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SYNTAX-PRAGMATICS INTERFACE: BRAZILIAN-PORTUGUESE L2 ACQUISITION OF ENGLISH

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RESUMO

Essa dissertação propõe que certos erros sintáticos na gramática de um aprendiz de L2 podem ser decorrentes da falta de conhecimento sobre a pragmática e a interface sintaxe-pragmática. Para contribuir com essa discussão, conduziu-se uma investigação sobre a aquisição das propriedades gramaticais dos *sujeitos* e dos *objetos* em inglês por aprendizes falantes do português brasileiro (PB). A principal hipótese testada foi se os fatores associados com a pragmática dessas posições gramaticais em PB (a L1) podem levar os aprendizes a aceitar frases agramaticais em Inglês (a L2).

Os sujeitos foram classificados em três níveis de proficiência lingüística: básico (n=11), intermediário (n=15) e avançado (n=14). Testes de julgamento gramatical e de interpretação foram empregados em duas condições: com e sem contexto pragmático. O desenvolvimento dos aprendizes na L2 e os seus conhecimentos sintático e pragmático foram analisados através do emprego de *dummies* como variáveis explicativas e de análise de regressão.

Os resultados confirmaram a hipótese de que a aquisição da interface interpretativa entre sintaxe e pragmática percorre uma trajetória de desenvolvimento que se estende além da aquisição individual desses dois componentes. As evidências indicam que (1) os aprendizes têm conhecimento sobre certas sutilezas estruturais da gramática da L2, o que sugere que a Gramática Universal (GU) está disponível para eles, (2) e que o desempenho deles é prejudicado em pontos onde as propriedades pragmáticas dos *sujeitos* e *objetos* na L1 diferem das propriedades pragmáticas da L2, provavelmente, porque aspectos interpretativos aí envolvidos devem ser aprendidos, i.e., não há orientação da GU. Argumenta-se que o *Strong Continuity Model* fornece uma fundamentação teórica adequada para explicar os descompassos entre o conhecimento sintático e pragmático dos aprendizes de L2.

Palavras-chave: Interface sintaxe-pragmática. Gramática Universal em L2. *Strong continuity models*

ABSTRACT

This dissertation has proposed that certain syntactic errors in an L2 learner's grammar may be more accurately explained in terms of a lack of knowledge about pragmatics and the syntax-pragmatic interface rather than as syntactic deficits per se. In order to contribute to this discussion, an investigation of the L2 acquisition of the grammatical properties of English *subjects* and *objects* by Brazilian Portuguese (BP) learners of L2 English was conducted. It was tested whether the L1 discourse-pragmatic factors associated with the syntax of these grammatical positions, particularly where deletion of a *subject* or an *object* is pragmatically controlled in the L1 (BP) and not in the L2 (English), can lead learners to accept ungrammatical L2 sentences.

Subjects were classified as being at one of three levels of linguistic proficiency: Basic (n = 11); Intermediate (n = 15); Advanced (n = 14). L2 Learners were administered grammaticality judgment, and interpretation tasks, presented in two conditions: + and – pragmatic context. Learners´ linguistic development in the L2 and their syntactic and pragmatic knowledge are investigated through regression analysis and the employment of dummies as explanatory variables.

The results confirm the hypothesis that the L2 acquisition of the interpretive interface between syntax and pragmatics has a developmental trajectory that extends beyond the acquisition of either of these two individual components. Evidence indicates that (1) learners know certain structural-rule-governed subtleties of the L2 grammar, suggesting that UG is available for them, (2) and that their performance is hindered at points where the pragmatic properties of the *subjects* and *objects* in the L1 do not match the L2 pragmatic properties, most likely because interpretive aspects have to be learned, i.e., there is no UG guidance. It is argued that the Strong Continuity model provides an appropriate theoretical framework to account for the mismatches between L2 learners´ syntactic and pragmatic knowledge.

Key-words: Syntax-pragmatic interface. Universal Grammar in L2 acquisition. Strong continuity models

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INTRODUCTION

In language acquisition, a learner advances from an initial state to a language-specific final state; in so doing, the learner must integrate multiple modular subsystems of a language grammar. Syntax and pragmatics are two such components. Results from first language (L1) acquisition, suggest that development of syntax takes place prior to development of pragmatics (AUSTIN, *et al.*, 1996; BOSER, 1995; BROWNELL, *et al.*, 1992; CARROLL, 1983; LUST, *et al.* 1986). Results from adult second language (L2) similarly indicate the independent albeit related development of syntax and pragmatics and perhaps the primacy of syntax over pragmatics as well (FLYNN, 1983, 1987; POLIO, 1995; PÉREZ-LEROUX, GLASS, 1999; HERTEL, 2003). Continued research, as suggested by Hopp (2004, p.68), indicate that "L2 learners have robust knowledge of underdetermined UG (Universal Grammar) - specified syntax, but that they manifest non-target like behavior in interpretive interface aspects" [viz., the syntax-pragmatic interface]. Hopp´s findings suggest that divergence between native and non-native speakers is found in areas where interpretation constrains syntactic options rather than in the area of syntax.

Taken together, the L1 and L2 results suggest that in language acquisition what on the surface might appear to be solely a syntactic deficit in a learner's grammar might be more fully understood in terms of a lack of knowledge about pragmatics and the syntax-pragmatic interface (see e.g. Lardiere, 2000, for similar arguments in other domains of acquisition). This dissertation intends to contribute to this discussion through an investigation of the L2 acquisition of the grammatical properties of English *subjects* and *objects*. More specifically, it will be tested whether the L1 discourse-pragmatic factors associated with the syntax of these grammatical positions, particularly where deletion of a *subject* or an *object* is pragmatically

controlled in the L1 and not in the L2, can lead learners to produce and accept ungrammatical L2 sentences at stages of development where they already indicate knowledge of the L2 syntax.

The underlying theoretical foundation of this research is the Strong Continuity Model of UG in language acquisition (HYAMS, 1992; POEPPEL, WEXLER, 1993; CRAIN, 1994; LUST, 1999; FLYNN, LUST, 2002, among others). Under this account, it is assumed that UG remains continuously available throughout a person's lifetime and it is distinct from specific language grammars. In other words, any human being can "count on" UG as an assistant in the acquisition of an L1, L2, L3 … Ln. For this reason, it is assumed that language acquisition processes are guided by the same underlying linguistic principles.

It will be argued that L2 learners develop the grammar of the L2 independently of the L1 grammar; however their grammatical knowledge may be masked at points of interpretive interface. At these points, prior to the development of a complete understanding of the pragmatic constraints concerning for example, the deletion of nominal elements, the L2 learner may appear to fall back on known L1 allowable operations. For this reason, it is very likely that even the grammar of advanced level adult L2 learners may show an apparent syntactic deficit when the pragmatic constraints operative in Brazilian Portuguese (BP henceforth) and in English differ with respect to the use of overt and null *subjects* and *objects*.

In order to acquire the L2 properties associated with *subjects* and *objects*, BP learners of L2 English face a twofold task. First, they need to learn that overt *subjects* and *objects* are syntactically required in English, that is, null arguments are not allowed in the L2 grammar, even in particular pragmatic contexts. Second, in the construction of the L2 grammar, a BP learner of L2 English must find out that s/he cannot rely on the L1 discourse-pragmatic factors when selecting a *subject* or *object* in the L2. In this study, it is assumed that universal language principles as well as language-specific properties will play a role in the L2 acquisition of these syntactic and discourse-pragmatic properties.

The dissertation is organized as follows. Chapter 2 presents a brief introduction to the major tenets of the generative language acquisition framework, which constitutes the grounds of this study. The following concepts associated with the theory of universal grammar in language acquisition are presented: the creative aspect of learners' competence, the innateness hypothesis and the language faculty,

and the poverty-of-the-stimulus argument. The Principles and Parameters theory formulated by Chomsky in the 80s is also briefly described in chapter 2.

In chapter 3, the linguistic focus of the study is summarized. Initially there is a presentation of the different formulations of the Null Subject Parameter (*pro*-drop parameter) that emerged during the 1980s (CHOMSKY, 1981; JAEGGLI, 1982; CHOMSKY, 1982; RIZZI, 1982, 1986; JAEGGLI, SAFIR, 1989). The common assumption among these formulations is that *pro*-drop languages, i.e., those where null subjects are possible, have phonetically unrealized, but syntactically present elements in subject position. Furthermore, chapter 3 also presents the main syntactic and discourse pragmatic factors associated with *subjects* and *objects* in BP (the L1) and in English (the L2). Examples of the sentence structures that will be investigated are provided in order to show the contrasts as well as the similarities among the two languages involved.

Chapter 4 reviews some studies that discuss key issues about Second Language Acquisition (SLA) within a generative framework, including the role of the L1 in L2 acquisition, access to UG in L2 acquisition, and the interface between syntax and pragmatics in language acquisition. In section 4.1, it is assumed that both the L1 and language universal principles play a role in the acquisition of a second language. Section 4.2 deals with access to UG in L2 acquisition, presenting some studies that investigate if L2 learners have access to principles and parameters of UG. The position adopted in this study is that L2 learners have full access to UG, that is, UG constrains their L2 grammars at all stages of language development. Section 4.3 addresses essential issues concerning L2 learners´ acquisition of the syntax-pragmatics interface. It is suggested that certain syntactic inadequacies in the developing L2 grammar may be due to learners not knowing the L2 syntactic properties rather than to a lack of knowledge about the discourse-pragmatic factors operative in the L2.

Chapter 5 focuses on the description of the methodological procedures adopted in the study. It offers and overview about the following topics: the hypotheses pursued, the subjects who participated in the study, the English as a Foreign Language (EFL) proficiency test used to classify the subjects, the experimental tasks (grammaticality judgment tasks and interpretation tasks), as well as examples of the sentence structures analyzed. The general procedures followed during the application of the experimental tasks are also described in this chapter.

The Grammaticality Judgment Task [-Pragmatic Context] will help to verify if learners development in the L2 is constrained by principles of Universal Grammar, independent of the language specific properties of the L1 grammar. The Grammaticality Judgment Task [+Pragmatic Context] will contribute to investigate if there is a primacy of development for syntax over pragmatics in the L2 developing grammars. Through the Interpretation Task, it will be possible to see if the presence of a misleading context can influence learners´ performance.

Chapter 6 aims to show and discuss the findings obtained from the experimental tasks, in light of the hypotheses initially formulated. The results are reported focusing on learners´ linguistic development (section 6.1), learners´ syntactic knowledge (section 6.2) and learners´ pragmatic knowledge (section 6.3). The results obtained from the Grammaticality Judgment Tasks indicate that, as learners reach higher levels of proficiency in the L2; their performance also increases, suggesting that general learning strategies are not guiding L2 learners in their judgments of the sentence structures tested. With respect to L2 learners' knowledge of the syntactic properties associated with *subjects* and *objects* in English (the L2), the results reported in chapter 6 support the hypothesis that from early stages of acquisition, L2 learners do not assume that the L2 grammar is the L1 grammar, as predicted by traditional models of Contrastive Analysis. Evidence indicates that they have knowledge about certain structural-rule-governed subtleties of the L2 grammar, such as, the compulsory use of overt *subjects* in finite clauses and expletive environments; the compulsory use of overt *objects* in matrix and subordinate clauses; the compulsory use of null *subjects* in non-finite clauses, and the optional use of null *subjects* in coordinate clauses. The results presented in section 6.3 suggest that learners´ performance is hindered when the pragmatic properties of the *subjects* and *objects* in the L1 do not match the pragmatic properties operative in the L2.

Chapter 7 concludes the dissertation with a brief overview of the study and some final thoughts.

2 THE THEORY OF UNIVERSAL GRAMMAR

The goals of this chapter are to provide an overview about important concepts underlying the theory of universal grammar in language acquisition, as well as an introduction to the theory of Principles and Parameters of Universal Grammar (CHOMSKY, 1981).

Section 2.1 examines notions related to the creative aspect of learner's competence, the inborn language faculty as an autonomous cognitive system of the human mind/brain, and the poverty-of-the-stimulus argument, which is assumed to support the innateness hypothesis in language acquisition. In this study, it is taken for granted that these concepts can account not only for first language acquisition but also for second language acquisition. Section 2.2 presents the *T-Model* (CHOMSKY, LASNIK, 1977), which describes the components of grammatical knowledge within the Principles and Parameters framework.

2.1 General Concepts of Language Acquisition

This section outlines some concepts about the nature and the acquisition of grammar according to Chomskyan generative linguistic tradition (1959, 1965, 1981, and 1995). In this view, grammatical development takes place through an interactive process where the child possesses inborn knowledge about the form of human language grammars in general, which in turn interacts with her/his linguistic environment to determine a particular language specific adult grammar. It is assumed that this innate knowledge derives from a kind of language organ - language faculty - located in some part of the human mind/brain dedicated to the use of a particular language, as explained by Chomsky (1986):

> The language faculty is a distinct system of the mind/brain, with an initial state s^o … Given an appropriate experience, this faculty passes from the state s^o to some relatively stable Ss, which then undergoes only peripheral modifications.

Linguistics is a field concerned with the formulation of a theory of grammar that can explain the essential characteristics of natural languages (i.e. human languages), which differentiate them from non-natural languages, such as artificial languages and animal communication systems. Universal Grammar (UG hereafter) is a theoretical construct concerned with the description of the genetically determined properties of the child's initial state of the language faculty. In other words, UG corresponds to the knowledge that the child is equipped with before interacting with the input. Chomsky and Lasnik (1995, p. 14) explain how the states of the language faculty relate to the concepts of grammar and UG:

> UG constitutes the child's initial state, the knowledge that the child is equipped with in advance of input. The language faculty has an initial state, genetically determined; in the normal course of development it passes through a series of states in early childhood, reaching a relatively stable steady state that undergoes little subsequent change, apart from the lexicon. (…) The initial state appears to be uniform for the species. (…) We call the theory of the state attained its *grammar* and the theory of the initial state *Universal Grammar* (UG).

Generative linguistic theory has investigated two classical issues in the study of language since the 1950s. The first one is referred to as *the problem of the descriptive adequacy* whilst the second is known as *the problem of explanatory adequacy*. The theory of a language will only reach explanatory adequacy if it correctly explains how linguistic knowledge emerges in the mind of the speaker-hearer. Descriptive adequacy refers to the criteria of accounting for the phenomena that occur in specific languages. The grammar of a language can be considered descriptively adequate if it clearly informs us concerning the grammaticality, ungrammaticality and the interpretation of the phrases and sentences of this particular language. In other words, a descriptively adequate grammar of a language is the one that "reproduces" a speaker's intuitions, i.e., his/her tacit knowledge, about the grammatical and ungrammatical sequences of words and their correspondent interpretations.

In the 1960s, Chomsky coined the concepts of *competence* and *performance* to explain the kinds of linguistic knowledge all native speakers have. On one hand, *competence* is the knowledge a native speaker has about his/her language. On the other hand, the notion of *performance* is associated with the way native speakers use this knowledge, that is, how language is used in concrete situations.

2.1.1 The Creative Aspect of Learner's Competence

Any native speaker of a language knows the grammar of his or her native language; otherwise they would not know how to interpret and form words, phrases and sentences in their native language. This grammatical knowledge, which is not unconscious, corresponds to a native speaker's linguistic competence. It is a fact that every person who knows a language can create new sentences as well as understand any novel sentence produced by other speakers. This happens because language acquisition is an inherently creative process, that is, children acquire a language by creating a set of generalizations that are constrained by the hypothesized endowed language faculty rather than through the imitation of patterns from the input.

One of the main sources of evidences to support this claim is the overgeneralization about the past tense forms of irregular verbs in English created by most children. Children cannot have learned forms such as *comed*, *goed* and *haved* from the input, since they do not occur in adult speech. Yet, such forms are common and frequent in the early stages of acquisition of children learning English as an L1. Chomsky (1959) pointed out that the creative aspect of language use constitutes a powerful argument against the behaviorist view of language[1] disseminated in the first half of the twentieth century, which contended that young children acquire a language through imitative rather than creative processes. According to Chomsky

[1] Skinner (1957) postulated that language is determined by *stimuli*, *response* and *reinforcing stimuli.* The idea that language is a set of learned responses to stimuli prevailed until the late 1950´s, when Chomsky (1959) brought the notion of creativity as a universal property of human languages. The behaviorist theory of language acquisition assumed that language originates from a physical need, that is, from situations that are external to the organism.

(1972, p.12), the creativity of language indicates that a language cannot simply be learned by imitation and repetition, as predicted by behaviorism:

> The normal use of language is innovative in the sense that much of what we say in the course of normal language use is entirely new, not a repetition of anything that we have heard before, and not even similar in pattern – in any useful sense of the terms 'similar' and 'pattern' – to sentences or discourse that we have heard in the past.

2.1.2 The Innateness Hypothesis and the Language Faculty

Children acquiring different languages go through similar developmental stages while "constructing" the grammar of their native languages. Deaf babies "babble" with their hands as others normally do with voice, and spontaneously invent sign languages with grammars that reflect properties of oral human languages. Furthermore, the developmental stages for language of deaf children parallel to those observed in children acquiring spoken languages (FROMKIN; HYAMS; RODMAN, 2006). This uniformity in the patterns of children's linguistic development lead many linguists to believe that children are born with an innate language faculty – a Universal Grammar - that constrains them in the construction of the grammar of a specific language. Chomsky's explanation for this phenomenon is that the course of acquisition is determined by a biologically endowed language acquisition program within the mind/brain (UG), which provides children with a set of procedures for developing a grammar from the linguistic input they are exposed to Chomsky (1981b, p. 7): "Universal Grammar may be thought of as some system of principles, common to the species and available to each individual prior to experience".

Innate theories assume that the language faculty is an autonomous cognitive module, that is, it is independent of other aspects of the mind/brain. UG is a theory of the language module solely. Several evidences are mentioned in the literature in support of the Innateness Hypothesis. First of all, Chomsky (1972, p.102) emphasizes that language acquisition is an ability possessed only by the human race:

> Whatever evidence we do have seems to me to support the view that the ability to acquire and use language is a species-specific human capacity, that there are very deep and restrictive principles that determine the nature of human language and are rooted in the specific character of the human mind.

Another factor that contributes to the argument of a biological basis is that language acquisition parallels other abilities that are part of the human genetic endowment, such as the ability to learn to walk. These activities are essentially subconscious, involuntary in the sense that human beings cannot decide not to acquire their native language, or not to walk, as they can choose whether or not they want to learn how to drive, and unguided, i.e., children are not taught about the grammar of their native language, even though they sometimes may be instructed about the use of language.

2.1.3 The Poverty-of-the-Stimulus Argument

Linguists´ ultimate goal is to account for language acquisition, that is, to understand how native speakers culminate with knowledge of their language. The assumption that the linguistic data available to language learners cannot account for the complexity of their knowledge has permeated the current generative linguistic literature. Such premise referred to as the "poverty-of-the-stimulus argument"[2], or the "problem of language acquisition" brings compelling support to the Innateness Hypothesis.

During the period of language acquisition, the child faces an overwhelming problem due to the fact that the evidence available is impoverished. It is usually mentioned in the literature that children find at least three types of inadequacies in the linguistic experience. First, the sentences they are exposed to are not always grammatical. Second, even though the stimulus is finite, they are able to produce and process an infinite number of sentences. Third, children are able to acquire knowledge about their language in the absence of positive evidence. As explained by Hyams (1986, p.23), the linguistic data are both "degenerate" and "deficient":

[2] See Thomas (2002) for a broad review about the development and the relevance of this concept within generative linguistics.

> The data are degenerate insofar as they contain performance errors, for example, slips of the tongue, false starts, and so on. The data are deficient in that the child receives no direct evidence of ambiguity, synonym, or ungrammatical sentences. Similarly, there may be many perfectly acceptable sentence types which never occur in his linguistic environment.

The linguist seeks to explain the fact that adult speakers´ knowledge of their own language goes far beyond the linguistic evidence they encountered in childhood. Since the data children are exposed to cannot account for the richness and complexity of the grammar they achieve, the argument that children can learn a language strictly from the input is not supported empirically. Thus, it is very likely that the syntactic aspects of a language that could not have been acquired from the input available to children are supplied by UG. The poverty-of-the-stimulus concept has become one of the most persuasive arguments in favor of the theory of UG because it accounts for the gap between the limited, finite experience of language the learner receives and the complex, infinite linguistic knowledge he or she possesses.

In a few words, the argument can be explained as follows: even though there are some patterns in all human languages that cannot be learned through exposure to positive evidence[3] alone, children do learn the correct grammars for their native languages; therefore, human beings must have some form of innate linguistic capacity which provides additional knowledge during the language acquisition period. Schwartz and Sprouse (2000) claim that the concept “poverty of the stimulus” can help linguists to determine which features of language will lead to fruitful investigations that can contribute to the development of the theories of language acquisition. Thomas (2002 p. 61) elucidates the logic followed by these authors: “if no model for feature X in the input can be found to be commensurate with the richness of speakers´ demonstrated knowledge of X, then investigation of X is likely to lead to insight into the language faculty”.

[3] Both positive and negative evidence may be available to the language learner. Positive evidence refers to the occurrence of particular sentences in the speech children hear during the language acquisition period. On the other hand, negative evidence can be direct or indirect. Children are exposed to *direct negative evidence* when their errors are corrected by other speakers of the language. However, generative linguists often points out that correction does not play a significant role in language acquisition because it is not very frequent and children usually do not respond to correction (McNEILL, 1966). *Indirect negative evidence* refers to the non-occurrence of certain types of structure in the language children are exposed to. Chomsky (1986) states that children learn language from positive evidence only.

For example, the pattern that guides the use of “yes-or-no” questions, which is claimed to be unlearnable from positive evidence alone, is usually referred in the literature as an instance of the explicative potential of the poverty-of-the-stimulus argument. There are two hypotheses the language learner might entertain about the structure of “yes-or-no” questions in English: (i) the first auxiliary verb in the sentence moves to the beginning of the sentence, or (ii) the main clause auxiliary verb in the sentence moves to the front. Consider examples (1) and (2) below:

(1) a. Peter is at school now.
b. Is Peter at school now?

(2) a. Peter who is divorced will go to the party.
b. Will Peter who is divorced go to the party?
c. * Is Peter who will divorced go to the party?

It becomes quite clear from sentences similar to (1) and (2) that the result of rule (i) leads to unacceptable sentences while rule (ii) accounts for the formation of grammatical interrogative sentences in English. Sentence (2b) seldom is part of the primary linguistic data (PLD here after) available to three-year-old children[4] because it is too complex; sentence (2c) is unacceptable, therefore, not utterly in the language children hear. Then, the intriguing question is: how do children internalize rule (ii) if sentences like (2b) and (2c) are excluded from the PLD? Since the PLD is insufficient to arrive at the right rule concerning the formation of “yes-or-no” questions, the logical conclusion is that the course of acquisition cannot be solely guided by the properties of the linguistic input. Therefore, it is very plausible to contend that children already come equipped with the knowledge needed to arrive at rule (ii) before being exposed to their language.[5]

[4] Crain and Nakayama (1987) concluded that children acquire “yes-or-no” questions at 3,2 years of age.

[5] See Pullum and Scholz (2002) for a critique of the poverty-of-the-stimulus argument. Legate and Yang (2002) aims to determine how much evidence would be necessary for a child in order to acquire some specific linguistic structures. The quantitative results they found suggest that knowledge of yes-or-no questions “is available to children in the absence of experience” (LEGATE; YANG, 2002, p. 159)

2.2 Principles and Parameters of Universal Grammar

The original generativist model, *Syntactic Structures*, named after Chomsky's 1957 book, postulated a separation between phrase structure rules and transformations. For this reason, this model is also called 'transformational generative grammar'. Based on *Aspects of the Theory of Syntax*, (CHOMSKY, 1965), this model was replaced by the Standard Theory, which focused on the distinctions between deep/surface structure and competence/performance. In the 1970´s, the Extended Standard Theory refined the rules that had been employed in the previous model, culminating with the development of the Government - Binding Theory (CHOMSKY, 1981), when the concepts of *Principles and Parameters* were introduced within the Universal Grammar Approach. UG principles consists of those constrains that do not vary on all human languages, whilst the parameters of UG account for the existence of some degree of variation among human languages.

Principles and Parameters approach (P&P) comprises the key concepts of the Government and Binding (GB)[6] theory (CHOMSKY, 1981). P&P has captured the connection between sound and meaning through the technical constructs Phonetic Form (PF), and Logical Form (LF). Within P&P the sound sequences and the representation of certain aspects of meaning are connected via syntax, which "bridges" PF and LF. It is assumed that *sounds*, the external face of language, do not have a meaning in themselves whilst *meanings*, the internal face of language, are abstract mental representations.

A language grammar must account for how a sentence is pronounced, what it means and how a syntactic structure connects these two elements (sound and meaning). Within principles and parameters theory, Phonetic Form (PF) and Logical Form (LF), respectively, refer to the sound sequences and the representations of meaning. Syntax is the construct that establishes the connection between PF and LF. Chomsky (1986, p. 68) explains that "PF and LF constitute the "interface" between language and other cognitive systems, yielding direct representation of sound on the one hand and meanings on the other as language and other systems interact".

[6] In this study, the P&P approach refers to Chomsky´s Government - Binding Theory (GB) developed in the 1980s. However, the term GB will be avoided because Chomsky considers it a "misleading terminology" since the theories of Government and of Binding are not the only modules of language (CHOMSKY, 1993, p.29).

In addition to PF and LF, P&P theory assumes the existence of two other levels of syntactic representation: the D-Structure (showing all elements in their original location in the sentence) and the S-Structure (the elements are showed after the application of movement operations)[7]. The combination of these levels of representation constitutes the so-called *T-Model* (due to its upside-down T shape), which illustrates the components of grammatical knowledge. The figure below was adapted from Flynn, (1987, p. 47).

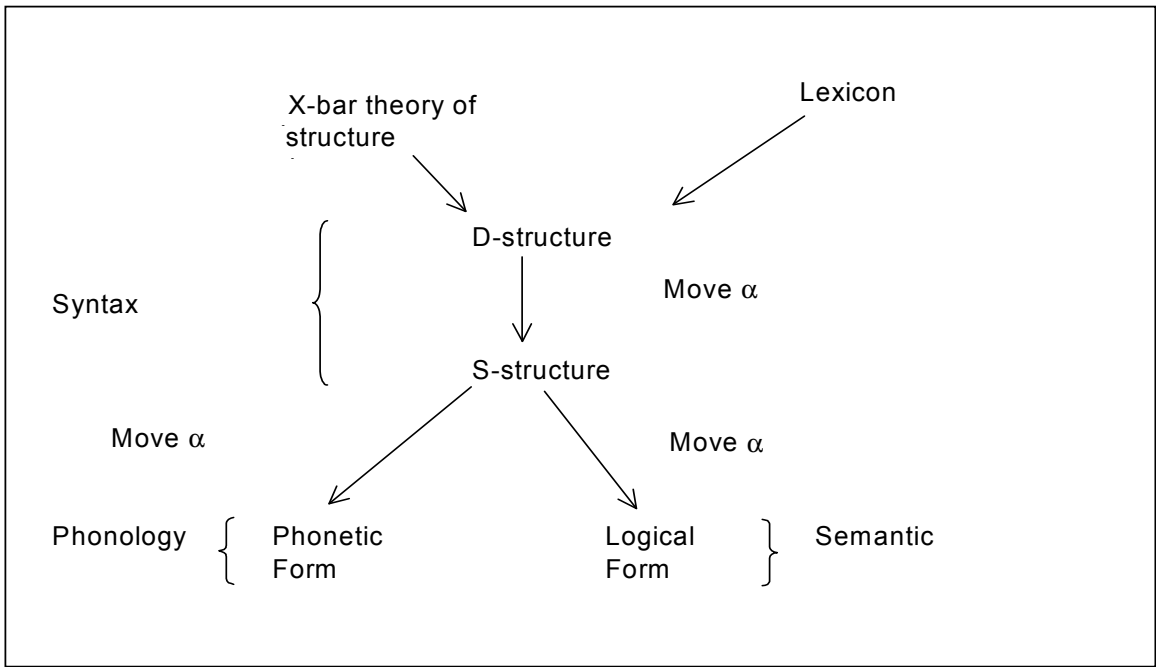

Figure 1 - The T- Model: the components of grammatical knowledge
Source: Flynn, (1987, p. 47)

The core assumption underlying the T-Model (CHOMSKY; LASNIK, 1977) is that syntax, phonology and semantics constitute the framework of a language grammar. In order to describe a sentence, the basic unit which a grammar is concerned with, it is necessary to invoke several different aspects of the grammar, that is, all applicable principles and parameter settings must be elicited. Within this approach, the innate universal grammar is organized into modular subsystems, i.e., it consists of separate parts that, on one hand, function fairly autonomously and, on the

[7] Under the current revision of the P&P theory, The Minimalist Program (MP) (CHOMSKY, 1993, 1995), the notions of S-structure and D-structure have been questioned. Within MP, it is assumed that the cognitive system interacts with two other systems: the articulatory-perceptual system (A-P) and the conceptual-intentional system (C-I), following Aristotle's traditional description of language as sound with a meaning. Therefore, there are two interface levels, Phonetic Form (PF), at the A-P interface and Logical Form (LF) at the C-I interface.

other hand, are related in several ways. Each one of these modules consists of several interacting subcomponents of the general theory, as explained in Chomsky (1999, p.49). “The initial state of the language faculty consists of a collection of subsystems, or *modules* as they are called, each of which is based on certain very general principles. Each of these principles admits of a certain very limited possibility of variation”.

One of the key concepts in P&P is the notion of *Government*, which affects various aspects of the Theory, such as, case assignment, empty categories, binding and constraints on movement. *Government* is a syntactic relationship between a “governor” and an element that is governed. For example, it is said that a Verb governs its object NP, as in example (3) below. The Verb *helps* governs the NP *me*, and due to this syntactic relationship, it determines that the object appears as the Accusative form *me* rather than the Nominative form *I*.

(3) Susan helps me a lot.

It is assumed that all lexical heads of phrases, i.e., Noun, Verb, Adjective, and Preposition can function as governors within a sentence. In addition to these elements, INFL (Inflection) is also considered a governor, even though it is not a lexical item. INFL can be classified as finite and non-finite. Sentences with tense (a concept associated with time reference) and AGR (Agreement, for example, if the subject number is singular or plural) are called finite clauses, as exemplified in sentence (4). The explanation and the examples that follow are from Cook and Newson (1996, pp. 52, 53).

(4) Mervyn plays the piano very well.

Example (4) is a finite clause because it contains the ending *–s* to show both present tense and singular AGR. Sentences which do not have tense and agreement are called non-finite clauses, as the infinitival clause in (5):

(5) (He considers) Mervyn to play the piano very well.

> Non-finite clauses such as *Mervyn to play the piano very well* only appear inside other clauses, such as *he considers*. Nevertheless they still have an INFL constituent. Though the Verb *play* lacks any inflection, it is preceded by the "infinitival marker" *to*. The INFL element is here an independent element *to* which precedes the Verb, not a morpheme attached to the Verb. INFL can thus be either finite or non-finite. When INFL is finite, it may contain the features of tense and agreement (AGR), which are realized as an inflection attached to the Verb such as *–ed.* When INFL is non-finite, it may contain the infinitival marker *to*. (COOK; NEWSON, 1996, p. 52-53).

The difference between finite versus non-finite INFL is important to the discussion about what governs the subject, that is, what attributes Case to this grammatical position. In finite clauses, the subject usually appears in Nominative Case (ex. 6), whilst in non-finite clauses it can occur in Accusative Case (ex. 7).

(6) **He** plays the piano.

(7) Susan wants [**him** to play the piano].

The generalization extracted from these examples, on one hand, suggests that subjects are governed by a finite INFL, that is, only when INFL has tense and agreement, as in (6), is it able to determine the Case of the Subject. On the other hand, it is clear that a non-finite INFL, as the infinitival marker *to* in the verb *to play* (ex. 7) does not govern and determine the Case of the subject. Therefore, it is assumed that INFL is a separate and independent element in the sentence that, when it has tense and agreement, governs the subject assigning it the Nominative Case.

The following modules are the P&P most important components: First, X-Bar Theory provides an explanation of the structure of the phrases focusing both at the lexical categories (Nouns, Verbs, Prepositions, and Adjectives) and at their properties, which are projected in the syntax; Second, Theta Theory is a module of the theory that assigns semantic roles, such as Agent and Patient, to the different parts of the sentence; Third, Case Theory deals with the case forms visible in the surface structure, such as the Genitive (*-s* as in *Mary's car*), Accusative (Him, Her, Me) and Nominative cases (He, She, I) in English, as well as with "abstract" Case, i.e. when case is not morphologically manifested in the NPs. The *Case Filter* (CHOMSKY, 1986, p. 74), a principle that obligates Case assignment, states that "Every phonetically realized NP must be assigned (abstract) Case". Forth, Binding

Theory aims at explaining the relationship between pronouns and their antecedents[8]. To sum up, it is important to highlight that each module of the theory is necessary to account for a single sentence or phrase, that is, these modules should not be seen as isolated components within a system.

Searching for simplification has been a constant goal of any linguistic tradition. The main purposes of generative linguistics since the early 1960s, i.e., reaching descriptive and explanatory adequacy, have always been accompanied by a search for simplification. This quest for simplicity has led generative researchers to the formulation of the Minimalist Program (MP), a version of the P&P model initially formulated by Chomsky in the early 1990s. The Minimalism maintains most of the core concepts of the previous generative approaches, specially the assumption that there is a Language Faculty, i.e., a component of the human mind/brain, biologically endowed, and specially dedicated to acquisition, understanding and use of language. The MP, as well as the P&P approach in the 1980s, assumes that the Language Faculty has an initial state (S_0) genetically expressed, therefore uniform in the human specie, that develops into different stages, through the interaction with the linguistic environment, until it reaches a particular internal language grammar (S_S). S_0 is the Universal Grammar, i.e., a theory about the initial state of language acquisition and S_S can be understood as a description of the grammar of natural languages.

The Minimalist Program core concepts are the Principle of Full Interpretation and the Principle of Economy of representation and derivation, which were introduced in Chomsky's work during the 1980s. The first concept claims that redundant elements do not have a place in the structure of the sentence while the second refers to the imperative condition that all representations be as economical as possible. The Principle of Economy states that only the required elements should be represented in the syntactic structures. These two important Principles "imported" from the P&P framework have contributed to the minimization of the levels of linguistic representation, a central aspect within the Minimalist Program. Under the current revision of P&P only the conceptual necessary levels of representation should remain; therefore, due to the design of the language faculty, a structural derivation must have two levels of representation, corresponding to the sound and meaning components, respectively: *Phonetic Form* (PF) and *Logical Form* (LF).

[8] For a detailed description of these modules, see Haegeman (1994) and Cook and Newson (1996).

3 LINGUISTIC FOCUS OF THE STUDY

Section 3.1 summarizes the Null Subject Parameter in order to provide the linguistic background that will support the sentence structures involved in the experimental tasks. In section 3.2, there is a presentation of the BP (the L1) linguistic facts about sentence structures involving *subjects* and *objects*. In section 3.3, a description of the most relevant facts about the use of *subjects* and *objects* in English (the L2) is given. The chapter ends with a table outlining the L1 and L2 discourse-pragmatic and syntactic factors investigated in this study.

3.1 The Null Subject Parameter

The Null Subject Parameter attempts to account for the fact that languages vary with respect to the filling of the subject position, and this results in different grammatical patterns. In some languages, including Brazilian Portuguese, Italian and Spanish, subject pronouns can be dropped while in other languages, such as English, German and French, they must be phonetically expressed. Concomitantly, only in languages like Portuguese, Italian and Spanish can subjects be more or less freely postposed to the verb. Within the P&P framework, the *Empty Category Principle* (ECP) (CHOMSKY, 1981) states that "An empty category must be properly governed"[9]. The Null Subject, or *pro*-drop, Parameter, which has been one of the most studied parameters in the generative literature (CHOMSKY, 1981, 1982; RIZZI,

[9] According to the *Principle of Proper Government*, lexical categories, such as Nouns and Verbs, are proper governors while non-lexical categories, such as INFL, are not. Since the subject position is governed by Infl, but not by V, subjects are, in principle, not properly governed. Hence, there must be a property in null-subject languages that circumvents this problem.

1982; JAEGGLI; SAFIR, 1989), explains why certain languages seem to violate the ECP, which, by being a principle of UG, must not be violated[10].

During the 1980s, different formulations of the *pro*-drop parameter emerged. Initially, it was assumed that in null subject languages an empty category was allowed in subject position due to the rich verbal inflection manifested in these languages. A way of expressing this is to propose that the *pro*-drop parameter has two settings: INFL is either a proper governor (in null subject languages) or it is not (in Non-Null Subject Languages)[11]. The subject can be dropped in null subject languages because they have a rich inflectional system that allows the subject to be recovered, i.e., interpreted. Since the empty subject position in null subject languages is governed by the agreement features of the INFL node, there is no violation of the ECP in these languages.

Within this initial formulation of the *pro*-drop parameter (CHOMSKY, 1981)[12], the omission of the subject forms was assumed to be part of a cluster of morphological and syntactic properties, which are described and exemplified below[13]:
a. The subject can be omitted in a tensed clause, as in example (8):
(8) [ec][14] ho trovato il libro. ('I have found the book".)

b. "Free Subject-Verb Inversions" are allowed, as shown in sentence (9):

(9) [ec] ha mangiato Giovani. ("Giovani has eaten")

c. Violations of the *that-trace* filter are also allowed as in (10):

(10) Chi_i credi che t_i partira? ("Who do you think (*that) will leave?)

d. Sentences containing long *wh*-movement and empty resumptive pronouns are grammatical, as in sentence (11):

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[10] The *Pro*-drop Parameter was named after *pro*, the phonologically empty element in subject position.
[11] Within this formulation of the *Pro*-Drop Parameter, (Chomsky, 1981), INFL = [+/- Tense, +/- AGR], and it is a proper governor if it is [+AGR].
[12] Earlier studies had already noticed the existence of this cluster of properties: Jespersen, 1924; Perlmutter, 1971.
[13] Examples are adapted from Chomsky (1981).
[14] The symbol [ec] is generally used to represent an "empty category".

(11) L'uomo $_i$ che mi domando chi [ec] $_i$ abbia visto. (*"The man (X) such that I wonder who x saw.")

e. Expletive subjects are not required, as in sentence (12):

(12) [ec] ha piovuto. ("It has rained").

However, the fact that these properties are not always consistently grouped in the same language has led some researchers to disagree about incorporating all of them into a definition of what constitutes a *pro*-drop language. Hence, a revision of the initial formulation of the *pro*-drop parameter is proposed by Jaeggli (1982). He proposes that the cluster of properties associated with the *pro*-drop parameter consists of only two properties, namely, missing subjects (ex. 8 above) and free subject-verb inversion (ex. 9 above)[15]. Under this second formulation, PRO is the empty category in sentences with missing subjects.

Issues related to the classification of the empty category in null subject languages have contributed to another revision of the *pro*-drop parameter. Chomsky (1982) points out that considering PRO as the empty category in subject position of finite clauses would raise problems with the distribution and specification of empty categories. Since there are four types of overt NPs, it seems a logical consequence that empty categories, which are non-overt NPs, follow the same typology.

An empty category, *pro*, is introduced in the theory to account for null elements in subject position (CHOMSKY, 1982). The basic assumption is that in languages where a null subject is allowed in tensed clauses, this position is filled by an empty category, known as *pro* (ex. 13), which is a pronominal element without a phonetic realization:

(13) *pro* Chove muito nas florestas tropicais.
pro Rains a lot in the tropical forests.
('It rains a lot in the tropical forests').

In the Principles and Parameters literature, empty categories are classified according to their referential feature composition. *Pro* is an empty category that does

[15] See Jaeggli (1982) and Rizzi (1982) for an analysis of the two properties related to the parameter.

not share the same properties of the other empty categories (PRO, NP-trace and Variable)[16]. *Pro* functions as a pronominal non-anaphoric element, that is, it has [+pronominal, - anaphoric] referential features. Rizzi (1982, 1986) has proposed that there are two conditions which are necessary for *pro* to appear in the subject position: (1) *pro* has to be licensed by INFL, and (2) identified by the agreement morphology on the verb.

The assumption that lexical information highly influences syntactic structure postulated by P&P theory is summarized in the Projection Principle. In addition, it is a general property of sentences that they must have subjects, even if the subject is not semantically required, as in the case of expletive pronouns in non-null subject languages. This requirement was formalized in the Extended Projection Principle – the EPP (CHOMSKY, 1982). In null subject languages, the EPP is assumed to be satisfied by the existence of an empty category, namely *pro*.

Summarizing, with respect to the null subject parameter, what remains broadly accepted in the theory is the fact that *pro*-drop languages have phonetically unrealized, but syntactically present elements in subject position[17]. Three clearly distinct points of view have been postulated in generative linguistics literature to explain the null subject phenomenon: within P&P theory early approaches, null subjects are assumed to be allowed when INFL is a proper governor; after, null subjects were assumed to occur in languages with morphological uniformity; third, as recently postulated by the Minimalist Program, a language allows null subjects or not depending on whether affixes are generated in the syntax or in the lexicon.

Rizzi (1986) proposes that *pro*, the empty category found in the subject position of finite clauses, can also occur in object position in certain languages, such as Italian[18]. However, he argues that the properties of object *pro* and subject *pro* are different in Italian. On one hand, subject *pro* can be any grammatical person depending on the finite inflection and it can have specific or non-specific interpretation. On the other hand, object *pro* is always plural, masculine and cannot have specific reference. From this pattern, Rizzi concluded that INFL might not be

[16] See Jaeggli and Safir (1989, p. 22) for a presentation of the typology of Empty Categories.
[17] Speas (1994) and Kato (for BP, 1999) have argued that there are no null elements.

[18] In addition to the *pro* analysis (RIZZI, 1986; ROBERGE, 1991, among others), null objects within a generative framework have also been analyzed as variables A´- bound by an empty topic (HUANG, 1984; 1989; RAPOSO, 1986; AUTHIER, 1988, among others). There are also other explanations, such as the ellipsis-with-reconstruction analysis proposed by Cyrino (1994).

the only licensor of *pro*. He suggests that in certain languages, as Italian, V (verb) is also a licensor of *pro*, while in other languages, as English, V does not belong to the licensors of *pro.* With respect to object *pro* identification, Rizzi (1986) proposes that the recovery of its content is associated with a rule of arbitrary interpretation, which determines the arbitrary reading of the null objects in Italian.

3.2 The L1: Brazilian Portuguese Linguistic Facts

Previous research shows that in BP, unlike in English, certain discourse-pragmatic factors interact with the grammatical properties associated with *subjects* and *objects*, as described below in sections 3.2.1 and 3.2.2.

3.2.1 The *Subject* Position

In Brazilian Portuguese, null subjects are syntactically allowed. However, unique to BP as a Romance pro-drop language, the use of null referential *subjects*, particularly with 1st person (singular and plural), and with 2nd person singular, is in decline (DUARTE, 1993, 1995). Duarte (1995) argues that BP is becoming a non-pro-drop language with some remaining properties of the pro-drop languages. The following examples present the most relevant factors to this study (see an extensive discussion of these facts in Schwenter 2006):

Null *subjects* are used with 3rd person singular in subordinate clauses (ex. 14, from Duarte 1993, 1995).

(14) *Ele*$_i$ sentiu que *pro*$_i$ era o único ali novo.
He$_i$ felt that *pro*$_i$ was the only there young.
('He realized that he was the only young man there'.)

Null *subject*s are required in expletive environments (exs. 15, 16 from Duarte 1993, 1995 and ex. 17), like in other Romance languages.

(15) *pro* Parece que o João passou por aqui.
pro Seems that the John passed around here.
('It seems that John has passed around here'.)

(16) *pro* Choveu o dia todo.
pro Rained the whole day.
('It has rained the whole day'.)

(17) *pro* Têm muitas pessoas aqui.
pro Has many people here.
('There are many people here'.)

In coordinate clauses, *subject*s can be null (18).

(18) *Este dicionário* $_{i}$ contém muitas palavras e *pro*$_{i}$ oferece uma seção de gramática.
('*This dictionary* $_{i}$ contains lots of words and *pro*$_{i}$ provides a grammar section').

In finite adjunct clauses, both null (ex. 19) and overt (ex. 20) *subjects* are possible.

(19) *O homem* $_{i}$ vai ao supermercado quando *pro*$_{i}$ chega em casa.
The man $_{i}$ goes to the supermarket when *pro*$_{i}$ arrives home.
('*The man* $_{i}$ goes to the supermarket when he $_{i}$ arrives home').

(20) *O homem* $_{i}$ vai ao supermercado quando ele $_{i}$ chega em casa.
('*The man* $_{i}$ goes to the supermarket when he $_{i}$ arrives home').

However, both null (ex. 21) and overt (ex. 22) *subjects* in non-finite adjunct clauses sound unnatural in BP.

(21) * *O homem* $_{i}$ vê o filho quando *pro*$_{i}$ chegando em casa.
('*The man* $_{i}$ sees the son when *pro*$_{i}$ arriving home').

(22) * *O homem* $_{i}$ vê o filho quando *ele* $_{i}$ chegando em casa.
('*The man* $_{i}$ sees the son when *he* $_{i}$ arriving home').

In complement clauses, both null (ex. 23) and overt (ex. 24) *subjects* are possible.

(23) *O prisioneiro* $_i$ admite que *pro*$_i$ gosta da vida do crime.
('*The prisioner* $_i$ admits that *pro*$_i$ likes the crime life').
('*The prisioner* $_i$ admits that *he* $_i$ likes the crime life').

(24) *O prisioneiro* $_i$ admite que *ele* $_i$ gosta da vida do crime.
('*The prisioner* $_i$ admits that *he* $_i$ likes the crime life').

Overt *subjects* in BP are preferred with first and second person singular (exs. 25 and 26), unlike other Romance languages.[19]

(25) *Eu* acho muito engraçado quando *eu* lembro o modo que *eu* fui criada.
I think very funny when *I* remember the way that *I* was educated.
('I think it's very funny when I remember the way I was brought up.')

(26) *O senhor* podia descrever o lugar onde *o senhor* mora?
The sir could describe the place where *the sir* live?
('*Sir*, could *you* describe the place where *you* live?')

In addition to the properties above described, in BP there are some discourse-pragmatic factors which play a role in the choice for a null or an overt *subject*. It will be investigated if these L1 factors can lead L2 learners to accept certain ungrammatical subjectless sentences in English. Specifically, two discourse-pragmatic factors operative in the L1 (BP), which are not operative in the L2 (English), will be considered: (1) a null subject can be coindexed with an NP in the preceding discourse, that is a referent clearly defined in the previous discourse allows a syntactically null *subject*, especially with 3rd person singular referents (see footnote 9); (2) the role of the features [±human] and [±specific] in learners´ acceptability of null and overt *subjects* in the L2 (ex. 27).

(27) *O famoso filme* $_i$ fala sobre a vida no futuro. *pro*$_i$ Apresenta uma visão negativa da humanidade (the null subject is [-human, +specific])
The famous film$_i$ deals with life in the future. *pro*$_i$ Presents a negative view of humanity.
('*The famous film* $_i$ deals with life in the future. *It*$_i$ presents a negative view of humanity.')

[19] First and second person singular *subjects* are usually overt in BP. That is, the contrast between BP and English is more evident with third person singular *subjects*; therefore, the study will focus on this kind of *subjects*. Duarte (1995) found the following distribution for the use of null *subjects* in adult BP: 8% with first person singular, 19% with second person singular and 42% with third person singular.

3.2.2 The *Object* Position

With respect to null elements in the *object* position, Cyrino´s studies (1993, 1994) strongly suggest that BP is not constrained by any grammatical property. The only operative constraints on the use of null versus overt *object*s in BP are the NP antecedent features, particularly [± human] and [± specific]. Cyrino (1994) concluded that null *object*s are more frequently used when the antecedent NP has the features [– animate; - specific], as in example (28), from Cyrino 1994, and Table 1, adapted from her results:

(28) João descascou *a banana*$_i$, mas Pedro não comeu *pro*$_i$.
João peeled *the banana*$_i$, but Pedro did not eat *pro*$_i$.
('John has peeled *the banana*$_i$, but Peter has not eaten *it*$_{i*}$).

Table 1 - Percentage of use of null *Objects* in BP

Features of the antecedent	*Object position*
[+animate, +specific]	0% deletion
[+animate, -specific]	57% deletion
[-animate, +specific]	86% deletion
[-animate, -specific],	93% deletion

Source: Cyrino (1994)

According to Cyrino (1994), overt *objects* are the preferred choice when the antecedent NP has the features [+ animate; + specific] (ex. 29, from Cyrino 1994):

(29) Se você encontrar a *Maria*$_i$ novamente, convida *ela*$_i$ pra sair com a gente.
If you meet the *Maria*$_i$ again, invite *her*$_i$ to go out with us.
('If you meet *Maria*$_i$ again, invite *her*$_i$ to go out with us').

Following the same pattern employed in the *subject* position, it will be investigated if the presence of a [-human, -specific] referent clearly defined in the previous context (ex. 30) will lead L2 learners to accept null objects in the L2.

(30) Um homem jovem geralmente desperdiça dinheiro. O adolescente brasileiro gasta com cigarro.
A young man usually wastes *money*$_i$. The Brazilian teenager spends *pro*$_i$ on cigarette.
('A young man usually wastes *money*$_i$. * The Brazilian teenager still spends *pro*$_i$ on cigarette.')

3.3 The L2: English Linguistic Facts

It is important to highlight that in English both *subjects* and *objects* are syntactically obligatory, that is, overt *subjects* and *objects* are required elements in the English core grammar. Null *subjects* and *objects* in English are allowed in very restricted contexts, as explained below.

3.3.1 The *Subject* Position

In contrast to BP, English is a non-null-subject language where *subjects* are generally obligatory, even when they can be recovered through the linguistic context. Pragmatic factors, such as the ones operative in BP (e.g. presence of a referent clearly defined in the previous context, and the features [±human] and [±specific], as example 31 shows) do not constrain the use of *subjects* in English, because not filling the *subject* position usually results in ungrammatical sentences (ex. 32).

(31) *A war*$_i$ brings a lot of suffering and poverty for a country. *It*$_i$ spreads hate, racism and all sorts of diseases (the null subject is [-human, -specific]).

(32) a. * *pro*$_i$ Snows a lot in some American and Canadian cities during the winter.
b. * *pro*$_i$ Is a wonderful apartment for rent close to the subway station.
c. * *pro*$_i$ Causes a lot of trouble and suffering to poor people everywhere.
d. * *John*$_i$ saw Henry when *pro*$_i$ was walking down the street.
e. * *A computer*$_i$ helps people in all fields. *pro*$_i$ Brings hours of fun to children.

However, in a restricted number of contexts, the null subject option is available in some restricted registers of the adult noncore grammar, as described in

Haegeman (1997, 1999): diaries, informal notes, notices in commercial packaging, and in certain idiolects of colloquial English[20]. In addition, null *subjects* in English are frequently found in early periods in the L1 acquisition of English (HYAMS, 1986).

The linguistic structures selected to investigate the learner's knowledge about the syntactic properties associated with the subject position in English (L2) are not only those where the use of an overt subject is required in English (clauses involving expletive pronouns, finite-adjunct clauses and complement clauses), but also those where a null pronoun is either compulsory (non-finite adjunct clauses) or optional (coordinate clauses). Learners´ knowledge about these structural properties of the L2 grammar will reveal the degree to which they may be applying general cognitive strategies (e.g., matching surface structure patterns of the L1 and the L2) rather than being guided by linguistic principles in their developing L2 grammar. In addition, in order to see if learners know that the pragmatic factors operative in their L1 (BP) do not hold in the L2 (English), the sentence structures will vary the features [±human] and [±specific] and the presence of a pragmatic context [± pragmatic context]. Examples of the sentence structures tested are given below.

In expletive environments, an overt pronoun (*it* or *there*) is syntactically required in subject position (exs. 33-35).

(33) *It* seems that the professor enjoys the cold weather in Boston.

(34) *It* rains a lot in some Brazilian cities during the summer.

(35) *There* is a huge cathedral near the bus stop.

Coordinate clauses (ex. 36) can be subjectless in English.

(36) *The poor man*$_i$ drinks beer and *pro*$_i$ smokes lots of cigarettes every evening.

In non-finite adjunct clauses the *subject* must be null, and its referent must be the main clause *subject* (ex. 37).

[20] For a more extensive discussion of these constructions see Haegeman (1997, 1999). Sentence structures involving these constructions will not be part of the experimental tasks in this study. For this reason, they will not be discussed in this section.

(37) *A young child*$_i$ usually disturbs a tired father when *pro*$_i$ eating dinner.

In finite-adjunct clauses (ex. 38) as well as in complement clauses (ex. 39) *subjects* must be overt.

(38) *The lawyer*$_i$ always answers the mayor when *he*$_i$ is giving a speech.

(39) *The prisoner*$_i$ admits that *he*$_i$ likes the exciting crime life.

3.3.2 The *Object* Position

In contrast to BP, *objects* are, in general, obligatory in English. There are, however, a few restricted contexts in English in which "backward" deletion of an *object* is allowed. For example, in a coordinated sentence structure [Mary cooks *pro* and loves carrots.] or in *object topicalization* [Beans, I love *pro*]. Null objects in English can also be used in instructional contexts, such as in recipes (HAEGEMAN, 1994).

In English, in contrast to what happens in BP, the features [±human] and [±specific] are not significant discourse variables in predicting overt or null realization of the *object* in matrix (ex. 40) and subordinate clauses (ex. 41). In addition, the presence of a referent clearly identified in the previous context does not license a null *object* in English (ex. 42).

(40) A patient usually reads *a weekly magazine* [- human, - specific] in the waiting room.

(41) The policeman argues that the young man usually steals *a wallet* [- human, - specific].

(42) The woman from NYC admires *the brilliant linguist*$_i$. The professor visits *him*$_i$ on the weekends.

To summarize, table 2 presents an overview of the main syntactic and discourse-pragmatic factors associated with *subjects* and *objects* in the L1 and L2 grammar. It will be investigated if L2. Learners have knowledge about the factors operative in the L2 grammar.

Table 2 - Discourse-pragmatic and syntactic factors investigated in this study

	BP(L1)	English (L2)
Syntactic Factors[a]		
1. *Subjects* in expletive environments	Must be null (exs. 15-17)	Must be overt (exs. 33-35)
2. *Subjects* in coordinate clauses	Can be null (ex. 18)	Can be null (ex. 36)
3. *Subjects* in finite-adjunct clauses	Can be either null (ex. 19) or overt (ex. 20)	Must be overt (ex. 38)
4. *Subjects* in non-finite adjunct clauses	Unnatural sentences in BP (ex. 21,22)	Must be null (ex. 37)
5. *Subjects* in complement clauses	Can be either null (ex. 23) or overt (ex. 24)	Must be overt (ex. 39)
6. *Objects* in matrix and subordinate clauses	Can be either null (ex. 28) or overt (ex. 29), depending on the features of its referent	Must be overt (ex. 40-42)
Discourse-Pragmatic Factors[b]		
7. *Subjects* in matrix clauses with a referent clearly defined in the previous context.	Can be null (ex. 27)	Must be overt (ex. 31)
8. *Subjects* in matrix clauses with the features [±human] and [±specific]	Can be null (ex. 27)	Must be overt (ex. 31)
9. *Subjects´* reference in non-finite adjunct clauses	Unnatural sentences in BP (ex. 21,22)	Must be null, and its referent must be the main clause *subject* (ex. 37)
10. *Objects* in subordinate clauses with the features [±human] and [±specific]	Can be either null (ex. 28) or overt (ex. 29)	Must be overt (ex. 40)
11. *Objects* in matrix clauses with a referent clearly defined in the previous context.	Can be null (ex. 30)	Must be overt (ex. 42)

Notes: a) In this study, it is argued that learners' performance with these factors will reveal the knowledge they have about the most relevant syntactic properties of *subjects* and *objects* in the L2 grammar; and, b) It is argued that learners' performance with these factors will reveal the knowledge they have about the most relevant L2 discourse-pragmatic properties of *subjects* and *objects*.

4 SECOND LANGUAGE ACQUISITION

This chapter starts with a brief summary of the field of second language acquisition during the 70s and early 80s. Then, it points to issues related to the influence of the L1 in L2 acquisition, arguing that, although the L1 is involved, it is not the only source of knowledge in the development of the L2 grammar. The last section of this chapter deals with the problematic of UG accessibility in L2 acquisition, favoring the position that L2 grammars are constrained by universal linguistic principles.

4.1 An Overview of Early Studies in SLA

Until the late 1970´s, most theories of second language (L2) acquisition hypothesized that it was a process highly determined by the first language (L1). This approach is best represented in terms of the Contrastive Analysis model of language learning (FRIES, 1945; LADO,1957), which considers L2 acquisition as a result of the experience (habits and knowledge) L2 learners “carry over” from their L1s. The core assumption under Contrastive Analysis is that the L1 is a major obstacle in the learning of a new target second language, because L2 learners tend to transfer the forms and meaning of their L1 into their L2.

On the other hand, Dulay and Burt (1974) introduced the assumption that universal innate principles, rather than the native language, were the guiding force in L2 acquisition. Based on experimental tests, they formulated the Creative Construction Theory, which focused on investigating the similarities between L1 and L2 acquisition. Within this approach, an L2 learner and a child L1 learner make similar errors, therefore, these errors can be considered “developmental” in the

sense that they represent a learner's grammatical knowledge in a particular stage of linguistic development.

Ongoing development within what we currently call the UG research paradigm in Second Language Acquisition (SLA) continued throughout the 1970's. For example, Ritchie (1978) more precisely investigated the differences between competence and performance in the adult L2 learner. A unique contribution of Ritchie (1978) was that he investigated the status of a linguistic constraint, viz., the Right Roof Constraint[21] in adult L2 acquisition. More precisely, he investigated whether adult Japanese speakers learning L2 English incorporate the Right Roof Constraint into their L2 grammars. In his study, the L1 and the L2 contrast with respect to this constraint, specifically, Japanese (the L1) does not have and English (the L2) has the Right Roof Constraint. Ritchie (1978) concluded that his subjects demonstrated they "knew" English has the Right Roof Constraint, i.e., they did not simply transfer structures from their L1. In addition, other studies also contributed to these first steps towards the formulation of the UG research paradigm in SLA (COOK, 1973, 1975; FLYNN, 1981; 1983, 1987; LICERAS, 1983; WHITE, 1985).

In summary, the results of these studies indicated that the study of adult L2 acquisition within a UG framework could shed some light on both the nature of first language acquisition and on the nature of the language faculty. Furthermore, such studies could foster the understanding of how language interacts with other domains of human cognition.

4.2 The Role of the L1 in L2 Acquisition

This section presents a brief overview about the roles that have been attributed to the L1 in L2 acquisition in order to contextualize the assumption which underlies this work. The issue of how a native language is involved in the acquisition of a second language has been discussed since the early SLA studies. Gass (1988) identifies three phases of research about the phenomenon of language

[21] The "Right Roof Constraint" (ROSS, 1967) is a universal principle widely studied in children L1 acquisition. It refers to the constraints on the extraposition of Noun Phrases: an element cannot move rightward out of the clause in which it originates.

transfer. In the first, the native language was considered vitally important (e.g. LADO, 1957); in the second phase, it was argued that the native language was minimally involved in the acquisition of the second language (DULAY; BURT, 1974); during the third phase, in the 80s, research seeks to understand the aspects which are transferred from the native to the second language.

The studies conducted during the first phase assumed the theoretical basis of the Contrastive Analysis approach (LADO, 1957). Specifically, these studies aimed at predicting the sort of difficulties the L2 learner would have based on the differences between the L1 and the L2. Within the North American tradition, the main goal was to design better pedagogical materials, that is, resources such as textbooks that could help the L2 learner to overcome the problems associated with the mismatches between the native and the target language. Nevertheless, some European studies focused on the comparison of two languages in order to develop a better theoretical understanding of the nature of language rather than for pedagogical reasons.

In the early 70s, some scholars challenged the Contrastive Analysis approach claiming that it was not able to explain second language data for the following two reasons: certain errors made by L2 learners could not be due to the influence of the L1 grammar; learners coming from different L1 backgrounds produced similar errors. These factors have led SLA researchers to investigate the similarities found among L2 learners despite their diverse L1 background. Dulay and Burt´s work (1974) was central in the reaction to contrastive analysis assumptions. Under the influence of first language acquisition research, they proposed the Creative Construction Hypothesis, stating that the effect of the L1 in L2 acquisition is little, and that L2 learners, like L1 learners, are guided by universal innate principles.

In the 80´s, a rethinking of the traditional narrow view that tended to explain language transfer as a mechanical transmission of native language forms to the second language was proposed. New terms such as “mother tongue influence”, “cross-linguistic influence” and “cross-linguistic generalization” were coined by the following scholars to replace the usual concept associated with transfer: Corder (1983), Kellerman and Sharwood Smith (1986), and Zobl (1984). Researchers at this time were making an effort to reconcile previous positions about language transfer in order to better understand the processes involved in the acquisition of an L2. Therefore, in work by Andersen (1983); Flynn (1983, 1985); Gass (1979, 1980); Zobl (1980a, 1980b, 1982) the native language is not considered the only factor that

shape L2 learners progress towards the target language. These studies, among others, adopt the perspective that both the native language and the target language structures are important factors in determining the progress of the L2 learner.

Some of the UG research conducted in the 80s and 90s focused on investigating if parameter-setting was possible in SLA and on understanding the nature of L2 initial state, as for example, White (1985), Tsimpli and Roussou (1991), Strozer (1992), among others. Parameter-resetting studies tended to focus on the influences of the L2 learner's L1 to explain the differences in the representation of grammar between L1 speakers and L2 learners. For this reason, Klein and Martohardjono (1999, p. 9) claim that within this paradigm "non-target behavior is traced to the L2 learner's putative initial hypothesis that the L2 requires the same parameter values as the L1". Similarly, initial state studies also assume that the L2 learners´ L1 representation is the source of divergence in L2 development. Under this framework, at least two possibilities have been proposed for the L2 initial state: a) the L1 principles and parameters, that is, the L1 core grammar (SCHWARTZ; SPROUSE, 1994, 1996); b) lexical categories of the L1 (VAINIKKA; YOUNG-SCHOLTEN, 1994, 1996) and functional categories of the L1 without feature specification (EUBANK, 1996).

From this brief overview about the phenomenon of language transfer, it can be concluded that more studies are needed in order to investigate the undeniable influence of the L1 in L2 acquisition. In this study, on one hand, it is assumed that the L1 is involved in the acquisition of a second language; on the other hand, it is also claimed that what guides the L2 learner are the principles of the L2 grammar organization rather than the grammar of his or her native language. In addition, in line with current research, as reported in section 4.3 below, it is postulated that at the level of the syntax-pragmatics interface, when the L2 learner has not learned the pragmatic principles of the L2 yet, he or she might employ what is known from the L1. In addition, it is assumed that this pattern will not be found with respect to the acquisition of the L2 grammatical properties, since the L2 learner is guided by universal linguistic principles.

4.3 Access to UG

In the 1980´s, L2 acquisition studies within the framework of Generative Linguistics continued to focus on the investigation of whether or not UG remained available to the L2 learner. The main research question within these studies was whether L2 learners did or did not have access to principles and parameters of UG. The UG accessibility issue has been reformulated as the "No Access", "Partial Access", and "Full Access hypotheses" (see references in the sections below).

On one hand, the No Access and the Partial Access hypotheses, respectively, argue that either UG is totally inaccessible to the adult L2 learner or it is only partially available in terms of the UG language specific L1 parameter settings. According to these models, in order to acquire specific properties of the L2 when they differ from the L1, the L2 learner is guided mainly by non-linguistic strategies e.g., Slobin´s Operating Principle (CLAHSEN; MUYSKEN, 1986).

On the other hand, the Full Access hypothesis argues that UG is fully available to the adult L2 learner, as it is to the child L1 learner consistent with earlier L2 studies within the UG paradigm (BURT; DULAY, 1974; COOK, 1973; RITCHIE, 1978; FLYNN, 1983, 1987; WHITE, 1985; LICERAS, 1983). Hence, the differences found in patterns of acquisition between L1 and L2 learners are not due to lack of access to UG. These models of L2 acquisition will be discussed in the following sections.

4.3.1 The No-access Hypothesis

Within the UG framework for L2 acquisition, the proponents of the No-Access Hypothesis[22] claim that only the cognitive processes underlying child L1 acquisition derive from the biologically endowed language faculty, but the mechanisms that determine adult L2 acquisition are determined by nonlinguistic cognitive processes i.e., general learning principles. Some researchers claim that L2 acquisition is fundamentally different from L1 acquisition (CLAHSEN; MUYSKEN, 1986;

[22] See Klein and Martohardjono (1999, p. 6) for an interesting discussion about the inherent controversy of no-access models within a UG framework.

CLAHSEN, 1988; BLEYVROMAN, 1989) because they argue that L2 acquisition is governed by cognitive faculties that are separate and distinct from the domain-specific language faculty (UG). It is argued that, in opposition to L1 acquisition, general learning processes are central in the acquisition of the L2. This happens because the cognitive principles underlying the construction of the L1 grammar, i. e., UG, are not accessible in adult L2 acquisition.

The Fundamental Difference Hypothesis (FDH), a version of the no-access hypothesis postulated by Bley Vroman (1989), argues that the following differences between the child L1 learner and the L2 learner fundamentally distinguish the two processes. Firstly, child language “develops” while adults have to “learn” a foreign language. Secondly, UG is the knowledge source for the child L1 learner while the native-language is the knowledge source for the adult L2 learner. In addition, it is claimed that the guiding linguistic constraints differ in L1 and adult L2 acquisition. Since it is hypothesized that UG is no longer available for adult L2 learners, general problem-solving strategies are invoked to account for L2 acquisition.

To summarize, FDH´s essential assumption is that the mental representations of the L1 and L2 grammars differ in important ways. The FDH claims that UG is not necessary to account for the L2 learner’s knowledge, because the same knowledge can be obtained by observing the L1. However, no empirical evidence has been advanced to support the FDH. Contradictorily, Bley-Vroman (1989, p. 52) affirms that the L2 learners have “some expectations” about the nature of the second language. Epstein et al. (1996) claim that these expectations come to the L2 learner via the language faculty, and not by merely observing the L1.

Clahsen and Muysken´s (1986) version of the No-Access Hypothesis suggest that only nonlinguistic principles govern L2 acquisition at points of divergence between the L1 and the L2. That is to say, adult L2 grammars are not fundamentally constrained by UG in the manner that L1 acquisition is. They compared the development of word order in the L1 and L2 acquisition of German. Based on some differences in the developmental sequences observed in L1 and L2 acquisition of German word order, they came to the conclusion that only children have access to UG. In other words, in language acquisition, they argue, L1 learners set parameters of UG while L2 learners apply information processing and problem-solving strategies. However, some researchers have presented alternative explanations for these acquisition data (See DUPLESSIS *et. al*, 1987; TOMASELLI; SCHWARTZ, 1990).

4.3.1.1 The Critical Period Hypothesis

On one hand, the assumption that there is a Critical Period for L2 learning is implicit in the No-Access Hypothesis, briefly described in the previous sub-section. On the other hand, this notion is clearly unaccepted in the studies which support the Full Access Hypothesis (See sub-section 4.2.3 below). The fact that patterns of acquisition for the adult L2 learners often differ from L1 learners and that levels of ultimate fluency attainment may differ between the L1 and the L2, especially with respect to the acquisition of the L2 phonology, is postulated by some researchers to be due to a biological critical period for adult L2 learning. Some studies explicitly testing this hypothesis in L2 acquisition suggest that adult L2 learners are subject to critical periods because UG is inaccessible for this particular group of language learners (SCHACHTER, 1988; BLEY-VROMAN, 1989; JONHSON; NEWPORT, 1989). Lenneberg´s (1967) and Johnson and Newport's (1989) studies, focusing in L1 and L2 acquisition, respectively, are often cited by researchers who are interested in investigating age effects or maturational constraints in language acquisition. For this reason, both studies will be summarized in the following paragraphs.

Lenneberg (1967) argues that since Universal Grammar is a component of the human brain, effects of the process of biological maturation should be found on this mental organ. He hypothesized that certain stages in a child's developing language could be explained as resulting from the UG maturation process, that is, the Maturation Hypothesis could offer an explanation for the sequence of stages in language acquisition. In order to empirically test this hypothesis, Lenneberg analyzed the patterns of speech recuperation in patients with traumatic aphasia (speech deficits due to brain damages).

This analysis has led Lenneberg to infer that the acquisition of primary language could only occur within the period extending from early infancy until puberty, which has become known as the Critical Period Hypothesis for language acquisition. Only during this period of time i.e., between 2 years of age until the beginning of puberty, Lenneberg argues, the "mental organ" responsible for language acquisition (UG) would be completely active. In addition, he claims that his findings point to a clear correspondence between the stages of language development and the physical evolution of the brain in human beings. In sum, Lenneberg´s conclusion

was that UG is closely related to brain maturation; for this reason, first language acquisition after the critical period (the beginning of puberty) is unlikely to occur.

Johnson and Newport (1989) seek to determine if critical-period effects would be found in L2 acquisition, as postulated by Lenneberg (1967) for L1 acquisition. They administered a grammaticality judgment test in a group of 46 native speakers of Chinese and Korean who had immigrated to the United States at various ages. Johnson and Newport predicted that subjects who started the L2 acquisition before puberty should reach native-like competence in the L2. On the other hand, subjects who started the L2 acquisition after puberty should not be able to acquire native-like competence.

Johnson and Newport (1989) found an age effect on the acquisition of certain aspects of grammar, such as, third-person singular, s-affixation or progressive *ing*-affixation. They concluded that speakers who acquire L2 English after the age of seven show a steady decline in the acquisition of certain grammatical structures. In addition, they argue that among subjects who started learning English before puberty, there is basically no individual variation while there is a lot of individual variation among subjects who started the L2 acquisition process after puberty, that is, learners´ accuracy was considered random after age 15. In other words, subjects who started acquiring English between the ages of 3 to 15 did not score at chance levels, while subjects who started acquiring English between the ages of 17 and 39 scored at chance level. According to Johnson and Newport, these results indicate that some factors associated with age may control language acquisition before puberty, and may no longer be active after puberty[23].

Nevertheless, Epstein et al. (1996, p. 680) noted that the aspects of grammar investigated by Johnson and Newport, (e.g. third-person singular, s-affixation or progressive *ing*-affixation) are "language-particular morphological aspects of English", i.e. they are related to but essentially different from the principles and parameters of UG. So, they argue, it may be the case that the acquisition of language-specific aspects of grammar is age-sensitive.

Menuzzi (2001), aiming at discussing the "Maturation Hypothesis"[24] in language acquisition, argues that Johnson and Newport's (1989, 1991)[25] results may

[23] See Birdsong and Molis (2000) for a replication of Johnson and Newport´s study (1989) with different results. They did not find evidence of random accuracy among subjects above 15 years of age.

[24] See footnote Nº 26 for some references about the Maturation Hypothesis.

bring a strong positive argument for the effects of maturation on specific aspects of UG i.e., those properties which are learnable from experience. He assumes that the Maturation Hypothesis may provide an explanation not only for the stages of language development but also for the Innateness Hypothesis i.e., the assumption that humans are biologically endowed with specific mental capacities for language development – a Universal Grammar (CHOMSKY, 1965, 1981, 1986, 1995).

Within a generative framework, linguistic knowledge entails knowledge of linguistic universals, which are inborn, as well as knowledge about language specific properties, which are learnable from experience. Menuzzi (2001) hypothesizes that the effects of age of acquisition should be stronger on those properties which are language-specific than on universal aspects of language. A reanalysis of Johnson and Newport's study (1991), in light of new evidence from Brazilian Portuguese, has led him to confirm this prediction.

Johnson and Newport's (1991) goal was to verify if the effects of brain maturation would be different upon universal and non-universal aspects of the L2, in this case English. Specifically, they focused on the L2 acquisition of the *subjacency condition*, a linguistic universal, by subjects who started acquisition before and after puberty. Their findings indicate that subjacency effects correlate with age of L2 acquisition, that is the younger the subject started acquisition the better his performance on sentences that involve subjacency effects was.

Menuzzi (2001), complementing Johnson and Newport's results with data from Brazilian Portuguese, concludes that the effects of brain maturation were clearly stronger on linguistic aspects that are acquired through experience than on linguistic universals, which are innate. His overall conclusion is that the Maturation Hypothesis may be correct, and that this hypothesis can be an additional source of evidence for the UG theory, since it suggests that the distinction between linguistic universals (which are invariable) and language specific properties (which are variable) differently influence the maturation of the brain.

Menuzzi´s study (2001) points to the conclusion that age-related effects may be found in the L2 acquisition of aspects that do not derive from UG (e.g. lexical learning, and learning of certain language specific rules) and are unlikely to occur in the L2 acquisition of grammatical properties which are determined by UG. This

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[25] Johnson and Newport´s study (1989) is summarized above, in this section; for an overview of Johnson and Newport (1991), see Menuzzi (2001, pp. 157-162).

position does not seem to contradict the studies which criticize the assumption that UG is inaccessible after puberty. The assumption that the Critical Period Hypothesis is due to UG inaccessibility derives from a failure of identifying the differences between competence and performance in language acquisition (EPSTEIN et al., 1996).

Flynn and Manuel (1991) caution that it is important to distinguish between the acquisition of the lexicon, phonology, syntax, semantics, and pragmatics, since it may be that each aspect of language is guided by a distinct set of principles, as suggested by Krashen, Long, and Scarcella (1979). With respect to the acquisition of syntax, Flynn and Manuel argue that certain data cannot be explained by a critical period approach, but can be understood if a theory of UG is assumed to act in the adult mind/brain[26].

The authors´ main criticisms with respect to critical period formulations are briefly summarized in the following arguments: first, the linguistic differences noticed between children and adult language learners are not understood yet, that is, changes with age may occur as a result of the interaction among several factors. These changes do not necessarily imply that adult learners have lost their capacity to access UG; second, UG theory does not aim at accounting for the end-state competence achieved, that is, it does not inform us about the level of proficiency attained by the language learner.

Flynn and Manuel (1991, p. 134) argue that the studies which investigate the Critical Period Hypothesis merely demonstrate that there are differences between the end-state achieved by children and adult L2 learners. Rather than that, in order to be considered successful, these studies should be able to demonstrate that UG does not constrain the hypotheses about the new target grammar formulated by adult L2 learners. They concluded that there is no evidence to support the claim that adults, in contrast to children, do not access UG in L2 acquisition. They argued that if UG did not guide adult L2 acquisition, adults would make errors totally unrelated to the kinds of errors children make. However, several commonalities between child L1 and adult L2 syntactic acquisition have been found.

Martohardjono and Flynn's study (1995) suggests that two areas of language are not affected by a critical period: the innate principles and parameters of UG

[26] See Flynn and Manuel (1991, pp 136-140) for an example that illustrates this assumption.

governing the acquisition of syntax and the biologically determined sensory abilities for the development of sound systems. However, the authors do not deny that there may be certain differences between adults and children in language learning. In order to test the existence of a critical period for UG principles and parameters, that is, to test whether they are still accessible for adult L2 learners, it is important to investigate whether adult second language learners have knowledge of UG principles which are instantiated differently in the first and second languages. Martohardjono (1993) investigated how adult learners who are native speakers of a language without syntactic *wh*-movement, such as Chinese and Indonesian[27], treat sentences like (5), which are grammatical in their native languages, when learning English.

(5)The girl who had a stomach ache ate a cookie.

(6) What$_i$ did the girl [who had a stomach ache] eat t_i?

(7) * What$_i$ did the girl [who had t_i] eat a cookie?

In order to investigate the effects of a possible critical period in L2 acquisition, Martohardjono´s study only included subjects who had started learning English after the age of 15. The structures selected for the study tested learners´ knowledge of different types of movement constraints that hold in English, but do not occur in their L1s. The test sentences involved a variety of ungrammatical sentences in English: Extractions of the *wh*-word out of Relative Clauses, Adjunct Clauses and Sentential Subjects. The results showed that both Indonesian and Chinese learners were capable of rejecting above 70% of the ungrammatical sentences that involved *wh*-extractions in all the structures tested. Martohardjono concluded from these results that UG principles, such as the Subjacency Principle[28], which are not operative in the L1, remain available to adult L2 learners, suggesting that UG is not affected by a critical period.

[27] Both in Chinese and in Indonesian the question words remain *in situ*, that is, there is no syntactic movement in question-formation. Therefore, in these languages movement constraints are not instantiated.

[28] The Subjacency Principle determines how far an element can be moved. Chomsky (1973) proposed that movement cannot cross more than one bounding node, that is an IP or a NP.

With respect to the language faculty in the domain of phonology, Flynn and Martohardjono (1995) refer to important empirical evidence that points to the fact that general phonological abilities, such as the biologically determined ability to construct new phonological systems, are maintained in adulthood and remain available to mature L2 learners. Several studies show that the sensory ability to perceive and produce novel contrasts remains available with age (SNOW; HOEFNAGEI-HÖHLE, 1978; WERKER; TEES, 1983; BEST, McROBERTS; SITHOLE, 1988). For this reason, the authors claim that native-like pronunciation is not an adequate measure of phonological competence. Instead, they suggest that speech cognition be measured by the ability to detect sounds pertinent to speech and to manipulate or integrate them into a systematic mental representation of the sound system for the language being acquired.

In sum, Flynn and Martohardjono (1995) restate that the biologically determined faculty for language (competence) remains accessible to adult L2 learners both on the acquisition of syntax and on the acquisition of sound systems. In other words, they were able to successfully isolate two areas of L2 language acquisition where critical period effects may not be present.

4.3.2 The Partial-Access Hypothesis

Partial-access hypotheses contend that UG is not totally unavailable to the adult L2 learner. Schachter (1989) proposes that only the invariant principles of UG, that is, those that characterize the grammars of all languages would remain accessible to the L2 learner. In other words, only the parametric values instantiated in L1 are available to the L2 learner. For this reason, L2 learners construct grammars constrained by principles of UG and the immutable set parameters of the particular L1 grammar. The underlining assumption is that L1 grammar and L2 grammar construction fundamentally differs, especially because the L1 constrains the acquisition of the second language. Strozer (1992), another proponent of the partial access hypothesis, argues that only the invariant principles of UG are available to the adult L2 learner and that parameter setting is impossible in L2 acquisition.

The following empirical evidences reviewed by Epstein, Flynn and Martohardjono (1996) present crucial counter-arguments to the partial-access hypothesis. First of all, this prediction implicitly assumes that UG does not constrain L2 acquisition when there is a mismatch between the L1 and L2 grammars; that is, UG is involved in L2 acquisition only on those aspects where the L1 and the L2 perfectly match. However, several empirical studies (FLYNN, 1983; 1987; 1991; 1993; FLYNN; MARTOHARDJONO, 1994) show that L2 learners are able to assign new parametric values in the construction of the L2 grammar and they do that consistently with predictions made by the theory of UG.

Secondly, the partial-access hypothesis predicts that L2 learners will not be able to use certain UG principles in the second language acquisition. L2 learners´ knowledge of syntactic movement constraints is of particular interest to L2 researchers because this kind of knowledge involves sentence-types that are assumed to be unavailable in the L2 input. The same is assumed about L1 acquisition, that is, knowledge about movement cannot be determined from the input. Since negative evidence of this type is not generally made available to the learner, knowledge of subjacency and other negative constraints is hypothesized to be biologically determined, that is, given by UG. Therefore, the argument concerning underdetermination of the data (or poverty of the stimulus) can also be shown to hold in L2 acquisition. It has been argued that UG is not available to the L2 learner in the same way that it is to the child L1 learner (Schachter, 1989). However, Martohardjono (1993) proposed a different approach to investigating L2 learner´s knowledge of UG syntactic movement principles. Instead of comparing absolute rates of rejection of individual *wh*- constructions between native and non-native speakers, she tested whether L2 learners´ judgments of violations conform to grammatical systems allowed by UG. Since knowledge of ungrammaticality could not possibly have been derived from the L1 grammar, Martohardjono concluded that UG principles constraining syntactic *wh*- movement must still be available to these learners. She has found some level of variability among the subjects, which is predicted by a parameter-setting theory of L2 acquisition (FLYNN, 1987).

Furthermore, data collected from errors made by adult L2 learners also bring crucial evidence against the partial-access hypothesis. Besides the three arguments briefly explained above, Epstein et al. (1996) also mention some studies which found that L1 and L2 learners showed comparable patterns of acquisition with respect to

control verb, such as, *promise*, *remind* and *tell* the acquisition (COOPER et al.,1979; FLYNN et al., 1991). These studies indicate that L2 learners of English, like L1 learners, interpret both subject and object control verbs as object control verbs, that is, it seems that a general principle of locality plays a role in the L2 acquisition of English. Both L1 and L2 learners of English seem to rely on this locality principle at early stages of acquisition. It is important to highlight that in these studies certain patterns of acquisition seem inexplicable in terms of "transfer from the L1". It seems that they can only be explained if UG is assumed to remain available to the adult L2 learner.

The fact that children do not start speaking like adults from the beginning, even though being equipped with an inborn language "organ", urges some explanations. Investigating the nature of UG from the initial to the end state (or steady state)[29] has been a leading question both in L1 and L2 acquisition. The "Maturation Model" and "The Strong Continuous Model" are theories that aims at explaining the issues related to the developmental problem of language acquisition.

4.3.2.1 The Maturation Model

The Maturation Model[30] asserts that the UG principles are not all immediately available to the L1 learner due to some maturational constraints that control the linguistic development. The basic assumption is that certain universal principles become available only after the child has achieved a particular stage in cognitive maturation.

Therefore, from this point of view, first language acquisition is considered the result of the maturation of UG, plus experience. For this reason, it can be inferred

[29] The definition of the initial and end-state (steady state) adopted in this study is the one presented by Epstein, Flynn and Lust, 1997. They explain that the initial state is not absolute and it is not a temporal state. It refers to a state of the mind/brain prior to experience with particular linguistic data and a particular new acquisition task. Therefore, being in the initial state means having a set of finite discrete principles available to any language specific phenomenon to which one is exposed. With respect to the final state, they assume that it is equated with the notion of full competence, that is, the final state of a language specific grammar has to do with the architecture of the mind/brain and not with the proficiency level attained by the learner.

[30] See Felix (1984) for L2 acquisition, for L1 acquisition see Lenneberg (1968); Borer; Wexler (1987), and Radford (1990).

that when a child achieves the steady state of language acquisition, UG matches with his or her L1 grammar, becoming an indistinct unit. However, it is argued that a maturation theory of UG seems to contradict the notion that UG is a theory of the initial state, since such theoretical construct entails the formulation of a model that accounts for language acquisition from the initial to the steady state (LUST, 1999; FLYNN; LUST, 2002).

With respect to L2 acquisition specifically, maturation model theories predict that access to UG is no longer available to an adult L2 learner, because UG "melts" with the specific grammar of his or her L1. In other words, since UG becomes the language specific grammar, it is only available until the L1 grammar is fully acquired.

4.3.2.2 The Weak Continuity Model

In language acquisition research the *continuity hypothesis* (PINKER, 1984) suggests that the UG principles remain the same during all stages of child L1 acquisition, that is, early child grammars and mature native grammars are minimally different. For this reason, children always produce sentences that conform to UG. Within this model, the initial state of language acquisition is considered very elaborate, that is, it is equivalent to the state of an adult grammar. However, the *continuity* assumption should be understood as an account of the child's linguistic competence, rather than his or her linguistic performance. Therefore, the classical distinction between competence and performance leads to an understanding of the reasons why children do not speak as adults, even though they are both guided by the same underlying linguistic principles.

The concept of continuity was divided into the "Strong Continuity Hypothesis" and the "Weak Continuity Hypothesis". The main assumption of the Strong Continuity Hypothesis is that all the principles of UG may be accessible since the beginning of language acquisition. On the other hand, the Weak Continuity Hypothesis contends that early child grammars correspond to UG, but they contain only lexical categories, that is, initially, the functional projections are not part of these grammars.

The Weak Continuity Hypothesis was adapted by Vainikka and Young-Scholten (1991) to explain the initial state in the context of L2 acquisition. They claim

that functional categories provided by UG[31] are initially absent from the grammars of L2 learners and that these categories progressively emerge in discrete stages: the VP, IP and AGRP stages. Each one of these stages is a distinct type of grammar, that is, L2 learners who are in the first stage, the VP stage, assumes that his or her grammar lacks the functional categories I, AGR, C, and their corresponding X´ projections. Under this proposal, the L1 lexical categories, along with the L1 headedness properties, constitute the L2 learner initial state.

One of the crucial criticisms directed to Vainikka and Young-Scholten´s study argues that they consider the absence of some form in production data as evidence of absence of the corresponding abstract category (EPSTEIN et al., 1996; LAKSHMANAN, 1993; GAVRUSEVA; LARDIERE, 1996). In addition, Epstein et al. (1996, p. 692) observe that the types of naturalistic production tasks used by Vainikka and Young-Scholten "do not incorporate the controlled manipulation of target structures relevant to the factors being investigated".

Epstein et al. (1996) also raised several interesting questions, which are briefly summarized as follows[32], with respect to the theoretical foundation of Vainikka and Young-Scholten`s study. First, they argue that the empirical evidence in their study does not provide a consistent explanation for the postulation of the three developmental stages suggested by the authors. Second, they contend that the Weak Continuity Hypothesis cannot explain L2 acquisition, because it only proposes a model of "Increasing Overgeneration" (EPSTEIN et al., 1996, p. 69). Therefore, this model should be abandoned as an explanation for L2 acquisition. Finally, they point out that some of the principles proposed by the Weak Continuity Hypothesis, such as, the Full House Principle, and the Optional V to I raising in the IP, involve some kind of violation to a UG model of language acquisition.

4.3.3 The Full-Access Hypothesis

[31] Functional categories are grammatical categories which play a formal role in a sentence, such as tense phrase (TP), agreement phrase (AgrP), and complementizer phrase (CP), among others.

[32] See Epstein et al. (1996) for a detailed explanation.

The core assumption of the Full-Access to UG Hypothesis, mainly represented in the Parameter-Setting Model (FLYNN, 1983; 1987), is that “the essential faculty for language evidenced in L1 acquisition is also critically involved in L2 acquisition” (Flynn, 1987, p. 29). Particularly, FLYNN’s study (1983) found compelling empirical evidence suggesting that abstract principles of structural organization isolated for L1 acquisition, such as the head-initial/head-final parameter in the acquisition of grammatical anaphora, also constrain the process of L2 acquisition.

The Full-Access approach constitutes the null hypothesis, which predicts that L2 adult acquisition (like child L1 acquisition) will converge on the core grammar representation required by the L2. Importantly, Klein and Martohardjono (1999, p. 6) explain that assuming non-native acquisition as UG-constrained, like child L1 acquisition, does not mean that both the development and the product of L1 and L2 acquisition should perfectly match. Epstein et al. (1996) argue that the UG-given-inventory of functional categories is complete in the L2 grammar of adult L2 learners and that the L2 learner’s grammar is constrained by UG at all stages. Their data set suggests that from early stages of acquisition the grammars of L2 learners incorporate functional as well as lexical categories. They investigated the acquisition of functional categories by 33 Japanese-speaking children and 18 Japanese-speaking adults learning ESL. These subjects were tested on sentences involving the functional categories IP, such as present and past tenses, modals, the progressive aspect, and negation, and CP, such as sentences involving topicalization, relative clauses, and *wh*-questions. The type of task used was elicited imitation containing two tokens of each kind of structure previously described. Subjects were pre-trained on all the experimental tasks and they all received bilingual lists containing the lexical items used in the stimulus sentences. Sentences were equalized in syllable length (16) and in number of words (9-11).

Epstein et al. (1996) found that the grammars of both Japanese-speaking children and adults contained the functional categories IP and CP, at early stages of L2 acquisition. The results of error analysis indicate that no greater than 15% of the errors for any one sentence type involved an error on the functional category in question. The errors observed when investigating functional categories do not reflect a knowledge deficit, that is, the absence of the syntactic categories themselves. They argue that these errors may derive from a production problem that is independent of the absence or presence of the functional category in the grammar. This

performance difficulty may inhibit the expression of a particular functional category in a given utterance, since the results indicate that the difficulty may vary according to the type of structure involved. Epstein et al. (1996, p. 707) conclude that:

> (1) UG principles and parameters are available to the L2 learner and (2) L2 language development is restricted to language-particular lexical, morphological, and phonological acquisition, parameter setting, and the integration of acquired linguistic knowledge with what are, strictly speaking, grammar-external systems.

4.3.3.1 The Strong Continuity Model

Within the Full-Access hypothesis, the Strong Continuity Model constitutes a framework to explain how UG relates to language acquisition. This model contends that UG remains distinct from the language specific grammar constructed by the child L1 learner during the acquisition of his or her L1. In addition, within this model, UG is completely available and continuously constrains the process of L1 grammar construction. For this reason, all syntactic functional categories are accessible from the initial state of first language acquisition; that is, before children start being exposed to the adult language data, the complete functional structure is already available for them.

Several studies support the Strong Continuity Model in first language acquisition. Poeppel and Wexler (1993) found evidence for the existence of functional categories in early German grammar, including IP and CP. Hyams´ (1992) findings further support the availability of fully functional structure in early grammar. In line with these findings, Lust (1999, p. 118) claims that “UG remains continuously available throughout the time course of first language acquisition. UG does not itself change during this time”. Lust suggests that the linguistic development of the child corresponds to the time necessary to integrate UG principles with the specific language grammar, that is, the mapping process underlying language acquisition. However, Lust highlights that this time does not bring evidence in support of the Maturation Hypothesis, because, contrary to what is assumed under this model, UG remains the same at different stages of language acquisition development. Flynn and

Lust (2002, p. 99) explain the essential points underlying the Strong Continuity Model of UG in language acquisition:

> UG remains constant and distinct from specific language grammars during the lifetime of an individual and hence is available to guide the learner in the construction of new grammars throughout the individual's lifetime.

The Strong Continuity Model of UG outlined in figure 2 suggests that 1) UG remains distinct from specific language grammars; 2) UG continues to be entirely available to the L2 learner during the acquisition of a second language; 3) Language knowledge is acquired in a similar manner in adulthood and in childhood. It is important to highlight that Flynn and Lust (2002) do not deny the existence of some differences between child and adult language acquisition. However, they interpret these differences as a result of a number of different factors, such as performance circumstances, that can be explained under the Strong Continuity Model. The underlying theoretical premise of this study is that the differences between L1 and L2 acquisition do not point to either UG inaccessibility or to the assumption that the access to UG fundamentally differs in the L1 and L2 learner. Importantly, Flynn and Lust (2002, p. 100) argue that "these differences do not result from a change in the language faculty, UG".

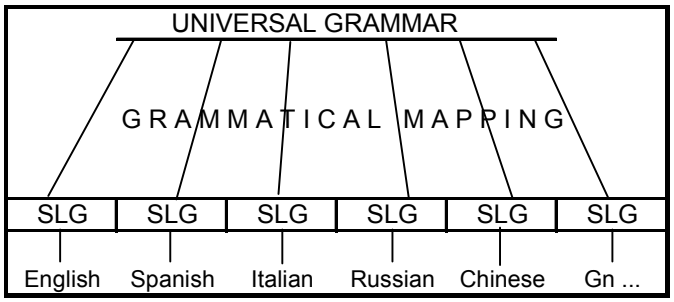

Figure 2 - The Strong Continuity model (SLG = Specific Language Grammar)
Source: Flynn and Lust (2002, p. 98)

Flynn and Lust reanalyzed data from previous experimental studies that investigated the acquisition of the parameter of phrase structure directionality in L1 and L2 scenarios. Several early studies have found that the child both sets this parameter very early and is able to extract its consequences to anaphora direction in his or her native language (LUST; CHIEN, 1984; LUST; MAZUKA, 1989; MAZUKA; 1996; LUST et al., 1996). Furthermore, previous studies conducted by Flynn (1983,

1987), found that L2, as well as L1 acquisition, show evidences of constrains of the phrase structure directionality parameter setting. A closer analysis of these studies reveals that L2 learners, in the process of constructing the target grammar, do not simply transfer the properties of their L1 grammars. In fact, at all levels of proficiency, no evidences were found indicating that L2 learners were transferring the parameter values from the L1 to the L2.

The results briefly outlined above lead Flynn and Lust (2002) to suggest that the Strong Continuity Model provides an accurate framework to account for both the L1 and L2 language acquisition processes. In addition, they argue that this approach is in harmony with the revisions in linguistic theory advanced in the Minimalist Program (CHOMSKY, 1995). Under these emerging advances in generative linguistics theory, the fundamental assumption is that there is only one human linguistic system, which is a unique biological endowment. Therefore, the similarities between the child L1 and the adult L2 linguistic development can be explained by arguing that UG constraints also operate in adult L2 learning. To conclude, Flynn and Lust's (2002, p. 118) experiments suggest that the child L1 learner and the adult L2 learner are "in relevant respects non-distinct with respect to the language faculty". However, they emphasize that:

> […] since language acquisition depends on more than just UG, the hypothesis that UG constrains adult L2 acquisition does not entail that adult L2 acquisition will be developmentally identical in all respects to child L1 acquisition.

Following the same line of investigation, Flynn et al. (2004) extend the core assumptions of the Full Access to UG Hypothesis to the investigation of L3 acquisition. Multilingualism is a natural phenomenon throughout the world, that is, nowadays an increasing number of people need to learn and use several languages. Contrary to this growing demand, multilingualism has not received the necessary attention among language acquisition researchers yet, who tend to consider it as a sub field of bilingualism and second language acquisition. Flynn et al. (2004, p. 6), in response to this emerging need, aim at answering the following research questions:

> (1) Do the properties of the L1 grammar alone determine language learning in L3 development? (2) Can grammatical properties of all prior languages known potentially determine subsequent patterns?

These issues have led them to investigate the acquisition of an L3 (English) by native speakers of Kazakh (an Altaic language) who acquired Russian as an L2. Focusing on the investigation of the L3 acquisition of relative clauses, they predicted that L3 learners would rely on the experience they have had, while integrating language-specific CP features (L1 or L2) with universal knowledge of CP, to acquire these structures in an L3 [33]. Flynn et al. (2004) used an elicited imitation task to test matching groups of adults (33 subjects) and children (30 subjects) distributed in three levels of proficiency. The results they found suggest that the L1 does not play a special role in the acquisition of subsequent languages, confirming their initial prediction for the adult L3 learners. In fact, this particular group of adult L3 learners seems to be influenced by all previous language acquisition experiences they have had, without showing a tendency to be more influenced by their L1. With respect to the group of children, Flynn et al. (2004, p. 14) results suggest that:

> …when the L2 is still "in progress", its influence on L3 acquisition is not the same as it is when L2 and L3 are *sequential*. In some sense, the specific knowledge underlying language A appears to be more fully available to the acquisition of language B when A and B are *sequential*.

These results, contributed to the formulation of an extended UG model to account for language acquisition, namely the Cumulative-Enhancement Model (FLYNN et al., 2004). In addition, they help us to explain why language learning gets easier the more languages an individual acquires, which is a well-known phenomenon[34]. The Cumulative-Enhancement Model predicts that each language represented in the learner's mind/brain may be evenly available for assisting him or her with the task of learning a new language.

Flynn et al. (2004) main conclusions can be summarized as follows: First, the authors show that L3, as well as L1 and L2 learners have access to the universal knowledge related to the free relatives[35] throughout language development. They also demonstrate that L3 acquisition studies can contribute to a better understanding

[33] For a detailed explanation about the acquisition of relative clauses in these languages, see the following studies: Flynn and Lust (1987) focus on the study of children's L1 acquisition of English; Flynn (1983, 1987) investigates the adult L2 acquisition of English. These studies constitute the background for Flynn's et al. study (2004).
[34] See Cenoz (2003) for a discussion about bilingualism and its effects on the acquisition of an L3.
[35] A free relative clause exemplified in Flynn et al. (2004): *Cookie Monster hits [what pushes Big Bird]*.

of statistical models for language learning (those studies that deal with the necessary amount of input in order to account for language acquisition). They claim that these studies, since they focus on the environment, fail to explain why the linguistics knowledge already represented in the learner's mind/brain influence the patterns of acquisition in a new language. In addition, it is argued that, through the study of an L3 (L4 or beyond), it is possible to obtain crucial new evidence about language acquisition that would not be available via the isolated study of the L1 and the L2.

To sum up, the Cumulative-Enhancement Model formulated by Flynn et al. (2004) may lead us to a better understanding about how innate linguistic principles and language-specific properties interact in the process of constructing a particular grammar (L1, L2, L3, Ln…). Studies of this sort provide us a better understanding of multilingualism as well as confirm earlier results for L2 acquisition, in terms of the role of other languages known in acquisition.

4.4 The Syntax - Pragmatics Interface in Language Acquisition

Several pieces of evidence indicate that both in L1 and in L2 acquisition the development of pragmatics takes place later than the development of syntax. Sections 4.4.1 and 4.4.2 present some of the core studies which address this issue in first and in second language acquisition.

4.4.1 Background: L1 Acquisition of the Syntax-Pragmatics Interface

Several studies on monolingual acquisition highlight that integrating syntactic information within an appropriate discourse framework is a demanding task for children leading them to omit syntactic obligatory arguments (HYAMS, 1996; PLATZACK, 2001). In addition, results from first language acquisition indicate that the integration of language specific pragmatics and linguistic knowledge involves learning (AUSTIN et al., 1996; BOSER, 1995; BROWNELL et al., 1992; CARROLL, 1983; LUST et al., 1986). In other words, children must learn how to accommodate

inborn UG knowledge with knowledge about the context where certain sentence structures may occur.

The results of the following three studies are particularly relevant to support the claim of "the developmental primacy of fundamental syntax over pragmatics", which underlies this research. Firstly, Lust et al. (1986), investigating the development of certain forms of pronominal and null anaphora in first language acquisition of English, found that children apply the *pragmatic context constraint*[36], which holds for pronominal anaphors only, to null anaphors as well. Sentences (1) and (2) below**,** adapted from Lust et al. (1986), are examples of pronominal anaphors, which are free, and null anaphors, which are obligatory:

(1) I´m going to tell you a little story about Cookie Monster$_i$. When he$_i$ closed the box, Cookie Monster lay down.

(2) I´m going to tell you a little story about Cookie Monster$_i$. When Ø$_i$*$_j$ pushing the car, Big Bird $_j$ patted Cookie Monster.

The fact that children generalize the pragmatic constraint to both pronominal and null anaphors suggests that certain pragmatic properties are late learned in first language acquisition.

Secondly, Boser (1995) investigates the acquisition of verb initial utterances by young children acquiring L1 German. She found that the German children use verb initial utterances with dropped topicalized phrases that have pragmatic antecedents. However, in adult German topicalized phrases can only be omitted when they have a linguistic antecedent. Boser argues that the German children in her study do not have deficits in underlying phrase structure, rather, the divergent sentence structures they produce are due to the demanding nature of the task they are faced with, i.e., learning that a pragmatic context is not sufficient to allow verb initial utterances.

The third relevant study was conducted by Austin's et al. (1996) and investigated the distribution of null subjects compared to the distribution of null auxiliaries in Spanish speaking children's grammar. Through an analysis of children's

[36] The *pragmatic context constraint* determines that a term which is mentioned in a previous utterance determines the reference of an anaphor in a following utterance (LUST; LOVELAND; KORNET, 1980, among others.)

natural speech samples[37], they were able to find evidence of early competence in a variety of syntactic structures, such as, the use of the subjunctive mood, relative clauses, VP ellipsis, impersonal se, and arbitrary plural subjects. However, their findings indicate that the subjects do not seem to have acquired an important language specific constraint on the distribution of overt subject pronouns, namely that overt pronouns in adult Spanish are only used for emphasis or contrast. In addition, they found that their subjects seem to believe that only a pragmatic antecedent is required to identify a null auxiliary, when in fact, in adult Spanish, only a linguistic antecedent is allowed in these contexts.

Austin's et al. (1996) argue that their results support the assumption that there is development in the first language acquisition of Spanish, i.e., learning can be found in the integration of syntax and pragmatics. The overall conclusion of their study is summarized in the following citation (AUSTIN et al., 1996, p. 11):

> Although children at these MLUs demonstrate a good deal of knowledge about aspects of syntactic well-formedness related to *pro*-drop, they still have to acquire the language specific knowledge of how and when to use null subjects and null auxiliaries together in discourse.

In summary, both Boser's (1995) and Austin's et al. (1996) findings point out that areas where children have to integrate language specific pragmatic constraints with knowledge of syntax are inherently problematic in first language acquisition. However, they highlight that children's grammatical competence does not seem to be the problem; rather, the problematic area resides on the interface between syntax and pragmatics.

In a similar vein, the studies presented in the next section also address issues related to language acquisition at interface conditions. Specifically, some important findings concerning the interface between syntax and pragmatics in L2 acquisition as well as issues related to L2 learners´ syntactic *versus* interpretative knowledge will be reported.

4.4.2 Background: L2 Acquisition of the Syntax-Pragmatics Interface

[37] The dataset consisted of a total of 13 samples from 10 subjects, ranging in age from 1 year 2 months to 3 years 4 months, and in MLU from 1.29 to 4.77.

Early results from adult second language acquisition indicate that L2 learners acquire the syntactic properties associated with the L2 grammar even when the distribution and licensing of these properties do not match with their L1 grammar. White (1985) aims at investigating whether UG plays a role in L2 acquisition as well as how the L1 is involved in this process. This assumption is tested on adult native speakers of Spanish learning English as a second language focusing on sentence structures involving the *pro-drop* parameter. Spanish is a *pro-drop* language, i.e. it has the properties attributed to this parameter including the ability to omit subject pronouns, the free inversion of subject and verb in declarative sentences and "that-trace" effects (These properties are explained in section 3.1 above). On the other hand, English does not show this clustering of properties because it is not a *pro-drop* language. So, Spanish speakers learning English as a second language have the *pro-drop* parameter activated in their L1 and they must learn that in English this parameter is not operative.

White (1985) predicts that since the L2 learners need to "lose" the L1 parameter they will carry over some structures from their L1 to the L2. In addition, she assumes that once the L1 parameter is lost all aspects associated with it should be lost together. The subjects who participated in the study were 54 native speakers of Spanish learners of English as a second language and 19 native speakers of French as a control group. The method consisted of a grammaticality judgment task with 31 sentences, some ungrammatical with missing subjects, subject-verb inversion and that-trace effects. The results show that the Spanish students carry the *pro-drop* parameter over into English, particularly at the initial levels of proficiency. Beginners are more likely to accept missing subjects in the L2 than advanced learners; nevertheless, there is a gradual improvement as the levels of proficiency increase.

Interestingly, White´s findings indicate that when the missing subject can be identified in the previous linguistic context[38] no improvement is found at the highest level of proficiency, that is, statistically significant differences in performance were not found between the basic and the advanced subjects. White does not find an explanation for this phenomenon. However, it is likely that this result indicate the

[38] *John is greedy. Eats like a pig* (White, 1985) is an example of this kind of sentence structure.

existence of mismatches between learners´ syntactic and pragmatic knowledge, which is one of the main assumptions underlying this study.

Overall, White (1985) finds support for confirming the first hypothesis and does not find evidence in support of the second hypothesis. In other words, the hypothesis that having to reset an L1 parameter leads L2 learners to transfer errors was confirmed. On the other hand, the prediction that loss of all aspects of the parameter would be related was not born out. In sum, White's study suggests that the acquisition of the syntactic properties of null-subject grammars by speakers of a non-null subject language is relatively unproblematic[39].

Another important early study was conducted by Coppieters (1987) with 21 near-native speakers of French from a variety of language backgrounds. Both semantic (e.g., tense/aspect distinctions) and syntactic (cliticization and raising) contrasts between the L1 and the L2 were investigated within a grammaticality judgment test. Results indicate that native and near-native speakers of French have different intuitions on French sentences. The main divergence between the two groups was found on the interpretations of sentences involving basic grammatical contrasts such as the two past tenses, the 3rd person pronouns, and the placement of the adjective before or after the noun. The author argues that the data clearly indicate that language use and learners´ underlying grammar constitute two relatively independent levels of language. The conclusion reached by the study is that more divergence between near-native and native speakers occurs in 'functional' or 'cognitive' aspects of grammar than in formal features, such as those determined by Universal Grammar.

Flynn (1983, 1987) investigated the head-direction parameter[40] in adult L2 acquisition of English by Spanish, Japanese and Chinese speakers. These languages differ in terms of word order and head direction. English and Spanish are SVO and head-initial languages whilst Japanese follows an SOV word order and is a head-final language. Chinese is a mixed language. It is SVO, but with respect to adjunct complementation it is head-final. Results indicate that in some ways the

[39] Similar results were found by Phinney (1987).

[40] Several L1 studies demonstrate that the head initial/head-final parameter is closely related to the acquisition of anaphora (CHOMSKY, 1969; LUST, 1981, 1986; LUST et al., 1986). Lust (1986) found that children are sensitive to the head-direction of their L1s and use this sensitivity to constrain their hypothesis about grammatical anaphora. For this reason, young children learning English as their L1 prefer forward anaphora (See sentence 3b) while children learning Japanese as their L1 choose backward anaphora (Example 4b).

patterns of acquisition are comparable to Japanese speakers and in other cases they are comparable to Spanish speakers learning English as an L2. The following controls were adopted: the language proficiency level was established by an independent standardized test; learners were familiar with the lexical items used in the stimuli; number of words and syllables did not vary among the stimuli sentences.

L2 speakers were asked to understand and produce complex sentences involving post-posing, as in sentences (3), and pre-posing of an adverbial subordinate clause, as in sentences (4). In addition, several of these sentences involved a pronoun in subject position (3b and 4b) and others did not involve any pronoun anaphor (3a and 4a). The examples below were taken from Flynn, (1983):

(3) a. The boss informed the owner when the worker entered the room.
b. The man answered the boss when he installed the television.

(4) a. When the actor finished the book, the woman called the professor.
b. When he delivered the message, the actor questioned the lawyer.

One of the most important findings of the study can be summarized as follows: at early stages of acquisition, the Japanese and Chinese speakers, whose L1 differs from L2 English in terms of head direction[41], did not show any significant preference for sentences involving either backward of forward pronoun anaphors. Advanced Japanese and Chinese speakers indicated a significant preference for sentences like 3a (head initial/post-posed) rather than for sentences like 4b (head-final/pre-posed); that is, they do not simply duplicate the head final direction that characterizes their L1s. Overall, these results suggest that the Japanese and Chinese learners were making an effort to organize the English grammar according to its head-initial configuration and in accord with the head-initial parametric setting for English. Similar patterns were found for L1 learners of English. These results support the hypothesis that the L2 learners had assigned a new value to the head-direction parameter in conformity with the English value.

With respect to the Spanish speakers, the results indicate that they scored higher in terms of amount correct on the same stimulus sentences than the Japanese

[41] Chinese with respect to subordinate clauses is head-final like Japanese. However, in terms of word order, it is SVO like English. Thus, both English and Chinese are head-initial with respect to the VP (V-NP) unlike Japanese which is SOV and head-final with respect to the VP (NP-V).

and Chinese speakers did. However, since advanced Japanese and Chinese speakers did not follow their respective L1 grammars, this pattern cannot simply be attributed to the match/mismatch in head-direction between the L1 and the L2. Rather, these results suggest that the L1 plays a subtle role in L2 acquisition; that is, in the process of acquiring a second language, learners do not simply copy the structural properties of the grammar they already have. Flynn (1987) concludes that where there is a structural match between the L1 and the L2, head-direction acquisition is facilitated, and where this match is not present, patterns of acquisition are comparable to those for L1 acquisition.

Another interesting finding refers to the effects of a +pragmatic lead upon learners coreference judgments. The results show that both Japanese and Spanish subjects allow the pragmatic context to determine the interpretation of null and pronoun anaphors, indicating that the L2 learners, especially in early stages of acquisition, have problems to observe language-specific constraints on the interpretation of null anaphors in English. It is claimed that only gradually L2 learners are able to differentiate null and pronominal anaphors in their developing L2 grammars. It is worthy recalling that Lust et al. (1986) found similar results for L1 acquisition.

Flynn's study strongly suggested that, even at early stages, L2 learners´ knowledge of the second language goes beyond the grammar they already have from their L1s. This assumption constituted the baseline of a new L2 explanatory theory within a UG framework. The explicative potential of this new theory is clearly enhanced, since it was able to integrate both the main assumptions of Contrastive Analysis and Creative Construction theories of L2 acquisition within a UG framework of principles and parameters. Under a UG paradigm, it is possible to account for the commonalities as well as the differences between L1 and L2 acquisition.

Several recent SLA studies have been investigating similar issues, suggesting that the syntax-pragmatics interface clearly poses challenges to L2 learners in general; therefore, it is a phenomenon worthy to be reinvestigated. Pacheco (2000) investigated the L2 acquisition of the pronominal *objects him*, *her* and *it* in English by Brazilian Portuguese learners with the purpose of finding evidences of interference from BP and the occurrence of patterns determined by universal strategies rather than L1 interference. Adult and adolescent learners studying English as a foreign language (EFL) in a private school participated in the study. The total number of Ss

was 145. They were classified as being at one of four levels of EFL competence: beginner (*n* = 32), basic (*n* = 22), intermediate (*n* = 45), advanced (*n* = 46). Two versions of a written production test were designed in order to elicit the 3rd person *object* pronouns. Version 1 (V1) was designed for beginners, basic and intermediate learners (Sentence 1 is an example). Version 2 (V2) was designed for advanced learners only. (Sentence 2 is an example). In both versions, students were instructed to complete the sentences using the targeted verb plus a modal (*will* or *can* for V1 and *would* or *could* for V2).

Sentence 1: If you meet Mary again, _____ (invite)
Sentence 2: If you met Mary again, _____ (invite)

Pacheco (2000) argues that some of her results support the L1 transfer hypothesis while others reveal the occurrence of patterns determined by universal strategies[42]. Table 3 summarizes the deletion of the *object* position, according to the features of the antecedent, by BP native speakers (Cyrino, 1994) and by English L2 learners.

Table 3 - Percentage of use of null *objects* in BP (L1) and in English (L2)

	Features of the Antecedent			
	+anim, +spec	+anim, -spec	-anim, +spec	-anim, -spec

[42] CYRINO (1999) found similar results when investigating the acquisition of null objects by BP speakers acquiring L2 English. She argues that in BP null objects are part of the core grammar (the syntax of the language) while in English they belong to the periphery grammar (pragmatic-semantic aspects) because they can only occur in recipe contexts. Her results indicate that BP learners were able to acquire aspects of the L2 core grammar and that they rely on the L1 when facing issues related to the periphery grammar.

Beginner	54,8%	56,1%	50%	88,8%
Basic	28,5%	25,5%	40%	89,4%
Intermediate	2,2%	4,8%	11,1%	21,6%
Advanced	0%	5,6%	6,5%	22,5%
BP	0%	57%	86%	93%

Note: (anim = animate; spec = specific)
Source: Pacheco (2000)

Table 3 demonstrates that at the *Beginner* and *Basic* levels, the L2 learners delete the *object* when the antecedent has the features [-anim, -spec] to a considerable degree [88.8% and 89.4% respectively][43] while intermediate and advanced learners avoid deletion when the antecedent has the features [+anim, +spec]. Pacheco argues, on the one hand, that the results for the *Beginner and Basic levels,* "transfer" from the L1 since similar patterns, with respect to the *object* deletion, are found in BP. On the other hand, Pacheco argues that the transfer hypothesis fails to explain the high frequency of null *objects* with [+anim, +specific] antecedents (54.8%) in the beginner level, since *object* deletions with this kind of antecedent is close to 0% in BP.

Particularly interesting to this study, Pacheco (2000) noted that *intermediate* and *advanced* learners do not use any wrong pronominal forms in their L2 English; that is, these learners do not incorrectly use the genitive or nominative forms of pronouns in *object* position. They know that only the accusative pronominal forms are licensed in this position. Pacheco also reports that beginners incorrectly use these forms in less than 20% of their utterances. These results suggest that these L2 learners have already mastered the grammatical properties associated with the L2 *object* position. Therefore, the deletion of the *object* position, at all levels, cannot be attributed to a lack of L2 grammatical knowledge about English per se. Rather, these findings suggest differential L2 development of syntactic and pragmatic knowledge of English. While these two aspects of a language are independent in some sense, as results such as these and others suggest, they are highly dependent upon each other. It seems that the full and accurate realization of a language's possible allowable pragmatic operations necessitates that the syntax be represented at a

certain level in order that the pragmatic operations be allowed to apply. In other words, without the syntax, there is nothing the pragmatic operations can apply to.

Building upon Pacheco's (2000) results, Pacheco and Flynn's (2006) study aims at determining if syntax and pragmatics develop differentially in adult L2 acquisition of English by L1 speakers of Brazilian Portuguese. This hypothesis is tested focusing on the match/mismatch between BP and English in terms of the use of null subjects and objects. The dataset is composed by 11 adult college students classified as being at one of the three levels of EFL competence: 4 basic, 4 intermediate and 3 advanced. Learners are asked to answer a grammaticality judgment task, which consists of two conditions: [-Pragmatic Context] and [+ Pragmatic Context]. Within the +pragmatic condition, learners are presented with a short scenario before they are given a sentence structure to judge.

The results indicate linguistic development across the proficiency levels tested, i.e., the overall percentage of correct answers correlated with the learners` linguistic proficiency. In addition, they argue that the following pieces of evidence support the assumption that the L2 learners have syntactic knowledge of English at early stages: First, they find that learners performed better on structures with a single main clause alone than on those involving a subordinate clause, that is, learners were able to differentiate the structures syntactically; Second, their findings show that at all proficiency levels learners seem to know that English require an overt pronoun in expletive environments, indicating that the L2 learners are developing their L2 grammars independently of their L1 grammar. With respect to the learners´ pragmatic knowledge, Pacheco and Flynn (2006) found that the influence of the context is statiscally significant when the sentence is ungrammatical than when it is grammatical indicating that learners accept a null object because they "believe" they can rely on the context to recover its meaning, as in BP. They argue that learners are influenced by a pragmatic strategy allowed in their L1, leading them to accept L2 ungrammatical sentences.

Pacheco and Flynn's preliminary results seem to indicate that certain syntactic errors in a learner's grammar may be more accurately explained in terms of a lack of knowledge about pragmatics and the syntax-pragmatic interface rather than as syntactic deficits per se.

Hopp (2004) investigates the German L2 acquisition of constraints on word order optionality, by advanced and near-native English and Japanese L1 speakers.

The German grammar allows scrambling, that is, argument-adjunct or argument-argument reordering, but this reordering is subject to both syntactic and interpretive constraints. In other words, scrambling in German is employed under particular information-structural and semantic interpretations, e.g. scrambling concerns constituents previously mentioned in discourse; definite NPs can scramble freely, and indefinite NPs can only scramble under specific, generic or partitive interpretations. The group of subjects is composed by 26 native speakers controls, 26 English-speaking and 13 Japanese-speaking learners of German. The L2 learners were classified as being at either high intermediate or advanced levels of proficiency. An acceptability judgment task with 40 grammatical items and 34 ungrammatical items was employed.

The results show that there is a disjunction between universally represented syntactic knowledge and L1-specific interface knowledge in advanced adult L2. Nevertheless, Hopp (2004) holds that the non-target-like performance on interface conditions with sentence structures involving scrambling may be due to a deficit in the coordination of syntactic knowledge and interpretive knowledge in the L2. On one hand, the author argues that the results found are clearly incompatible with accounts that claim for a general grammatical impairment in the adult L2 grammar, such as the one proposed by Hawkins and Chan (1997). On the other hand, in line with Sorace´s (1993, 2000, 2003) findings, Hopp suggests that in certain areas where interpretation constrains syntactic options near-native speakers showed evidence of persistent L1 transfer effects in their performance. Importantly, Hopp notes that both in L1 and L2 German acquisition of scrambling an expressive delay in the integration of discourse knowledge and syntax was observed.

Pérez-Leroux and Glass (1999) investigate the second language acquisition of Spanish null subjects by L1 English speakers. L2 learners answered a written translation task where the embedded subject pronoun could have either a quantified antecedent or a discourse-based referential antecedent. They present the results of two studies: one investigating the acquisition of a low frequency sentence structure in which the licensing of the null pronoun is regulated by a principle of UG (the Overt Pronoun Constraint, or OPC[44]) and the other examining a high frequency sentence

[44] The Overt Pronoun Constraint (MONTALBETTI, 1984) states that an overt pronoun cannot have a quantified expression (such as *everyone*, *no one*) or a *wh-* phrase as its antecedent in situations where a null pronoun is allowed. That is, in null subject languages different interpretative restrictions

structure, where the distribution of the null pronoun is constrained by certain discourse factors.

Specifically, they seek to determine whether there are differences in the L2 acquisition of null pronouns in the following sentence structures: quantifier structures with embedded clauses including pronouns, which are regulated by the OPC *versus* structures involving the use of pronouns in contrastive or focused contexts, that is, contexts regulated by language specific discourse mechanisms. The authors predicted that learners´ translations would favor null subjects with quantified antecedents, since overt pronouns are not allowed in this context. Their results indicate that L2 learners differentiate referential and bound variable interpretations of pronouns, that is, they know that embedded overt pronouns cannot be interpreted as referring to either a quantified expression or a *wh*-phrase. These findings show that their L2 grammars are constrained by the OPC. On the other hand, Pérez-Leroux and Glass (1999, p. 242) argue that learners´ discrimination of pronoun type increases with experience, suggesting that "knowledge of the marking of the topic/focus distinction is acquired over time and experience".

The conclusion to be drawn from this brief overview of research on syntax and its interfaces is that both L1 and L2 learners show a clear disjunction between their syntactic and interpretative knowledge. These results are in line with the Strong Continuity Hypothesis, which contends that both in childhood and in adulthood language knowledge is acquired in a similar manner, as explained by Flynn and Lust (2002). Overall, the findings reported above confirm one of the general predictions of this research project, namely that the acquisition of syntactic properties would be relatively unproblematic for L2 learners, contrary to the acquisition of interpretative aspects that constrain syntactic options.

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operate on embedded overt and null pronoun subjects. Only embedded null pronoun subjects can receive a bound variable interpretation, that is, they can take quantified expressions or *wh*- phrases as antecedents.

5 METHODOLOGY

This chapter describes and discusses issues related to the methodology employed in the dissertation. Evaluating L2 learners´ competence is a very complex task, because it has to be done through the investigation of learners´ performance. Klein and Martohardjono (1999) points to the need of using refined methodological procedures in SLA research in order to minimize the effects of extra-grammatical factors, which are always present in learners´ performance. The authors suggest the use of certain research strategies in order to deal with problems of this kind. For example, when investigating if the learners´ grammars are constrained by UG principles, they highlight that researchers should not expect L2 learners and native speakers to perform at comparable levels with ungrammatical sentences. Alternatively, they argue that the L2 grammar should be evaluated in terms of its internal sistematicity, which would indicate that it is a UG-constrained grammar. In adittion, they suggest that the use of different tasks may help to separate knowledge form performance. Klein and Martohardjono (1999) argue that knowledge effects should remain constant across tasks while performance effects should differ from task to task.

In a similar vein, the grammaticality judgment tasks employed in this study focus on *subjects* and *objects* in diverse sentence structures in order to pull apart learners´ knowledge about the syntactic properties and their knowledge about how these properties are used in the discourse-pragmatic context. The following sections present the hypotheses that will be considered in this study, information about the subjects´ background, explanation of the experimental tasks and the EFL test applied, along with a report about the general procedures followed during the application of the tasks.

5.1 General Hypotheses

This study builds upon the hypothesis that syntactic and pragmatic knowledge, although related; develop independently in L2 acquisition, as in L1 acquisition. The underlying core assumptions are twofold: on the one hand, L2 learners are capable of constructing target-like representations of L2 syntax; on the other hand, these representations can be influenced by the interpretive aspects, that is, conditions outside the domain of syntax which constrain these syntactic constructions. In this study, the overall goal is to determine whether certain patterns of acquisition that might at first glance appear to reflect deficits in syntactic knowledge can result from a lack of complete control of what Hopp (2004)[45] refers to as the "interpretive interface" aspects of the language. Hopp found that native and non-native speakers´ performance differs in areas where interpretation constrains syntactic options. Therefore, it is likely that L2 learners´ divergent performance indicates a lack of interpretative rather than syntactic knowledge in their developing L2 grammars.

In order to test these general predictions, systematically varied syntactic structures will be tested through the investigation of the L2 acquisition of *subjects* and *objects* in English by adult speakers of Brazilian Portuguese (BP). If principles of Universal Grammar (UG) constrain L2 acquisition, then pieces of evidence should be found indicating that L2 learners at early stages of acquisition have represented the syntax of L2 English specifically, the syntax associated with the use of subjects and objects in the L2. In the case at hand, the focus will be on the match/mismatch between BP and English in terms of the grammatical properties of null *subjects* and *objects* and the discourse pragmatic conditions that constraint these arguments in these languages.

It will be tested whether the L1 pragmatic factors associated with the syntax of overt and null *subject*s and *object*s, particularly where deletion of these noun phrases is pragmatically controlled in the L1 and not in the L2, can lead learners to judge ungrammatical L2 sentences as grammatical and to misinterpret the coreference between a pronoun and its antecedent when there is a misleading pragmatic context. If there are mismatches between L2 learners´ syntactic and pragmatic knowledge, at all three levels of proficiency under investigation, then the following general predictions should be confirmed:

(i) The independence of yet related development of syntax and pragmatics.

[45] See section 4.3 above for a description of this study.

(ii) The developmental primacy of fundamental syntax over pragmatics.
(iii) And, the existence of "delay" in the acquisition of "interpretive interface aspects" [viz., the syntax-pragmatic interface] (Hopp 2004, p. 68).

In addition, it is assumed that in the absence of acquired knowledge about these "interpretive interface" conditions for the L2, the learner will rely upon L1 knowledge in a manner not observed in development of syntactic constraints.

5.2 Subjects Participants in the Study

As shown in table 4, for this study, adult native L1 speakers of BP who are learning English as an L2 at multiple levels of proficiency are investigated. The total number of subjects (Ss) who participated in this study is 40 (n = 40). These Ss were classified as being at one of three levels of EFL competence: Basic (n = 11); Intermediate (n = 15); Advanced (n = 14). Their levels of proficiency were determined through the realization of a standardized test, as described in section 5.3 below.

All subjects answered a questionnaire in order to provide some relevant background information (see appendix A). Table 4 summarizes the most important facts about the subjects. Ss ranged in age from 19;00 to 65;00 years of age. Mean age was 26;00 for Ss at Basic level, 27;00 for the Intermediate Ss and 37;00 for the Advanced Ss. Of the total number of Ss, 17 were male and 30 were female.

Table 4 - Subjects´ background overview

	Ss	Age	Gender		Education[a]		
			Male	Female	UG Stud	UG	Grad

		(years)					
Basic	11		3	8	11	0	0
Mean		27;00					
Maximum		43;00					
Minimum		19;00					
Intermediate	15		8	7	9	3	3
Mean		27;5					
Maximum		47;00					
Minimum		18					
Advanced	14		6	8	4	3	7
Mean		37;4					
Maximum		65					
Minimum		19					

	English Instruction[b] (years)	Experiences in an English Speaking Country					TOEIC[c]	
		Living	How long (years)	Studying	How long (months)	Traveling	Score	Correct Answer
Basic		0		0		0		
Mean	3;1		0		0		121.7	20.7
Maximum	13		0		0		200	28
Minimum	0;5		0		0		70	16
Intermediate		4		4		7		
Mean	9;1		0;3		1.5		289.7	36.7
Maximum	24		1;00		12		365	44
Minimum	2;5		0		0		225	30
Advanced		4		6		10		
Mean	20;2		1;7		14.0		412.9	49.1
Maximum	45		9;00		84		455	54
Minimum	6		0		0		395	47

Notes: a) UGrad St, UGrad and Grad stand for undergraduate student, undergraduate degree and graduate degree. b) This is an estimate, some subjects answered with the total period of time since they have started to study English formally. c) TOEIC stands for Test of English for International Communication. The maximum score is 495, which corresponds to 60 correct answers.

Most Ss were undergraduate students (n = 22). The other Ss were professionals with either an undergraduate (n = 7) or a graduate degree (n = 10). The total number of years Ss studied English ranged from 0;5 to 45;00 years. The mean number of years Ss studied English was 3;05 years at the Basic level, 9;00 years at the Intermediate level and 20;00 years at the Advanced level. A few subjects had lived and studied in an English speaking country: 4 Ss within the intermediate level and 6 Ss within the advanced level.

5.3 EFL Proficiency Test

The three proficiency levels (Basic, Intermediate and Advanced) were established through an adaptation of the Test of English for International Communication (TOEIC^{R}) (ETS**,** 2000**).** The original test comprises 200 questions divided into two sections, Listening and Reading, with 100 questions each. The reading section consists of 60 questions involving knowledge of the L2 grammar and 40 questions testing learners´ reading skills. For this study, only the 60 questions on grammar were chosen (see appendix B)**.** The listening section was not included because learners´ listening skills were not tested in the experimental tasks.

In the reading section of the original TOEIC test learners are classified into 5 levels of proficiency, according to the scores they reach on this section of the test. Level 1: from 0 to 32 correct answers, score ranging from 5 to 100; level 2: from 33 to 52 correct answers, score ranging from 105 to 225; Level 3: from 53 to 72 correct answers, score ranging from 230 to 350; level 4: from 73 to 87, score ranging from 355 to 425; level 5: from 88 to 100 correct answers, score ranging from 430 to 495. In order to obtain the three levels of proficiency for this study, the 5 levels of the original TOEIC were merged into 3 groups. Therefore, in the adapted TOEIC test version, in the basic group, subjects who had from 0 to 28 correct answers, scoring from 5 to 225, that is, levels 1 and 2 were combined into 1 level. The Intermediate group includes the subjects who had from 29 to 46 correct answers, scoring from 230 to 390. The highest score in the Intermediate group on the adapted TOEIC corresponds to the average score for level 4 of the original TOEIC[46].The Advanced group consists of those subjects who had from 47 to 60 correct answers, scoring from 395 to 495. The conversion table designed to create the three levels of the adapted TOEIC can be seen in appendix C.

5.4 Overview of Experimental Tasks

[46] This score was computed as follows: 355 + 425 = 780/2 = 390.

Learners were administered grammaticality judgment, interpretation and translation[47] tasks, presented in two conditions: + and – pragmatic context. Sentence structures focus on the use of *subjects* and *objects* because the L1 (BP) and the L2 (English) investigated in this study differ with respect to the factors which influence the distribution of arguments. As explained in sections (3.2) and (3.3), in the L1 certain discourse-pragmatic factors interact with the syntactic properties associated with the use of null and overt arguments while in the L2 purely syntactic constraints determine the use of *subjects* and *objects*. Therefore, the syntactic and discourse contrasts between English and BP, with respect to the use of arguments, constitute an ideal situation to test the hypothesis that L2 learners' syntactic knowledge can be hindered at points of interface with other domains of the grammar. L2 learners´ knowledge of the grammatical properties of *subjects* and *objects* in English will be analyzed within the following discourse-pragmatic conditions: (1) + pragmatic context with ± human and ± specific arguments; (2) - pragmatic context with ± human and ± specific arguments.

The following controls were employed in all tasks in order to certify that the results obtained in the tasks are due to mismatches between learners´ syntactic and pragmatic knowledge of the L2. All arguments are in the third person singular pronoun, because the highest percentual of null subjects was found with third person singular subjects (DUARTE, 1995). The feautures [± human] and [± specific] were varied because they are decisive in the selection for a null or an overt object in BP. All sentences in the tasks were approximately equalized in syllable length (from 16 to 18 syllables) and in word length (11 or 12 words)[48]. Each linguistic structure was presented both within grammatical (2 tokens) and ungrammatical sentences (2 tokens). It is important to see if L2 learners can differentiate between grammatical and ungrammatical sentences**,** because this would indicate they know the syntactic properties of the L2 grammar. Grimshaw and Rosen (1990) analyzing the L1 acquisition of certain universal principals, find that children L1 learners´ performance with grammatical sentences is superior to their performance with the ungrammatical ones. They argue that this mismatch suggests children´s developing grammars have the UG principles investigated. All sentences are in the simple present tense and the

[47] The results of the Translation Tasks will not be reported in this study. They will be analyzed in future studies.
[48] This number of syllables and words is well attested when testing adult L2 learners (personnal talking with Flynn, 2007).

same verb was used once or twice in the sentences testing knowledge about the *subject* position. Likewise, in those sentences testing learners´ knowledge about the *object* position verbs were not repeated more than twice.

In order to test whether learners, on the one hand, know the grammatical properties that constraint the deletion of *subjects* and *objects* in English, and, on the other hand, whether they know that in the L2 these grammatical positions, in contrast to their L1, are not pragmatically controlled, different types of syntactic structures[49] were tested in the following experimental tasks:

(1) Grammaticality Judgment Task [+/- Pragmatic Context]

The Grammaticality Judgment Task consists of two conditions. The first involves eliciting judgments of grammaticality on sentences within the [-Pragmatic Context] condition and the second involves eliciting judgments on sentences within the [+Pragmatic Context]. Within each of these two conditions, both grammatical and ungrammatical sentences are systematically varied. The [+/- Pragmatic Context] condition is varied in order to test whether learners´ judgments of L2 sentences can be affected by a pragmatic strategy allowed in their L1 that is, the deletion of a subject or an object when there is an appropriate context that allows recovery of the deleted argument. In order to provide a Pragmatic Context, the learners are presented with a short, appropriate scenario, as discussed in more detail below, before they are given a sentence structure to judge as grammatical or not. The sentences that they are asked to judge are varied in terms of the existence of null or overt *subject* or *object* with the features [± human] and [± specific]. They also varied systematically, in terms of the syntactic properties of the sentence structures. The structures chosen reflected both match and mismatch properties between BP and English.

(2) Interpretation Task

In the Interpretation Task, subjects are asked to answer questions involving the interpretation of the null *subject* in non-finite adjunct clauses. Some of these sentences are presented after a misleading pragmatic context and others without a previous context. The goal is to see if learners´ interpretation of the same syntactic structure differs when this structure appears after a misleading context and when it

[49] The syntactic structures used in the tasks will be presented below in sections 5.4.1, 5.4.2, and 5.4.3.

occurs without any previous pragmatic context. All sentence structures analyzed in this task and examples will be described below.

5.4.1 Grammaticality Judgment Task [-Pragmatic Context]

The Grammaticality Judgment Task [-Pragmatic Context] consists of 140 sentences divided into two equalized sentence batteries (battery A, in appendix D and battery B, in appendix E) with 70 sentences each. All sentences are controlled in terms of number of words (11-12 words) and syllables (16-18 syllables). There are two grammatical and two ungrammatical tokens for each sentence structure.

The use of the Grammaticality Judgment Task [-Pragmatic Context] allows an evaluation of the following overall hypothesis: If learners development in the L2 is constrained by principles of Universal Grammar independent of the language specific properties of the L1 grammar then the following could be predicted:

(1) Learners' performance on their grammaticality judgments should gradually improve as their grammatical competence in L2 English develops. If learners are applying general astructural strategies in constructing the L2 grammar, it would not be expected to see changes in the rates of amount correct improve as a function of increased competence, all else being equal.

(2) Learners should provide evidence that they are sensitive to the differences with respect to the level of complexity in the syntactic structures tested. Again, if learners were applying general astructural strategies in the course of acquisition, it would not be expected that they would necessarily differentiate the stimulus sentences in terms of subtle syntactic differences given that all the structures are controlled in terms of number of words and syllables as noted above. To test this hypothesis, learners will be asked to judge the occurrence of the same sentence structures in matrix and in subordinate clauses. The sentence structures used to test hypothesis (2) are exemplified in table 5.

Table 5 - Examples of sentence structures employed to test hypothesis (2)

Structures	Examples

1. Null and Overt *Subject* in Matrix Clauses compared to	a. The corrupt governor lives next to the mayor in New York. b. * Has a full time position at the famous Harvard School of Law.
2. Null and Overt *Subject* in Subord. Clauses	a. The young philosopher thinks that he smokes a lot in the office. b. * The prisoner admits that likes the exciting crime life in New York.
3. Existential *There is* in Matrix Clauses compared to	a. There is a huge cathedral near the bus stop on Fifth Avenue. b. * Is a wonderful apartment for rent close to the subway station.
4. Existential *There is* in Subord. Clauses	a. The boy tells the girl that there is a mysterious house nearby. b. * Some people report that is a shortcut to the science library.

(3) Evidence should be found indicating that the L2 learners have implicit knowledge concerning those syntactic configurations in English that demand for example, explicit *subjects* in contrast to what is licensed in BP. To test this hypothesis, sentence structures involving the expletives *it* and *there* in subject position will be tested, as exemplified in table 6.

(4) Learners´ should demonstrate they have knowledge with respect to the linguistic structures where the use of an overt argument is required in English, but also those where a null argument is either compulsory or optional. Learners´ knowledge about these nuances of the English Grammar will reveal the degree to which they are being guided by linguistic principles rather than applying general cognitive structures in their development of the L2 grammar. Table 7 shows examples of the sentence structures used to test this hypothesis.

Table 6 - Examples of sentence structures employed to test hypothesis (3)

Structure	Examples

1. Weather Expletive in Matrix Clauses	a. It rains a lot in some Brazilian cities during the winter months. b. * Rains a lot in some Brazilian cities during the winter months.
2. Existential *There is* in Matrix Clauses	a. There is a tiny pocket on the black leather jacket behind you. b. * Is a tuna sandwich for a late dinner in the refrigerator
3. *Seem* Expletive in Matrix Clauses	a. It seems that the secretary catches a cold once in a while. b. * Seems that politicians tell others some harmful lies once in a while.

Table 7 - Examples of sentence structures employed to test hypothesis (4)

Structure	Examples
1. *Subjects* must be overt in Matrix Clauses	a. The Charles River flows between the cities of Boston and Cambridge. b. * Saves thousands of text files, movies and different kinds of heavy images
2. *Subjects* can be null in Coordinate Clauses	a. The poor man drinks beer and smokes lots of cigarettes every evening.
3. *Objects* must be overt in Matrix Clauses	a. The policeman meets the woman at the shopping center every Sunday. b. * The young man usually sees at the bus stop near the supermarket.

(5) Evidence should be found indicating that the percentage of correct answers does not differ significantly when comparing sentence structures where the grammatical properties of the L1 and L2 arguments match with sentence structures which do not match in the L1 and the L2. In other words, the fact that the syntax associated with *subjects* and *objects* differ in BP and in English is not relevant in determining the amount of correct answers given by the L2 learners. If confirmed, such results would suggest that the L1 is not the main source of knowledge in the development of the L2 grammar. To test this hypothesis, sentence structures involving the use of *subjects* in contexts where BP and English differ will be compared to sentence structures where both languages share the same properties with respect to the use of *subjects.* Table 8 shows examples of the sentence structures used to test this hypothesis.

Table 8 - Examples of sentence structures employed to test hypothesis (5)

Structure	Examples
1. Pronoun Anaphor in Finite Adjunct Clause (BP = English)	a. The lawyer always answers the mayor when he is giving a speech.
Compared to	
2. Null Anaphor in Finite Adjunct Clause (BP ≠ English)	a. * The mayor usually questions the president when is leaving the room.
3. Pronoun Anaphor in Complement Clauses (BP = English)	a. The young philosopher thinks that he smokes a lot in the office.
Compared to	
4. Null Anaphor in Complement Clauses (BP ≠ English)	b. * The prisoner admits that likes the exciting crime life in New York.

5.4.2 Grammaticality Judgment Task [+Pragmatic Context]

The Grammaticality Judgment Task [+Pragmatic Context] consists of 48 sentences divided into two equalized sentence batteries (battery A, in appendix F and battery B, in appendix G) with 24 sentences each. All sentences are controlled in terms of number of words (11-12 words) and syllables (16-18 syllables). There are two grammatical and two ungrammatical tokens for each sentence structure.

Table 9 - Examples of sentence structures employed to test hypothesis (6)

Structure	Examples
1. [+hum, +spec] *Subjects* in Matrix Clauses	a. The elderly woman works for a famous pet shop in

compared to	New York. She usually feeds all the little animals early in the morning. b. The businessman visits a lot of cities in Brazil every year. * Sells computers to some companies on the south and northeast coasts.
2. [-hum, -spec] *Subjects* in Matrix Clauses	a. A computer helps young students, busy teachers and people in all fields. It usually brings hours of fun and games to children and adults. b. A big window illuminates an entire room in a crowded office. * Provides a pleasant and fun work environment to all the employers.
3. [+hum, +spec] *Objects* in Matrix Clauses compared to	a. The young woman from New York City knows the French Canadian man. The lawyer meets him in a coffee shop every Monday after lunch. b. The young man truly idolizes the worldwide famous Brazilian soccer star. * The enthusiastic little fan from a small town adores a lot.
4. [-hum, -spec] *Objects* in Matrix Clauses	a. In the cold winter the woman puts on a heavy warm coat. In the summer the elderly lady keeps it inside the closet. b. Once in a while the neighbor calls a cheap pizza delivery store. * The student always orders on Wednesdays and Fridays late in the evening.
5. [+hum, +spec] *Objects* in Subord Clauses compared to	a. The bright Computer Science student truly respects the smart Italian girl. Everybody knows that the professor still visits her once in a while. b. The French-Canadian student loves the Chinese girl. * The English professor confesses that he invites for dinner every day.
6. [-hum, -spec] *Objects* in Subord Clauses	a. On a regular basis, the smart college student buys a magazine. The brilliant Computer Science student admits that he reads one sometimes. b. On rainy days in New York, a tourist always carries an umbrella. * A smart American tourist reveals that he keeps inside the backpack.

This test allows an evaluation of the following hypothesis: If there is a primacy of development for syntax over pragmatics in the L2 developing grammars, then in an investigation with respect to the syntax associated with the English overt and null *subjects* and *objects* by L1 BP learners of L2 English in [+ pragmatic contexts], we should find empirical evidence for the following:

(6) Evidence for more accurate performance overall with [+human, +specific] rather than with [-human, -specific] *subjects* and *objects*. This result will show whether the L2 learners can be affected by a discourse-pragmatic strategy allowed in their L1 when deciding if the L2 sentence structures are grammatically correct or not,

concerning the use of null or overt arguments. Sentence structures used to test this hypothesis are exemplified in table 9.

(7) Within the [+Pragmatic Context] condition, more accurate performance overall is expected on grammatical sentences, i.e., those with overt arguments, rather than on ungrammatical sentences, i.e., those with null arguments. Such a result would indicate that the presence of a pragmatic context may negatively influence learners´ grammaticality judgments, overriding their knowledge about the grammatical properties associated with the English *subjects* and *objects*. This hypothesis is tested with sentence structures as the ones exemplified in table 10 below.

Table 10 - Examples of sentence structures employed to test hypothesis (7)

Structure	Examples
1. Gramm Sent with Overt *Objects* in Matrix Clauses compared to	The young woman from New York City knows the French Canadian man. The lawyer meets him in a coffee shop every Monday after lunch.
2. UnGramm Sent with Null *Objects* in Matrix Clauses compared to	The young man truly idolizes the worldwide famous Brazilian soccer star. * The enthusiastic little fan from a small town adores a lot.
3. Gramm Sent with Overt *Objects* in Subord Clauses compared to	The bright Computer Science student truly respects the smart Italian girl. Everybody knows that the professor still visits her once in a while.
4. UnGramm Sent with Null *Objects* in Subord Clauses	The working man from a small Brazilian town trusts the famous priest. * The hardworking taxi driver from Rio states that he idolizes a lot.
5. Gramm Sent with Overt *Subjects* in Matrix Clauses compared to	The elderly woman works for a famous pet shop in New York. She usually feeds all the little animals early in the morning.
6. UnGramm Sent with Null *Subjects* in Matrix Clauses	The intelligent student studies at a public school in New York. * Goes to school with an elderly woman on Mondays and Fridays.

(8) The percentages of correct answers should differ significantly when comparing sentence structures where the pragmatic properties of the L1 and L2 arguments match with sentence structures where they do not match. In other words, it is very likely that a pragmatic strategy allowed in the learners´ L1 hinders the knowledge they have about the grammatical properties of the L2 arguments. To test this hypothesis, sentence structures involving the use of *objects* in contexts where the pragmatic constraints operative in BP and in English differ will be used. Table 11 shows examples of the sentence structures used to test this hypothesis.

Table 11 - Examples of sentence structures employed to test hypothesis (8)

Structure	Examples
1. [+hum, +spec] Objects in Matrix Clauses [+pragm cont] (BP = English) Compared to	a. The young woman from New York City knows the French Canadian man. The lawyer meets him in a coffee shop every Monday after lunch. b. The young lady from a small town admires the famous country singer. * The elderly woman usually sees on the streets in New York City.
2. [-hum, -spec] Objects in Matrix Clauses [+pragm cont] (BP ≠ English)	a. In the cold winter the woman puts on a heavy warm coat. In the summer the elderly lady keeps it inside the closet. b. In the United States a young lady usually wastes hard earned money. * The naive woman still spends on useless advertised products for the home.

5.4.3 Interpretation Task [50]

The Interpretation Task consists of 8 sentences divided into two equalized sentence batteries (battery A, in appendix H, and battery B, in appendix I) with 4 sentences each. All sentences are controlled in terms of number of words (11-12 words) and syllables (16-18 syllables). There are two tokens for each sentence structure tested. In this test, learners are asked to answer multiple choice questions involving the interpretation of the *subjects* in subordinate clauses. Non-finite adjunct clauses were presented within two conditions: after a misleading previous context and without a previous context. In one situation, learners were asked to answer a question about the reference of the *subject* after reading a misleading context, which had the purpose of distracting learners´ attention to the fact that in English *subjects* in non-finite subordinate adjunct clauses must be the same as the *subject* in their main clauses. If the presence of a misleading context can interfere with learners´ percentage of correct answers, then the following prediction should be satisfied:

(9) More accurate performance is expected when non-finite adjunct clauses are not accompanied by a previous misleading context than when they occur after a misleading context. Such a result would indicate that the presence of a +pragmatic

[50] The complete version of all tests is in appendix J.

context may mask the knowledge L2 learners have about the grammatical properties associated with the argument position in English. This hypothesis is tested with non-finite adjunct clauses, as exemplified in Table 12 below.

5.5 General Procedures[51]

Subjects who are undergraduate students took the tasks at the college where they study. Subjects who are not undergraduate students took the tasks at their work place. Before testing began, all subjects were tested on their knowledge of the lexical items used in the stimulus sentences. This was done in order to make certain that any differences that emerged in the results were due to the syntactic and pragmatic factors varied and not due to lack of knowledge of the lexical items. In addition, there was a pre-training section in order to familiarize the subjects with the demands of the experimental tasks. The instructions in each task were written in the subjects´ L1 rather than in English, in order to make sure that they were perfectly understood even by subjects within the basic level of proficiency.

Table 12 - Examples of sentence structures employed to test hypothesis (9)

Structure	Examples

[51] Before testing sections started, all tasks were proof read by a native English speaker to look for possible problems in terms of meaning (e.g. bad choice of words).

1. Null Anaphor in Non-finite Adjunct Clause [+ Pragmatic Context] Compared to	In the 80's, people heard the same story about John Lennon. When leaving the building in New York, Yoko called John Lennon. Who left the building? a) ( ) John Lennon b) ( ) Yoko c) ( ) Both of them d) ( ) None of them
1. Null Anaphor in Non-finite Adjunct Clause [- Pragmatic Context]	When entering the Court in New York, Michael Jackson saw Jay Leno. Who entered the Court? a) ( ) Michael Jackson b) ( ) Jay Leno c) ( ) Both of them d) ( ) None of them

The following procedure was adopted during the administration of all tests: half of the subjects took Battery A first and the other half took battery B first. This procedure was adopted for all tests in order to reduce possible effects of factors not related to learners´ linguistic knowledge, such as lack of attention or motivation, since subjects are naturally more tired when answering the last set of questions. The tasks were administered in four sessions conducted a week apart from each other with an approximately duration of one hour each. Session I lasted 1 hour; Session II lasted 1 hour and 10 minutes; Session III lasted 1 hour and 20 minutes and the duration of the last session was 1 hour. The four sessions are explained below:

I – During this first session subjects received explanations providing them an overview about the research. Initially, subjects were asked to read and sign the Consent Form, a document testifying that they agree to participate in the study (see appendix L). Next, all subjects answered a questionnaire designed to map their background with respect to the experiences they have had with the L2 as well as to obtain other relevant information. A general overview of subjects' answers is provided in section 5.2 above. After that, in order to be classified according to their levels of linguistic proficiency in the L2, subjects took the adapted version of the TOEIC test, as explained in section 5.3 above. Before leaving, each subject received a bilingual list with the lexical items used in the tasks (see appendix M). Subjects were asked to study this list before the next sessions. They were told that they would not be allowed to consult the list while taking the tests. The Vocabulary List was used

so that all subjects would be equally familiar with the lexical items. This procedure was important in order to minimize the possibility that the results would reflect effects of lack of knowledge of the words used in the tests.

II – The second session started with a brief discussion about the vocabulary items they had been asked to study. During this time, learners were asked to give the translation of the words in the list. Then, half of the subjects received the Grammaticality Judgment Task [-Pragmatic Context] Battery A and the other half received Battery B. Subjects were given instructions about the tasks and were asked to read the sample exercise available in the beginning of each battery. Subjects completed the two batteries in approximately 40 minutes. The next step was to take the Grammaticality Judgment Task [+Pragmatic Context]. Again, 50% of the subjects took battery A first and the other 50% started with battery B. Subjects received all the necessary explanations about this task, read the introductory sample exercise and started the test. After about half an hour all subjects had finished the task and the testing session was over.

III – The third session was dedicated to the Translation Task [-Pragmatic Context]. Subjects were given 40 minutes to complete each battery. As already mentioned above, the empirical results of the Translation Tasks will not be reported in this study.

IV – During the last session, the Translation Task [+Pragmatic Context] and the Interpretation Task were administered. Similarly to the procedure adopted in the other tasks, before starting the Interpretation Task, subjects were given a pre-training. The Interpretation Task was completed in 10 minutes.

6 RESULTS AND DISCUSSION

This chapter presents the statistical analysis and the main results achieved with this dissertation. The statistical procedure is based on regression analysis and the employment of dummies as explanatory variables. This method is employed to investigate learners´ linguistic development in the L2, as well as their syntactic and pragmatic knowledge.

Regression analysis models the relationship between the explained variable and one or more explanatory variables. In this dissertation the explained variable is the performance of the Ss with the sentence structures tested. Two types of regression analyses are estimated. The first type considers the learner's linguistic proficiency groups (basic, intermediate, or advanced) as explanatory variables, comparing the different groups of linguistic proficiency. The second type compares the Ss' performance on different sentence structures, the explanatory variables are the learner's score in the EFL proficiency test and the kinds of sentence structures employed. A dummy variable assumes either the value one (1) if a specific characteristic is present or the value zero (0) if this characteristic is not present. Appendix N presents an explanation of the statistical procedure employed in this dissertation.

The results from each experimental task will be discussed in relation to the hypotheses formulated in Chapter 5. The chapter is organized as follows. The first section shows the learners' linguistic development. In section 6.2, the results associated with learners' syntactic knowledge are presented and discussed. The last section presents the results along with a discussion concerning learners' pragmatic knowledge.

6.1 Learners' Linguistic Development

6.1.1 Hypothesis 1: The L2 developing grammar

Hypothesis number (1), as explained in section 5.4.1 above, states that learners´ performance improves with the development of their grammatical competence in the L2. As shown in Figure 3, the percentage of correct answers positively correlated with the learners' linguistic proficiency in the Grammaticality Judgment Tasks. These results indicate linguistic development across the proficiency levels tested, that is the more proficient the learner is the more accurate the results are. As hypothesized, this pattern suggests that learners were not applying general learning strategies to the tasks; if this were the case, differences in patterns of acquisition across proficiency levels would not be found. Pacheco and Flynn (2006) found similar results.

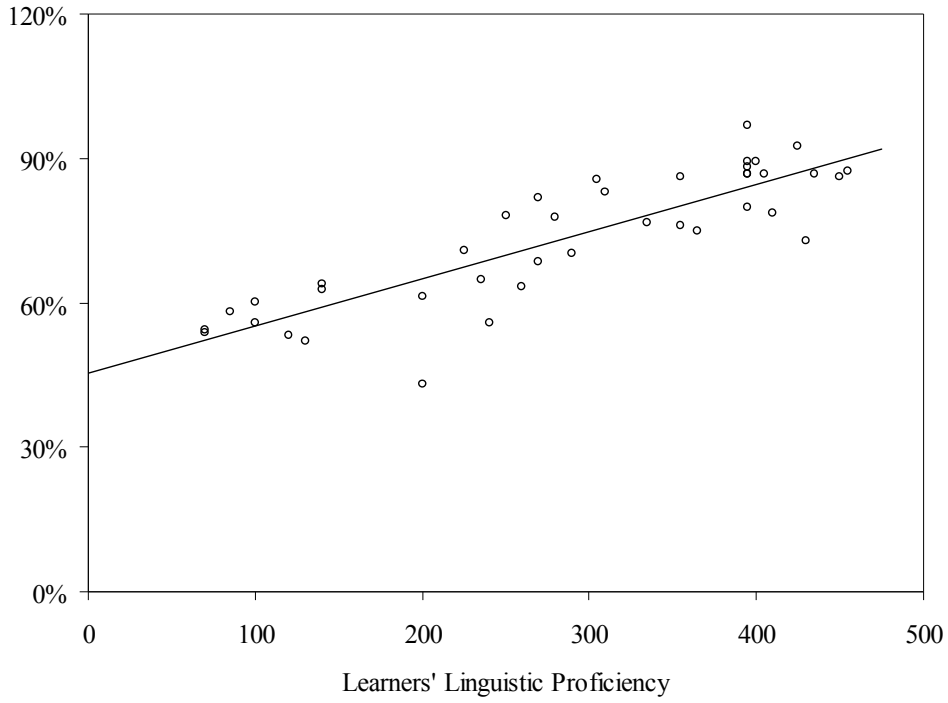

Figure 3 - Percentage of correct answers in the grammaticality judgment tasks *vs*. learners' linguistic proficiency
Source: Pacheco (2007)

Table 13 below displays the estimates of the mean percentage of correct answer by proficiency level. As presented in regression 1, the mean percentage of correct answers achieved by the Basic, Intermediate and Advanced groups in the Grammaticality Judgment Tasks were, respectively, 65.63%, 84.77% and 98.71%. The mean percentage of correct answers is statistically different among the three groups, indicating that learners, as hypothesized, are building, the grammar of the L2[52].

Table 13 - Percentage of correct answers in the Grammaticality Judgment Tasks by proficiency levels

	Regression 1
Proficiency levels	Gramm Judg Tasks
Basic	65.63[a]
	(2.475)
Intermediate	84.77[a]
	(2.120)
Advanced	98.71[a]
	(2.194)
R^2	72.9
Observations	40
White heteroscedastic test	1.73

Source: Pacheco (2007)
Note: Standard errors in parenthesis. a) The coefficient is statistically different from zero at 1%.

6.2 Learners' Syntactic Knowledge

6.2.1 Hypothesis 2: The level of complexity in the syntactic structures

In accordance with hypothesis number (2) in section 5.4.1, the results suggest that L2 learners are sensitive to differences in relation to the degrees of complexity in syntactic structures. A comparison between a sentence structure where the argument occurs in a matrix clause *versus* a sentence structure where the same kind of argument occurs in a subordinate clause indicates that learners performed better on arguments within a matrix clause, which is the less complex sentence structure.

[52] In order to test if the mean percentage of correct answer is statistically different among the three groups, a confidence interval is built for each estimated coefficient. Gujarati (2003, chapter 5) presents the procedure for computing confidence interval.

Table 14 presents the estimates for the comparison between the occurrence of the same sentence structure in matrix and subordinate clauses. It shows that the estimated coefficients (β_2) for the dummy variables are negative and statistically significant at 1% in regressions 2 and 3[53]. As explained in appendix N, whenever β_2 is negative and statistically lower than zero the percentage of correct answers in structure A is higher than in structure B. Hence, the percentage of correct answers in the matrix clauses is higher than in the subordinate clauses, for the same L2 proficiency level. Figure 4 shows the comparison between sentence structures with *Subjects* in Matrix Clauses versus sentence structures with *Subjects* in Subordinate Clauses obtained from regression 2.

Table 14 - Comparison between the performance of L2 learners with the same sentence structures in matrix and subordinate clauses

Variables	Regression 2 (A) *Subjects* in Matrix Clauses vs (B) *Subjects* in Subordinate Clauses	Regression 3 (A) Existential *There is* in Matrix Clauses vs (B) Existential *There is* in Subord. Clauses *
β_0	53.31 [a]	56.82 [a]
	(5.11)	(3.8477)
X_T	0.09 [a]	0.106 [a]
	(0.015)	(0.0101)
D_S	-11.87 [a]	-8.12 [a]
	(3.669)	(3.04)
R^2	40.6	50.3
Observations	80	80
White heteroscedastic test	3.05	9.46

Source: Pacheco (2007)
Notes: Standard errors in parenthesis. The variable Ds takes value zero for structure A and 1 for structure B). a) The coefficient is statistically different from zero at 1%.
*_ Heteroscedasticity consistent standard errors.

[53] Based on model (3) of the Appendix N, regression 2 can be written as $Y_{ABj} = 53.31 + 0.09X_{Tj} - 11.87D_{Sj}$. For null and overt *subjects* in matrix clauses, it is assumed that D_{Sj} is equal to zero. Thus, regression 2, for this sentence structure assumes the formula: $Y_{Aj} = 53.31 + 0.09X_{Tj} - 11.87*0 = 53.31 + 0.09X_{Tj}$. For null and overt *subjects* in subordinate clauses, it is assumed that D_{Sj} is equal to 1. In this case, regression 2 takes the formula: $Y_{Bj} = 53.31 + 0.09X_{Tj} - 11.87*1 = 41.44 + 0.09\ X_{Tj}$.

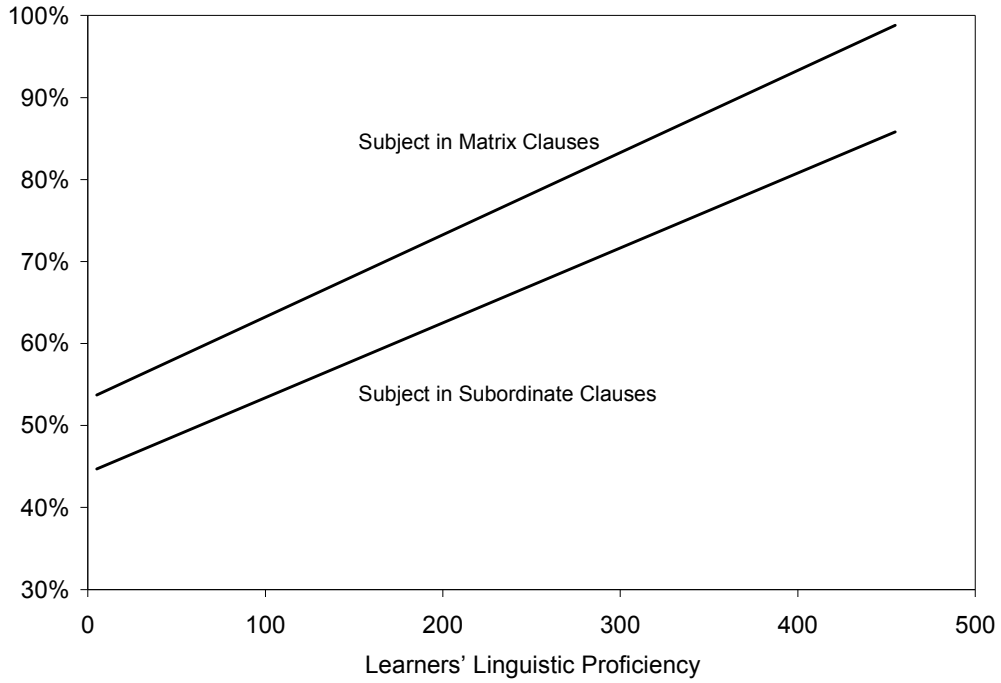

Figure 4 - A comparison between the performance of L2 learners with *subject* in matrix and subordinate clauses
Source: Pacheco (2007)

Given that the sentence structures were equalized in number of words and syllables and that learners were familiar with all the lexical items used in the experiments, this result suggests that the learners are differentiating the structures syntactically. This result also supports the conclusion that the learners are being guided by linguistic principles rather than simply applying general astructural strategies to all sentences.

6.2.2 Hypothesis 3: Differences between English and BP

As initially predicted, results suggest that at all proficiency levels learners seem to know that English requires a pronoun in expletive environments. Table 15 shows that even at the basic level, learners' percentage of correct answers for the three sentence structures investigated is above 50%. With the sentence structure "Existential *There is* in Matrix Clauses" learners at the basic level achieved over 70%

of correct answers. These findings reveal that the learners are developing their L2 grammars independently of their L1 grammars. If not, null subjects would prevail in these contexts since BP is like the other Romance languages in that a null *subject* must be used in English expletive environment. Yet, it is clear that these learners even at the earliest stages know that English is not BP in this respect.

Table 15 - Percentage of correct answers with the expletives *it* and *there* in *subject* position

Proficiency levels	Regression 4 Weather Expletive in Matrix Clauses	Regression 5 Existential *There is* in Matrix Clauses	Regression 6 *Seem* Expletive in Matrix Clauses
Basic	56.82 [a]	70.45 [a]	54.54 [a]
	(6.621)	(3.023)	(7.357)
Intermediate	73.33 [a]	88.33 [a]	80.00 [a]
	(5.669)	(4.819)	(6.301)
Advanced	89.29 [a]	98.12 [a]	91.07 [a]
	(5.868)	(3.291)	(6.520)
R^2	26.8	47.9	27.7
Observations	40	40	40
White heteroscedastic test	0.44	3.4	0.21

Source: Pacheco (2007)
Notes: Standard errors in parenthesis. a) The coefficient is statistically different from zero at 1%.

6.2.3 Hypothesis 4: The nuances of the English grammar

In accordance with the initial prediction, the results reveal that the L2 learners have knowledge about certain sentence structures where a null argument is grammatically acceptable in English. Table 16 presents the results of the rate of correct answers in sentence structures where an overt *subject* is either optional or compulsory in English. Regression 7 shows the results with *subjects* in matrix clauses, a sentence structure where the argument must be overt in English, compared to *subjects* in coordinate clauses, a sentence structure where the argument in *subject* position can be null in English. In regression 7, the estimated coefficient (β_2) for the dummy variable is not statistically different from zero. Therefore, for the same L2 proficiency level, the percentage of correct answers in the matrix clauses is equivalent to the percentage in the coordinate clauses.

These results indicate L2 learners have knowledge about certain nuances of the English Grammar with respect to the argument positions, what may be interpreted as evidence for UG. On one hand, they do not assume that, since null *subjects* in matrix clauses are not allowed in the L2 grammar, a null *subject* in a coordinate clause would also be ungrammatical. On the other hand, if the L2 learners were being guided by the L1 grammar, the percentage of correct answers with coordinate clauses would be higher than with matrix clauses, since, like in English, in BP the use of a null *subject* in a coordinate clause is also optional.

Table 16 - Comparison between the L2 learners' performance with overt subjects in matrix clauses and with null subjects in coordinate clauses

Variables	Regression 7 (A) Overt *Subjects* in Matrix Clauses vs (B) Null *Subjects* in Coordinate Clauses*
β_0	63.66 [a] (6.250)
X_T	0.0745 [a] (0.0167)
D_S	-0.6563 (3.966)
R^2	20.8
Observations	80
White heteroscedastic test	8.25

Source: Pacheco (2007)
Notes: Standard errors in parenthesis. The variable Ds takes value zero for structure (A) and 1 for structure (B). a) The coefficient is statistically different from zero at 1%. * _ Heteroscedasticity consistent standard errors.

6.2.4 Hypothesis 5: The L1 and L2 syntactic properties: similar results when L1 = L2 and L1 ≠ L2

Hypothesis 5 predicts that L2 learners would have similar percentage of correct answers when comparing sentence structures that share the same grammatical properties in the L1 and the L2 with sentence structures that differ in BP and in English. The findings showed on Table 17 below confirmed hypothesis 5. In regressions 8 and 9, the estimated coefficients (β2) for the dummy variables are not

statistically different from zero. That is, for the same L2 proficiency level, the percentage of correct answers with the structures pronoun anaphor in finite adjunct clauses and in complement clauses (when BP = English) is equivalent to the percentage found with the structures null anaphor in finite adjunct and in complement clause (when BP ≠ English).

Consequently, in this case the fact that the syntax associated with *subjects* in subordinate clauses differs in BP and in English was not relevant in determining the amount of correct answers given by the L2 learners. These findings support one of the main assumptions underlying the study, namely, L2 learners develop their L2 grammars independently of their L1 grammars.

Table 17 - Comparison between L2 learners´ performance when the grammatical properties of the L1 and the L2 match with sentence structures where they do not match

Variables	Regression 8 (A) Pronoun Anaphor in Finite Adjunct Clauses (BP = English) vs (B) Null Anaphor in Finite Adjunct Clauses (BP ≠ English) *	Regression 9 (A) Pronoun Anaphor in Complement Clauses (BP = English) vs (B) Null Anaphor in Complement Clauses (BP ≠ English)
β_0	38.09 [a] (8.216)	43.84 [a] (9.306)
X_T	0.135 [a] (0.021)	0.091 [a] (0.028)
D_S	-1.87 (5.145)	8.75 (6.69)
R^2	34.0	13.8
Observations	80	80
White heteroscedastic test	10.1	4.9

Source: Pacheco (2007)
Notes: Standard errors in parenthesis. The variable Ds takes value zero for structure (A) and 1 for structure (B). a) The coefficient is statistically different from zero at 1%.
*_ Heteroscedasticity consistent standard errors.

6.3 Learners´ Pragmatic Knowledge

In this section the predictions made with respect to the effects of the features [±human] and [±specific] and the presence of a discourse-pragmatic context on L2 learners' grammatical knowledge will be discussed, in accordance with the results obtained from the statistical analysis.

6.3.1 Hypothesis 6: Effects of the features [±human] and [±specific]

The prediction that L2 learners would perform better with [+human, +specific] rather than with [-human, -specific] arguments was partially confirmed. Table 18 presents the results related to this prediction. In regressions 10 and 11, the estimated coefficients (β_2) for the dummy variables are not statistically different from zero. This finding indicates that in matrix clauses there is no effect of the features investigated on learners´ percentage of correct answers. On the other hand, in regression 12 the estimated coefficient for the dummy variable is negative and statistically different from zero at 5%. In other words, with subordinate clauses the results indicate effects of the features [human] and [specific] upon learners´ performance.

In sum, the prediction that L2 learners would perform better with [+human, +specific] rather than with [-human, -specific] arguments was confirmed for subordinate clauses and not confirmed for matrix clauses. The L2 learners investigated here only resort to a pragmatic strategy allowed in their L1s, in this case the deletion of a [-human, -specific] *object* previously identified in the context, when judging subordinate clauses, which are syntactically more complex.

Table 18 - Comparison between L2 learners´ performance with [+human, +specific] and [- human, -specific] arguments

Variables	Regression 10 (A) [+hum, +spec] *Subjects* in Matrix Clauses vs (B) [-hum, -spec] *Subjects* in Matrix Clauses*	Regression 11 (A) [+hum, +spec] *Objects* in Matrix Clauses vs (B) [-hum, -spec] *Objects* in Matrix Clauses*	Regression 12 (A) [+hum, +spec] *Objects* in Subord Clauses vs (B) [-hum, -spec] *Objects* in Subord Clauses*
β_0	55.15 [a]	48.45 [a]	39.47 [a]
	(7.891)	(6.310)	(6.396)
X_T	0.0975 [a]	0.1056 [a]	0.1477 [a]
	(0.029)	(0.019)	(0.0167)
D_S	-0.625	3.125	-11.25 [b]
	(4.492)	(4.530)	(4.579)
R^2	25.9	29.1	22.4
Observations	80	80	80
White heteroscedastic test	15.9	8.27	6.87

Source: Pacheco (2007)

Notes: Standard errors in parenthesis. The variable Ds takes value zero structure (A) and 1 for structure (B). a) The coefficient is statistically different from zero at 1%. b) The coefficient is statistically different from zero at 5%. * _ Heteroscedasticity consistent standard errors.

6.3.2 Hypothesis 7: Grammatical vs. ungrammatical sentences within the +pragmatic condition

The prediction that, within the +pragmatic condition, L2 learners would perform better with grammatical than with ungrammatical sentences is investigated on Table 19. Regression 13 displays the comparison between the L2 learners´ performance on grammatical sentences with overt *objects* in matrix clauses and ungrammatical sentences with null *objects* in matrix clauses. In this case, the estimated coefficient for the dummy variable is negative and statistically different from zero at 1%, supporting the hypothesis. A similar result is obtained in regression 15, when the grammatical sentences with overt *subjects* in matrix clauses are compared to ungrammatical null *subjects* in matrix clauses. The estimated coefficient for the dummy variable is negative and significantly different from zero at 10%.

Regressions 13 and 15 show that the effect of the context on learners´ answers is higher with ungrammatical sentences than with grammatical sentences.

This suggests that the L2 learners tend to accept a null *object* or *subject,* leading them to accept ungrammatical sentences, because they can rely on the context to recover its meaning. In other words, the results clearly indicate that they are being guided by a pragmatic strategy allowed in their L1, in this case accepting a null argument when it can be identified in the context.

Table 19 - Comparison between L2 learners´ performance with grammatical and ungrammatical clauses

Variables	Regression 13 (A) Gramm Sent with Overt *Objects* in Matrix Clauses vs (B) UnGramm Sent with Null *Objects* in Matrix Clauses*	Regression 14 (A) Gramm Sent with Overt *Objects* in Subord Clauses vs (B) UnGramm Sent with Null *Objects* in Subord Clauses	Regression 15 (A) Gramm Sent with Overt *Subjects* in Matrix Clauses vs (B) UnGramm Sent with Null *Subjects* in Matrix Clauses*
β_0	55.52 [a]	35.64 [a]	56.45 [a]
	(4.113)	(6.460)	(6.20)
X_T	0.106 [a]	0.145 [a]	0.104 [a]
	(0.012)	(0.019)	(0.017)
D_S	-15.69 [a]	-1.875	-7.812 [c]
	(3.482)	(4.650)	(4.370)
R^2	51.3	42.0	31.5
Observations	80	80	80
White heteroscedastic test	6.9	6.1	11.1

Source: Pacheco (2007)
Notes: Standard errors in parenthesis. The variable Ds takes value zero for structure (A), and 1 for structure (B). a) The coefficient is statistically different from zero at 1%. c) The coefficient is statistically significant at 10%. * _ Heteroscedasticity consistent standard errors.

However, for regression 14, which compares the percentage of correct answers between grammatical sentences with overt *objects* in subordinate clauses and ungrammatical sentences with null *objects* in subordinate clauses, the estimated coefficient for the dummy variable was not statistically different from zero. As a consequence, this result did not bring support to the assumption that learners would make more mistakes with ungrammatical than with grammatical sentences within the +pragmatic condition. Consistently with the results presented in table 6.9 above, the L2 learners also performed differently with matrix and with subordinate clauses. In this case, unlike it was expected, the L2 learners did not show evidence of differences in performance with grammatical and ungrammatical sentences. This finding may indicate that since subordinate clauses are syntactically more complex

than matrix clauses, the L2 learners may have comparable levels of difficulty in both grammatical and ungrammatical sentences.

6.3.3 Hypothesis 8: The L1 and L2 pragmatic properties: different results when L1 = L2 and L1 ≠ L2

It was predicted that the percentage of correct answers would differ significantly when comparing sentence structures where the pragmatic properties of the L1 and L2 arguments match with sentence structures where they do not match. As explained in chapter 3, in English, in contrast to what happens in BP, there are no pragmatic constraints on the object position. The object position is always filled with an overt object in English. In BP, objects can be either overt or null based on the features of the NP which antecedes the object. It was hypothesized that these mismatches could cause problems to the L2 learners, leading them to accept sentences with null objects, which are ungrammatical in English, but pragmatically acceptable in BP.

Regression 16, on Table 20 below, presents the results for the comparison between the percentage of correct answers, within the + pragmatic condition, with a sentence structure where an overt object must be used in English and is preferred in BP *versus* a sentence structure where English requires an overt object and BP prefers a null object. The estimated coefficient for the dummy variable is negative and statistically different from zero at 10%. In support of hypothesis 8, the value of the estimated β_2 indicates that the percentage of correct answers is, on average, 15% lower with the sentence structures where a null object is preferred in BP than with the sentence structures where an overt object would be used in BP.

This finding reinforces the argument raised throughout the study with respect to the effects of the L1 pragmatic factors on learners´ grammatical knowledge of the L2. It is clear that these learners accept L2 ungrammatical sentences because they are being influenced by a pragmatic strategy allowed in their L1, specifically, the acceptance of [-human, -specific] null objects when they are recoverable from the pragmatic context.

Table 20 - Comparison between L2 learners´ performance with [+hum, +spec] Objects in Matrix Clauses [+pragm cont] (BP = English) and [-hum, -spec] Objects in Matrix Clauses [+pragm cont] (BP ≠ English)

Variables	Regression 16 (A) [+hum, +spec] Objects in Matrix Clauses [+pragm cont] (BP = English) vs (B) [-hum, -spec] Objects in Matrix Clauses [+pragm cont] (BP ≠ English) *
β_0	52.74 [a]
	(11.890)
X_T	0.082 [a]
	(0.034)
D_S	-15.00 [c]
	(7.840)
R^2	13.5
Observations	80
White heteroscedastic test	9.4

Source: Pacheco (2007)
Notes: Standard errors in parenthesis. The variable Ds takes value zero for structure (A), and 1 for structure (B). a) The coefficient is statistically different from zero at 1%. c) The coefficient is statistically different from zero at 10%. * _ Heteroscedasticity consistent standard errors.

6.3.4 Hypothesis 9: Effects of a misleading pragmatic context

The assumption that L2 learners would be influenced by a misleading pragmatic context is supported by the results presented on Table 21. Regression 17 displays the comparison between the L2 learners´ performance on the interpretation of non-finite adjunct clauses after a misleading context and without any previous context. The estimated coefficient for the dummy variable is negative and statistically different from zero at 1%. On average, the percentage of correct answers in the + pragmatic context is 35% lower than in the - pragmatic context, for the same level of linguistic proficiency. This finding clearly supports the hypothesis that the L2 learners´ grammatical knowledge develops in advance of the pragmatic knowledge. Learners´ performance was always a step behind when asked to show their grammatical knowledge within a + pragmatic context.

Table 21 - Comparison between L2 learners´ performance with and without a misleading pragmatic context

Variables	Regression 17 (A) Null Anaphor in Non-finite Adjunct Clause - Pragmatic Context vs (B) Null Anaphor in Non-finite Adjunct Clause + Pragmatic Context*
β_0	79.08 [a]
	(8.431)
X_T	0.0598 [b]
	(0.028)
D_S	-35.0 [a]
	(6.256)
R^2	32.19
Observations	80
White heteroscedastic test	19.9

Source: Pacheco (2007)
Notes: Standard errors in parenthesis. The variable Ds takes value zero for structure (A) and 1 for structure (B). a) The coefficient is statistically different from zero at 1%. b) The coefficient is statistically different from zero at 5%. * _ Heteroscedasticity consistent standard errors.

7 CONCLUSION

In this dissertation it has been proposed that certain syntactic errors in an L2 learner's grammar may be more accurately explained in terms of a lack of knowledge about pragmatics and the syntax-pragmatic interface rather than as syntactic deficits per se. The results indicate that learners´ grammatical knowledge improves as their proficiency in the L2 increases, suggesting that they are not simply transferring language structures from their L1 grammar; if this were the case, differences in patterns of acquisition across proficiency levels would not be expected. In addition, at all three EFL proficiency levels reported in this study, evidence was found supporting the hypothesis that L2 learners syntactic knowledge of the L2 develops independently of their L1.

On the one hand, the results indicate high percentages of correct answers with the following sentence structures, which were specifically designed to test learners´ knowledge of the grammatical properties associated with English *subjects* and *objects*: *subjects* in expletive environments, *subjects* in coordinate clauses, *subjects* in finite-adjunct clauses, *subjects* in non-finite adjunct clauses, *subjects* in complement clauses, and *Objects* in matrix and subordinate clauses. Moreover, the empirical findings confirm the hypothesis that there is a primacy of development for syntax over pragmatics in the L2 developing grammars. On the other hand, learners´ performance reveals that the presence of the discourse-pragmatic factors which determine the selection for *subjects* and *objects* in BP (the L1) clearly affects learners´ choices in terms of the acceptance of a null or an overt *subject* or *object* in English (the L2).

On the basis of the experimental results obtained, it is argued that, as initially hypothesized, the English L2 acquisition of the syntactic and pragmatic properties associated with *subjects* and *objects* by L1 BP speakers develops differently. The results support the hypothesis that the L2 acquisition of the interpretive interface

between syntax and pragmatics has a developmental trajectory that extends beyond the acquisition of either of these two individual components. It is argued here that the Strong Continuity model provides an appropriate theoretical framework to account for these mismatches between L2 learners´ syntactic and pragmatic knowledge. Because UG continues to be available to the L2 learners, they manifest consistent syntactic knowledge about the L2 grammatical properties investigated. Nevertheless, L2 learners do not show solid knowledge about the interpretive constraints operative in the L2, because these constraints have to be learned, since they are language specific. In other words, since L2 learners are not guided by universal language principles to acquire the interpretive constraints, they resort to the knowledge they have from their L1.

This study closes with the hope that some implications for L2 teaching and learning can be extracted from the results presented here. On the one hand, it seems that BP L2 learners of English are seldom instructed about issues specifically associated with the syntax-pragmatic interface between syntax and differences between the L1 and the L2 pragmatic factors. On the other hand, it is likely that grammar lessons dissociated from discussions about language use remain the focus of a great number of English classes in Brazil. The results of this study as well as the theoretical framework adopted here suggest that the opposite direction should be taken in L2 pedagogy. That is, with respect to L2 teaching, it clearly suggests that (1) Learners need to be instructed about the properties which are specifically associated with the L2 (e.g., the discourse-pragmatic factors of *subjects* and *objects* in English), since these properties have to be learned; (2) L2 learners do not need to be instructed about the L2 grammar principles, since the universal language mechanism constrain the L2 acquisition of these principles.

The ideas presented in the previous paragraph can be summarized with the following lines by Chomsky (1996, p. 24, apud Flynn and Lust 2002, p. 117): '…someone studying English as a second language would only be confused by instruction about the real principles of grammar, these they already know, being human'.

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APPENDIX A - QUESTIONNAIRE

Prezado participante do estudo, por favor, preencha as informações abaixo e responda às perguntas:

NOME: _____ DATA: _____

FONE: _____ E-MAIL: _____

(1) Idade: ____ (2) Sexo: ( ) F ( ) M (3) Profissão: _____

(4) Grau de escolaridade:

( ) Fundamental ( ) Médio ( ) Sup. Incompleto ( ) Sup. Completo ( ) Pós-graduação

(5) Você fala outras línguas em casa além do português? ( ) SIM ( ) NÃO

(6) Quais (caso tenha respondido SIM na questão anterior)?_____ _____

(7) Você conhece outra(s) língua(s) estrangeira(s) além do inglês? ( ) SIM ( ) NÃO

(8) Quais (caso tenha respondido SIM na questão anterior)? _____

(9) Quanto tempo você estudou essa(s) língua(s) (caso tenha respondido SIM na questão anterior)?_____

(10) Você utiliza o inglês no seu local de trabalho? ( ) SIM ( ) NÃO

(11) Com que freqüência (caso tenha respondido SIM na questão anterior)?
( ) sempre ( ) freqüentemente ( ) às vezes ( ) raramente

(12) Há quantos anos você estuda inglês? _____

(13) Você já morou no exterior? ( ) SIM ( ) NÃO

(14) Em que país (caso tenha respondido SIM na questão anterior)? _____

(15) Quanto tempo (caso tenha respondido SIM na questão anterior)? _____

(16) Você já viajou para o exterior? ( ) SIM ( ) NÃO

(17) Para onde e por quanto tempo (caso tenha respondido SIM na questão anterior)?
_____

(18) Você estudou inglês no exterior? ( ) SIM ( ) NÃO

(19) Em que país (caso tenha respondido SIM na questão anterior)? _____

(20) Quanto tempo (caso tenha respondido SIM na questão anterior)? _____

Muito obrigado pela sua participação!

APPENDIX B - EFL PROFICIENCY TEST

APPENDIX 2 EFL PROFICIENCY TEST

YOU WILL HAVE FORTY-FIVE (45) MINUTES TO COMPLETE PARTS V E VI OF THE TEST.

READING

In this section of the test, you will have a chance to show how well you understand written English. There are three parts to this section, with special directions for each part.

PART V

Directions: Questions 101–140 are incomplete sentences. Four words or phrases, marked (A), (B), (C), (D) are given beneath each sentence. You are to choose the **one** word or phrase that best completes the sentence. Then, on your answer sheet, find the number of the question and mark your answer.

You will read:

Because the equipment is very delicate, it must be handled with ..... .

(A) caring
(B) careful
(C) care
(D) carefully

Sample Answer
Ⓐ Ⓑ ● Ⓓ

The sentence should read, "Because the equipment is very delicate, it must be handled with care." Therefore, you should choose answer (C).

Now begin work on the questions.

101. If we had seen the demand in advance, we surely ..... on the cookbook.

(A) would stock up
(B) have stocked up
(C) had stocked up
(D) would have stocked up

102. Most of the time in Indonesia was spent ..... relatives.

(A) to visit
(B) visiting
(C) going visiting
(D) go to visit

103. My broker advised me to invest in secured bonds before ..... in the stock market.

(A) invested
(B) investing
(C) investment
(D) I will invest

104. It goes without ..... that you'll be paid for all this extra time you're spending on the project.

(A) telling
(B) saying
(C) repeating
(D) regarding

105. The businessmen discussed the contract at length but never actually signed ..... .

(A) anything
(B) anyone
(C) another
(D) anyway

106. The worldwide low inflation rate is expected to continue ..... .

(A) at a fast pace
(B) for a long time
(C) in a decline
(D) throughout

107. The patient ..... examined by the doctor.

(A) were
(B) is being
(C) has
(D) have been

108. The Argentineans are protecting their forests because the lumber is very valuable to ..... .

(A) they
(B) ourselves
(C) them
(D) we

109. Travel agents advise ..... early, in order to avoid disappointment.

(A) buying
(B) postponing
(C) booking
(D) canceling

110. The use of pesticides is having a ..... effect on the groundwater.

(A) devastate
(B) devastating
(C) devastated
(D) devastation

111. Because of Lucille's managerial skills, the family now has an ..... business.

(A) expanding
(B) expend
(C) expanse
(D) expended

112. Just as the business was about to go under, he ..... the bid for the shopping mall construction.

(A) was winning
(B) will win
(C) had won
(D) won

113. We have decided to ..... your income with a monthly bonus.

(A) implement
(B) compliment
(C) supplement
(D) compartment

114. A study was done to determine the effect ..... the change in government policy has had on the small business sector.

(A) of
(B) what
(C) for
(D) that

115. The air conditioner will have to be worked on ..... the office is in use.

(A) during
(B) while
(C) only
(D) meanwhile

116. Your credit history shows that either several loan payments were late ..... the bank made a huge error in reporting them.

(A) and
(B) but
(C) nor
(D) or

117. Another building will be ..... in the downtown area before you know it.

(A) demolished
(B) demolishing
(C) demolish
(D) demolishes

118. The meeting is ..... over.

(A) much or little
(B) here or there
(C) more or less
(D) to or from

119. We ..... the money to your money market account within three working days.

(A) have been transferred
(B) will transfer
(C) transferring
(D) will be transferred

120. We are sending you what we have now and ..... the remainder as soon as it arrives.

(A) will have shipped
(B) will ship
(C) shipped
(D) shipping

121. At election time, every speech is calculated to win ..... .

(A) preferences
(B) wishes
(C) votes
(D) choices

122. Although most people are ..... than I am, they are not as healthy or wise.

(A) wealth
(B) wealthy
(C) wealthily
(D) wealthier

123. Constance breathed a sigh ..... relief when she heard that her loan was approved.

(A) to
(B) for
(C) by
(D) of

124. Good management ..... to the employees.

(A) will be listened
(B) are listening
(C) listens
(D) listen

125. The newly discovered ore is being extracted by ..... of a huge robotic arm.

(A) mean
(B) means
(C) meant
(D) meanings

126. When the computer analyst realized what a ..... task it was, he immediately added two more staff to the project.

(A) precise
(B) superfluous
(C) short
(D) formidable

127. I spoke with the real estate agent who told me that the office space would cost $225 ..... square foot.

(A) for
(B) in
(C) per
(D) at

128. The human resources department is ..... for the hiring and care of our personnel.

(A) respondent
(B) responsive
(C) responding
(D) responsible

129. The air conditioning unit ..... for hours by the time you arrive.

(A) will have been running
(B) shall run
(C) will be running
(D) will run

130. We were having so much fun on the ship we were ..... to disembark at our destination.

(A) reluctant
(B) doubtful
(C) refusing
(D) hesitant

131. The appeal of this training approach is that the students find ..... which management style work best for them.

(A) out
(B) up
(C) about
(D) on

132. While you set up the display at the ..... of the store, I'll unpack the rest of the goods.

(A) prominence
(B) forward
(C) ahead
(D) front

133. Mrs. Choor has managed the department so well that she'll be up for a ..... promotion than she expected.

(A) big
(B) bigger
(C) more
(D) most

134. We would like to ..... a teleconference with your public relations office regarding the upcoming merger.

(A) transact
(B) install
(C) perform
(D) arrange

135. We knew the economy was ..... a turning point when the interest rates started to fall.

(A) at
(B) about
(C) throughout
(D) inside

136. We have been doing business with them since their ..... .

(A) incentive
(B) inception
(C) incision
(D) incitement

137. The new clerk wasn't sure under which ..... he should file the purchasing documents.

(A) covering
(B) level
(C) rank
(D) category

138. When Mrs. Graf sat down, she asked that the shades be pulled ..... because of the bright sunlight.

(A) below
(B) off
(C) down
(D) up

139. By ..... what the public liked and didn't like, we were able to fine-tune our ads.

(A) sighting
(B) focusing
(C) predicting
(D) pinpointing

140. We ..... with the prime minister for dinner at the Simsbury Hotel tonight.

(A) are meeting
(B) have been met
(C) were met
(D) will be met

PART VI

Directions: In **Questions 141–160**, each sentence has four words or phrases underlined. The four underlined parts of the sentence are marked (A), (B), (C), (D). You are to identify the **one** underlined word or phrase that should be corrected or rewritten. Then, on your answer sheet, find the number of the question and mark your answer.

Example:

Sample Answer
● Ⓑ Ⓒ Ⓓ

All employee (A) are required to wear their (B) identification badges (C) while at work. (D)

The underlined word "employee" is not correct in this sentence. This sentence should read, "All employees are required to wear their identification badges while at work." Therefore, you should choose answer (A).

Now begin work on the questions.

141. As (A) your old one, this new copier can (B) collate and staple (C) the copies in half the time. (D)

142. The museum is taking measures (A) to protect its paintings from (B) the damaging effects of pollutions (C) and utra-violet rays, which are getting worse and worse with each passing year. (D)

143. After reviewing (A) our finances, we decided (B) reduce (C) spending in all departments except marketing. (D)

144. Mrs. Barrett, acting as her (A) attorney, defended (B) Mr. Stevenson in a very determined (C) fashion. (D)

145. To make out (A) the lost time, we booked (B) a direct flight (C) from California to (D) New York.

146. One evening, (A) in a restaurant in Madrid, we were entertained (B) by (C) several dramatics (D) flamenco dancers.

147. The plane had to (A) fly over above (B) the city for an hour (C) before getting (D) permission to land.

148. The Commission surprised investors (A) by reversing its ruling (B) and freezes (C) all monies (D) in the disputed accounts.

149. Since the appliance sales have shot up any, (A)
we're going to continue with the marketing plan (B)
we've been using since the very start. (C) (D)

150. After (A) downsizing the company, the executives
realized that had much more furniture than they (B) (C)
needed. (D)

151. When we go on vacation (A), we prefer swim (B) and
active sports to sightseeing and (C) lying
on the beach. (D)

152. The shareholders (A) were upset that (B) there weren't
some (C) dividends paid out (D) in the last two
quarters.

153. Before to go (A) elsewhere for new staff, we always (B)
try to hire (C) in house (D).

154. Because it was structurally unsafe (A) and too (B)
expensive to repair, the 75 years old (C) building
had to be demolished. (D)

155. This summer, the consumer protection agency
are advising (A) consumers to read instructions
carefully (B) before using (C) any
outdoor cooking equipment. (D)

156. I've looked at (A) several records in your file (B) and
many documents still (C) don't have your
new marriage name. (D)

157. Ecologists feared (A) the American eagle
might be near extinction (B) as there were
so few sights (C) of them in the last decade. (D)

158. Standard Tires have (A) agreed to fund (B) any further
research into (C) the manufacture of (D) latex.

159. If the zoning (A) changed, we will be able (B) to
purchase the building down the street (C) and
redesign it. (D)

160. The factory (A) let go of many its employees (B)
because it had automated (C) so many (D) operations.

APPENDIX C - EFL PROFICIENCY TEST: CONVERSION TABLE

Table 22 - TOEIC Conversion Score

Correct Answers	Score	Correct Answers	Score	Correct Answers	Score
0	5				
1	5	21	160	41	365
2	5	22	170	42	380
3	5	23	175	43	390
4	5	24	185	44	400
5	15	25	195	45	405
6	25	26	200	46	420
7	35	27	215	47	430
8	40	28	230	48	440
9	50	29	240	49	450
10	60	30	250	50	460
11	65	31	260	51	470
12	75	32	270	52	480
13	85	33	280	53	485
14	90	34	295	54	495
15	100	35	300	55	495
16	115	36	315	56	495
17	120	37	325	57	495
18	130	38	330	58	495
19	140	39	345	59	495
20	145	40	360	60	495

Source: Oxford (2000)

APPENDIX D - GRAMMATICALITY JUDGMENT TASK [- PRAGMATIC CONTEXT] BATTERY A

Instruções: Neste teste algumas frases estão gramaticalmente corretas e outras incorretas. Erros relativos à pontuação ou troca de letras devem ser desconsiderados. Você deverá ler e julgar cada uma dessas frases. Feito isso, você deverá circular a letra que corresponde a sua resposta: se você considera a frase **Correta** circule a letra **C,** se você considera a frase **Incorreta** circule a letra **I.**

Tempo: 15 minutos

Exemplo: The student from Chile did not went to school yesterday. **C I**

A frase está incorreta gramaticalmente. Portanto, você deve circular a letra **"I"**.

1) The young philosopher thinks that he smokes a lot in the office. **C I**

2) It always snows in New York City in January and February. **C I**

3) The mayor usually questions the president when is leaving the room. **C I**

4) A smart student usually queries a good professor when leaving class. **C I**

5) The devoted secretary sometimes announces that the boss likes a lot. **C I**

6) A young Brazilian boy usually plays soccer and watches TV a lot. **C I**

7) A good teacher usually knows a student when is speaking in class. **C I**

8) A young Brazilian man always believes that plays soccer very well. **C I**

9) Nobody realizes that they consume too much fast food during the year. **C I**

10) The policeman knows that the drug dealer phones the woman every day. **C I**

11) The lawyer always answers the mayor when he is giving a speech. **C I**

12) The young professor teaches Arts and Philosophy in New York City. **C I**

13) Nobody recognizes that eats lots of junk food almost every day. **C I**

14) Some people report that is a shortcut to the science library. **C I**

15) A student always respects a good teacher and parents praise a lot. **C I**

16) The policeman meets the woman at the shopping center every Sunday. **C I**

17) In New York is at least one public library in each neighborhood. **C I**

18) The boss usually meets the secretary and the lawyer sees at work. **C I**

19) The teacher suggests that the student purchases a book every month. **C I**

20) A secretary usually brings to the main office in the morning. **C I**

21) Buys expensive clothes in New York City every Friday and Saturday. **C I**

22) Causes a lot of trouble and suffering to poor people everywhere. **C I**

23) The wife sells and the husband distributes Time Magazine every week. **C I**

24) A patient usually reads a weekly magazine in the waiting room. **C I**

25) A good cleaner usually makes a lot of money in New York. **C I**

26) The actor always sees the director when walking down Mass Avenue. **C I**

27) Rains in the rain forests in the months of August and September. **C I**

28) French wine, the famous philosopher drinks every day before bed time. **C I**

29) Nobody confesses that go out with a married person on Sundays. **C I**

30) A kid usually invents a word and a parrot repeats sometimes. **C I**

31) The poor man drinks beer and smokes lots of cigarettes every evening. **C I**

32) In New York it snows in the months of December and January. **C I**

33) Seems that some people work from Monday to Sunday in Argentina. **C I**

34) Holds a hundred CDs, fifty books and ten DVDs all together. **C I**

35) The woman always sees the secretary when she jogging on the beach. **C I**

36) The Department Head announces that the Dean fires a professor every year. **C I**

37) There is a huge cathedral near the bus stop on Fifth Avenue. **C I**

38) A businesswoman needs a secretary when she is paying a bill. **C I**

39) A young girl usually calls a close friend on Saturday evenings. **C I**

40) A woman usually reveals and a close friend keeps a secret. **C I**

41) A young Brazilian woman usually says that she works extremely hard. **C I**

42) The philosopher announces that rains once in a while in Boston. **C I**

43) The friendly professor agrees that a first grade student watches a lot. **C I**

44) Nobody reveals that he overeats once in a while during the winter. **C I**

45) Boston offers lots of tourist attractions and holds some famous sites. **C I**

46) It seems that the professor enjoys the cold weather in Boston. **C I**

47) The Charles River flows between the cities of Boston and Cambridge. **C I**

48) The poor woman confesses that the sick husband wants on the weekends. **C I**

49) The boss admires and the secretary misses the lawyer a lot. **C I**

50) A high school student carries inside a backpack from Monday to Friday. **C I**

51) Has a full time position at the famous Harvard School of Law. **C I**

52) The elderly lady says that it rains every spring in New York. **C I**

53) An old car usually causes problems and annoys the owner a lot. **C I**

54) The architect usually finds in a big store in New York City. **C I**

55) In the United States snows very often in the northern areas. **C I**

56) The president, the mayor visits once a month in Washington DC. **C I**

57) Is a tuna sandwich for a late dinner in the refrigerator. **C I**

58) The chubby boy buys chocolate ice cream in the park every weekday. **C I**

59) The librarian hopes that the student always puts on the desks. **C I**

60) The young man usually sees at the bus stop near the supermarket. **C I**

61) Everybody suspects that the president has a farm outside the country. **C I**

62) An elderly father loves and a mother always misses a son. **C I**

63) The father tells the mother that seems that all Americans watch sports. **C I**

64) A loving father always kisses a young son when he getting home. **C I**

65) The wife washes the uniform and the policeman hangs behind the door. **C I**

66) A good book carries hours of entertainment for a smart student. **C I**

67) The journalist reports that it seems that all Brazilians love soccer. **C I**

68) In the cupboard there is a wonderful slice of cake for dessert. **C I**

69) The student insists that wants a private office as soon as possible. **C I**

70) The boy tells the girl that there is a mysterious house nearby. **C I**

Muito obrigado pela sua participação!

APPENDIX E - GRAMMATICALITY JUDGMENT TASK [- PRAGMATIC CONTEXT] BATTERY B

Instruções: Neste teste algumas frases estão gramaticalmente corretas e outras incorretas. Erros relativos à pontuação ou troca de letras devem ser desconsiderados. Você deverá ler e julgar cada uma dessas frases. Feito isso, você deverá circular a letra que corresponde a sua resposta: se você considera a frase **Correta** circule a letra **C,** se você considera a frase **Incorreta** circule a letra **I.**

Tempo: 15 minutos

Exemplo: The student from Chile did not went to school yesterday. **C I**

A frase está incorreta gramaticalmente. Portanto, você deve circular a letra **"I"**.

1) The elderly grandfather knows that the little boy adores very much. **C I**

2) The mother believes that the student takes an English class on Saturdays. **C I**

3) A good person declares that worries about water and air pollution. **C I**

4) Seems that politicians tell others some harmful lies once in a while. **C I**

5) A modern woman usually likes sports and watches lots of games. **C I**

6) A rich woman always invites to dinner on Fridays and Saturdays. **C I**

7) The doctor admits that he calls the lawyer once in a while. **C I**

8) Floats on the polluted rivers and oceans in South and North America. **C I**

9) The mother feeds and the baby-sitter washes the kid every day. **C I**

10) The store manager wears once in a while on Saturday mornings. **C I**

11) A woman likes and a child usually smells a flower in spring. **C I**

12) Saves thousands of text files, movies and different kinds of heavy images. **C I**

13) The professor distributes the English homework at the end of class. **C I**

14) The prisoner admits that likes the exciting crime life in New York. **C I**

15) The girlfriend often kisses the boyfriend when watching a romantic film. **C I**

16) There is a tiny pocket on the black leather jacket behind you. **C I**

17) A sensitive man always accepts that he needs a good psychiatrist. **C I**

18) This dictionary contains lots of words and provides a grammar section. **C** **I**

19) On the east coast is an awesome beach for a summer vacation. **C** **I**

20) Is a wonderful apartment for rent close to the subway station. **C** **I**

21) The boss believes that the strange man phones the secretary every day. **C** **I**

22) A father usually gives a toy and a son wants a lot. **C** **I**

23) An elderly teacher always assumes that all students do every day. **C** **I**

24) A lawyer questions a prisoner and a policeman frightens a lot. **C** **I**

25) In most desert areas it rains only once or twice a year. **C** **I**

26) The young professor maintains that seems that only the poor students fail. **C** **I**

27) A polite student always greets a teacher when he is giving a talk. **C** **I**

28) A book always brings new information and makes life much more exciting. **C** **I**

29) On Fifth Avenue there is a branch of a famous Brazilian bank. **C** **I**

30) The teacher criticizes the student and the grandmother praises a lot. **C** **I**

31) It rains a lot in some Brazilian cities during the winter months. **C** **I**

32) Everybody says that it snows a lot in Boston in January. **C** **I**

33) The elderly grandfather agrees that the grandson watches once in a while. **C** **I**

34) A lawyer usually hires an intern when is typing a petition. **C** **I**

35) The lawyer, the woman sees at the shopping center on Saturdays. **C** **I**

36) The young lady buys expensive clothes and wears them on the weekends. **C** **I**

37) It seems that the secretary catches a cold once in a while. **C** **I**

38) The teacher has and the student keeps the English Grammar at home. **C** **I**

39) The policeman argues that the young man usually steals a wallet. **C** **I**

40) A caring person usually supports a friend in need of help. **C** **I**

41) A mother usually dislikes that a son dates a married woman. **C** **I**

42) A smart child always invents during the long, hot summer vacation. **C** **I**

43) The linguistics professor asks that the student brings to class every day. **C** **I**

44) A young child usually disturbs a tired father when eating dinner. **C** **I**

45) In some European countries rains a lot during the hot summer months. **C** **I**

46) The lady says that it seems that Chinese women get married young. **C** **I**

47) The young boy usually sells in the public library near the school. **C** **I**

48) The World Wide Web offers the best resources for foreign students. **C** **I**

49) Reads famous comic books in the school library once in a while. **C** **I**

50) The lawyer always calls the gardener when he arriving home at night. **C** **I**

51) The smart boss always greets the client when is entering the office. **C** **I**

52) Nobody confesses that he cheats on income taxes once a year. **C** **I**

53) The gardener tells the woman that there is an orange tree downstairs. **C** **I**

54) Nobody acknowledges that produces a lot of trash and air pollution. **C** **I**

55) An interesting book sometimes turns into a trivial and boring film. **C** **I**

56) The corrupt governor lives next to the mayor in New York. **C** **I**

57) The cleaner whispers that is lots of money inside the leather wallet. **C** **I**

58) A famous architect usually designs a building in New York City. **C** **I**

59) A little boy sometimes pushes a baby when he playing in the playground. **C** **I**

60) A secretary usually works from nine to five on the weekdays. **C** **I**

61) Snows a lot in some American and Canadian cities during the winter. **C** **I**

62) The flight attendant announces that snows a lot around here in January. **C** **I**

63) The young babysitter feeds the baby girl many times a day. **C** **I**

64) Creates at least three wonderful books for young children every year. **C** **I**

65) Nobody reveals that they tell a terrible lie once in a while. **C** **I**

66) The man always questions the detective when he is inspecting a house. **C** **I**

67) Swiss Chocolate, the construction worker only buys once in a while. **C** **I**

68) Nobody believes that bother a quiet neighborhood once in a while. **C** **I**

69) A housewife always fires and a husband criticizes a bad gardener. **C** **I**

70) The insane woman has a box and the poor husband carries everywhere. **C** **I**

Muito obrigado pela sua participação!

APPENDIX F - GRAMMATICALITY JUDGMENT TASK [+ PRAGMATIC CONTEXT] - BATTERY A

Instruções: Neste teste cada questão é composta por duas frases: a primeira serve de contexto para a segunda. A primeira frase está sempre correta. A segunda frase pode estar gramaticalmente correta ou incorreta. Erros relativos à pontuação ou troca de letras devem ser desconsiderados. Você deverá ler atentamente as duas frases e decidir se a **segunda** frase está gramaticalmente **correta** ou **não**. Feito isso, você deverá circular a letra que corresponde a sua resposta: se você considera a **segunda** frase **Correta** circule a letra **C,** se você considera a **segunda** frase **Incorreta** circule a letra **I.** **Tempo: 10 minutos**

Exemplo: A young boy usually enjoys going to school. He often misses the classmates on the weekends. **C I**

A segunda frase está gramaticalmente correta. Logo, você deve circular a letra "C**"**.

1) An old person from China usually recommends the famous green tea. The elderly lady announces that she sells on the streets every day. **C I**

2) On a regular basis, the smart college student buys a magazine. The brilliant Computer Science student admits that he reads one sometimes. **C I**

3) The bright Computer Science student truly respects the smart Italian girl. Everybody knows that the professor still visits her once in a while. **C I**

4) The intelligent student studies at a public school in New York. Goes to school with an elderly woman on Mondays and Fridays. **C I**

5) Some men, women and even children feel unhappy on a snowy day. The little American girl declares that she hates it in New York. **C I**

6) The young woman from New York City knows the French Canadian man. The lawyer meets him in a coffee shop every Monday after lunch. **C I**

7) The tall skyscraper provides a terrific view of New York City. Attracts lots of curious visitors from different countries all week long. **C I**

8) A professor usually works from Monday to Sunday all year long. Needs to take a fun thirty-day vacation once or twice a year. **C I**

9) The young man from the United States sometimes reads the famous newspaper. The retired professor from Boston receives at home on the weekends. **C I**

10) A big family always relies on a caring and lovely mother. A lovely baby boy usually wants her around all the time. **C I**

11) The young lady from a small town admires the famous country singer. The elderly woman usually sees on the streets in New York City. **C I**

12) A principal in a public high school sometimes hires a good teacher. A busy single mother always says that she necessitates a lot. **C I**

13) The young woman from the south desires the expensive French perfume. The rich elderly woman buys it in a famous store every month. **C I**

14) A big corporate firm always demands a highly qualified worker. A smart employer finds in the top universities throughout the country. **C I**

15) A war brings a lot of suffering and poverty for a country. Spreads hate, racism and all sorts of emotional and physical diseases. **C I**

16) The French-Canadian student loves the Chinese girl. The English professor confesses that he invites for dinner every day. **C I**

17) A famous person in Hollywood always relies on a strong bodyguard. The handsome film director announces that he hires one every year. **C I**

18) The elderly woman works for a famous pet shop in New York. She usually feeds all the little animals early in the morning. **C I**

19) A good writer writes about people from the past, present and future. He usually has an intuitive knowledge about people from all eras. **C I**

20) In the cold winter the woman puts on a heavy warm coat. In the summer the elderly lady keeps it inside the closet. **C I**

21) The old English dictionary has all the most frequently used words. It offers a long grammar section and a concise synonyms list. **C I**

22) A computer helps young students, busy teachers and people in all fields. It usually brings hours of fun and games to children and adults. **C I**

23) In the United States a young lady usually wastes hard earned money. The naive woman still spends on useless advertised products for the home. **C I**

24) On rainy days in New York, a tourist always carries an umbrella. A smart American tourist reveals that he keeps inside the backpack. **C I**

Muito obrigado pela sua participação!

APPENDIX G - GRAMMATICALITY JUDGMENT TASK [+ PRAGMATIC CONTEXT] - BATTERY B

Instruções: Neste teste cada questão é composta por duas frases: a primeira serve de contexto para a segunda. A primeira frase está sempre correta. A segunda frase pode estar gramaticalmente correta ou incorreta. Erros relativos à pontuação ou troca de letras devem ser desconsiderados. Você deverá ler atentamente as duas frases e decidir se a **segunda** frase está gramaticalmente **correta** ou **não**. Feito isso, você deverá circular a letra que corresponde a sua resposta: se você considera a **segunda** frase **Correta** circule a letra **C,** se você considera a **segunda** frase **Incorreta** circule a letra **I.** **Tempo: 10 minutos**

Exemplo: A young boy usually enjoys going to school. He often misses the classmates on the weekends. **C I**

A segunda frase está gramaticalmente correta. Logo, você deve circular a letra "C**"**.

1) The businessman visits a lot of cities in Brazil every year. Sells computers to some companies on the south and northeast coasts. **C I**

2) A washing machine usually makes a lot of noise late at night. It always disturbs all the working people in the houses nearby **C I**

3) The smart student from New York City admires the brilliant linguist. The Department Head always visits him on Fridays and Sundays evenings. **C I**

4) In the summer the student always carries a bottle of fresh water. The professor usually brings it to the classroom and to the library. **C I**

5) A successful businessman always spends a lot of time in the office. He usually comes home from the office after nine in the evening. **C I**

6) A young man from Italy usually respects a good soccer player. A typical Brazilian man always says that he likes a lot. **C I**

7) A young girl from a small town usually seeks a handsome gentleman. An intelligent young lady usually meets at high school or college. **C I**

8) The tourist from Salt Lake City likes the famous Statue of Liberty. The History professor reports that he views once in a while. **C I**

9) The young man from New York enjoys the famous Brazilian carnival. The elderly man from the southeast watches it on TV all night. **C I**

10) The young woman from New York City envies the pretty Mexican girl. Everybody knows that the famous singer sometimes invites her for lunch. **C I**

11) A good soccer player always makes a lot of money in Brazil. Practices during the week at the soccer stadium all year long. **C I**

12) The young man truly idolizes the worldwide famous Brazilian soccer star. The enthusiastic little fan from a small town adores a lot. **C I**

13) In the United States everybody has at least one heavy winter coat. A poor college student tells a friend that he wears every day. **C I**

14) The celebrated science fiction film deals with life in the future. Presents a unique view about the emotional nature of human beings. **C I**

15) Once in a while the neighbor calls a cheap pizza delivery store. The student always orders on Wednesdays and Fridays late in the evening. **C I**

16) A busy mother usually has a lot of problems with a careless child. An affectionate mother always loves him even on the very bad days. **C I**

17) According to a TV advertisement, even a child needs a Dell notebook. The little American boy always states that he wants it for school. **C I**

18) A family in a big city usually discards an old TV set. The needy hardworking woman emphasizes that she desires one right away. **C I**

19) A big window illuminates an entire room in a crowded office. Provides a pleasant and fun work environment to all the employers.

20) A rich businessman from the United States usually owns a Swiss watch. The famous executive from New York City wears once in a while. **C I**

21) A busy woman always searches for a zealous and trustful maid. A hardworking woman usually emphasizes that she needs her. **C I**

22) The working man from a small Brazilian town trusts the famous priest. The hardworking taxi driver from Rio states that he idolizes a lot. **C I**

23) The World Cup happens every four years in a different country. It always brings in soccer lovers of all ages from various countries. **C I**

24) The student from New York usually stays home on cold winter evenings. He watches action movies on TV on Fridays and Saturdays. **C I**

Muito obrigado pela sua participação!

APPENDIX H - INTERPRETATION TASK BATTERY A

Instruções: Leia as frases abaixo e as perguntas relativas a cada uma delas. Escolha apenas uma alternativa para cada pergunta. **Tempo: 5 minutos**

Exemplo: The president trusts **his** lawyer. **Who does "his" refer to?**

(A) Lawyer
(B) The president
(C) Both of the above
(D) None of the above

O pronome "his" refere-se a "the president". Logo, você deve marcar a alternativa (B).

1) The young lawyer regrets that **he** hires a lazy secretary sometimes.
Who does "he" refer to?
(A) The young lawyer
(B) Some male person
(C) Both of the above
(D) None of the above

2) In the 80's, people heard the same story about John Lennon. When leaving the building in New York, Yoko called John Lennon.
Who left the building?
(A) John Lennon
(B) Yoko
(C) Both of them
(D) None of them

3) Nobody says that **he** feels very lonely once in a while.
Who does "he" refer to?
(A) Nobody
(B) Some male person
(C) Both of the above
(D) None of the above

4) When entering the Court in New York, Michael Jackson saw Jay Leno.
Who entered the Court?
(A) Michael Jackson
(B) Jay Leno
(C) Both of them
(D) None of them

Muito obrigado pela sua participação!

APPENDIX I - INTERPRETATION TASK BATTERY B

Instruções: Leia as frases abaixo e as perguntas relativas a cada uma delas. Escolha apenas uma alternativa para cada pergunta. **Tempo: 5 minutos**

Exemplo: The president trusts **his** lawyer. **Who does "his" refer to?**

(A) Lawyer
(B) The president
(C) Both of the above
(D) None of the above

O pronome "his" refere-se a "the president". Logo, você deve marcar a alternativa (B).

1) The lawyer thinks that **he** needs an office in New York City.
Who does "he" refer to?
(A) The boss
(B) Some male person
(C) Both of the above
(D) None of the above

2) All the newspapers said exactly the same thing about President Bush. When preparing the speech about the war, Tony Blair met Bush.
Who prepared the speech?
(A) Bush
(B) Tony Blair
(C) Both of them
(D) None of them

3) Nobody agrees that **he** needs a psychiatrist once in a while.
Who does "he" refer to?
(A) Nobody
(B) Some male person
(C) Both of the above
(D) None of the above

4) When singing on the street in Las Vegas, Katie met Tom Cruise.
Who sang on the street?
(A) Katie
(B) Tom Cruise
(C) Both of them
(D) None of them

Muito obrigado pela sua participação!

APPENDIX J - COMPLETE TASKS

GRAMMATICALITY JUDGMENT TASK [-PRAGMATIC CONTEXT]

PART I: OVERT/NULL SUBJECT

A) MATRIX CLAUSES

Weather Expletive in Matrix Clauses in Sentence Initial Position

1) It always snows in New York City in January and February (16).
2) It rains a lot in some Brazilian cities during the winter months (16).
3) Rains in the rain forests in the months of August and September (16).
4) Snows a lot in some American and Canadian cities during the winter (18).

Weather Expletive in Matrix Clauses after a PP (prep. phrase)

5) In New York it snows in the months of December and January (17).
6) In most desert areas it rains only once or twice a year (16).
7) In the United States snows very often in the northern areas (18).
8) In some European countries rains a lot during the hot summer months (18).

Existential *there is* in Matrix Clauses in Sentence Initial Position

9) There is a huge cathedral near the bus stop on Fifth Avenue (16).
10) There is a tiny pocket on the black leather jacket behind you (16).
11) Is a tuna sandwich for a late dinner in the refrigerator (18).
12) Is a wonderful apartment for rent close to the subway station (17).

Existential *there is* in Matrix Clauses after a PP (Prepositional Phrase)

13) In the cupboard there is a wonderful slice of cake for dessert (16).
14) On Fifth Avenue there is a branch of a famous Brazilian bank (17).
15) In New York is at least one public library in each neighborhood (17).
16) On the east coast is an awesome beach for a summer vacation (16).

Seem Expletive in Matrix Clauses

17) It seems that the professor enjoys the cold weather in Boston. (16)
18) It seems that the secretary catches a cold once in a while. (16)
19) Seems that some people work from Monday to Sunday in Argentina.(16)
20) Seems that politicians tell others some harmful lies once in a while. (17)

Subject in Matrix Clauses

[+spec; +hum]

21) The young professor teaches Arts and Philosophy in New York City (16).
22) The corrupt governor lives next to the mayor in New York (16)
23) Has a full time position at the famous Harvard School of Law (16).
24) Creates at least three wonderful books for young children every year (16).

[+spec; - hum]
25) The Charles River flows between the cities of Boston and Cambridge. (16/17)
26) The World Wide Web offers the best resources for foreign students (16).
27) Holds a hundred CDs, fifty books and ten DVDs all together ( ).
28) Saves thousands of text files, movies and different kinds of heavy images (18).

[- spec; +hum]
29) A good cleaner usually makes a lot of money in New York. (17)
30) A secretary usually works from nine to five on the weekdays. (16)
31) Buys expensive clothes in New York City every Friday and Saturday. (18)
32) Reads famous comic books in the school library once in a while. (16)

[- spec; - hum]
33) A good book carries hours of entertainment for a smart student. (16)
34) An interesting book sometimes turns into a trivial and boring film. (18)
35) Causes a lot of trouble and suffering to poor people everywhere. (18)
36) Floats on the polluted rivers and oceans in South and North America. (17)

B) COORDINATE CLAUSES

Subject in Coordinate Clauses

[+human, + specific]
37) The poor man drinks beer and smokes lots of cigarettes every evening. (16)
38) The young lady buys expensive clothes and wears them on the weekends. (16)

[+human, - specific]
39) A young Brazilian boy usually plays soccer and watches TV a lot. (18)
40) A modern woman usually likes sports and watches lots of games. (16)

[- human, +specific]
41) Boston offers lots of tourist attractions and holds some famous sites. (18)
42) This dictionary contains lots of words and provides a grammar section. (17)

[-human, -specific]
43) An old car usually causes problems and annoys the owner a lot. (17)
44) A book always brings new information and makes life much more exciting. (18)

C) SUBORDINATE CLAUSES

Weather Expletive in Subordinate Clauses

45) The elderly lady says that it rains every spring in New York. (16)
46) Everybody says that it snows a lot in Boston in January. (16)

47) The philosopher announces that rains once in a while in Boston. (16)
48) The flight attendant announces that snows a lot around here in January. (17)

Existential *there is* in Subordinate Clauses

49) The boy tells the girl that there is a mysterious house nearby**.** (16)
50) The gardener tells the woman that there is an orange tree downstairs. (16)
51) Some people report that is a shortcut to the science library. (18)
52) The cleaner whispers that is lots of money inside the leather wallet. (18)

***Seem* Expletive in Subordinate Clauses**

53) The journalist reports that it seems that all Brazilians love soccer. (16)
54) The lady says that it seems that Chinese women get married young. (16)
55) The father tells the mother that seems that all Americans watch sports. (16)
56) The young professor maintains that seems that only the poor students fail. (16)

Null Anaphor in Non-Finite Adjunct Clauses

Ex.: $John_i$ saw Henry when ec_i walking down the street.

[+human, +specific]
57) The actor always sees the director when walking down Mass Avenue. (18)
58) The girlfriend often kisses the boyfriend when watching a romantic film. (18)

[+human, - specific]
59) A smart student usually queries a good professor when leaving class. (17)
60) A young child usually disturbs a tired father when eating dinner. (17)

Pronoun Anaphor in Non-Finite Adjunct Clauses

Ex.: *John saw Henry when he walking down the street.

[+human, +specific]
61) The woman always sees the secretary when she jogging on the beach. (17)
62) The lawyer always calls the gardener when he arriving home at night. (17)

[+human, - specific]
63) A loving father always kisses a young son when he getting home. (16)
64) A little boy sometimes pushes a baby when he playing in the playground. (18)

Pronoun Anaphor in Finite Adjunct Clauses

Ex.: The lawyer calls Henry when he is walking down the street.

[+human, +specific]
65) The lawyer always answers the mayor when he is giving a speech. (17)
66) The man always questions the detective when he is inspecting a house. (18)

[+human, -specific]
67) A businesswoman needs a secretary when she is paying a bill. (17)
68) A polite student always greets a teacher when he is giving a talk. (18)

Null Anaphor in Finite Adjunct Clauses

Ex.: *John$_i$ saw Henry when was walking down the street.

[+human, +specific]
69) The mayor usually questions the president when is leaving the room (18)
70) The smart boss always greets the client when is entering the office. (17)

[+human, -specific]
71) A good teacher usually knows a student when is speaking in class. (17)
72) A lawyer usually hires an intern when is typing a petition. (18)

Subject in Subordinate Complement Clauses

[+human, +specific]
73) The young philosopher thinks that he smokes a lot in the office. (16)
74) The doctor admits that he calls the lawyer once in a while. (16)
75) The student insists that wants a private office as soon as possible. (18)
76) The prisoner admits that likes the exciting crime life in New York. (17)

[+human, -specific]
77) A young Brazilian woman usually says that she works extremely hard. (17)
78) A sensitive man always accepts that he needs a good psychiatrist. (18)
79) A young Brazilian man always believes that plays soccer very well. (16)
80) A good person declares that worries about water and air pollution. (17)

Subject (he) in subordinate complement clauses with *Nobody* as an antecedent

81) Nobody reveals that he overeats once in a while during the winter. (17)
82) Nobody confesses that he cheats on income taxes once a year. (16)
83) Nobody recognizes that eats lots of junk food almost every day. (16)
84) Nobody acknowledges that produces a lot of trash and air pollution. (17)

Subject (they) in subordinate complement clauses with *Nobody* as an antecedent
85) Nobody realizes that they consume too much fast food during the year. (17)
86) Nobody reveals that they tell a terrible lie once in a while. (16)
87) Nobody confesses that go out with a married person on Sundays. (16)
88) Nobody believes that bother a quiet neighborhood once in a while. (17)

PART II: OVERT/NULL OBJECT

A) MATRIX CLAUSES

Object in matrix clauses

[+spec; +hum]
89) The policeman meets the woman at the shopping center every Sunday. (18)
90) The young babysitter feeds the baby girl many times a day. (16)
91) The young man usually sees at the bus stop near the supermarket. (17)
92) The young boy usually sells in the public library near the school. (16)

[+spec; - hum]
93) The chubby boy buys chocolate ice cream in the park every weekday. (16)
94) The professor distributes the English homework at the end of class. (17)
95) The architect usually finds in a big store in New York City. (16)
96) The store manager wears once in a while on Saturday mornings. (16)

[- spec; +hum]
97) A young girl usually calls a close friend on Saturday evenings. (16)
98) A caring person usually supports a friend in need of help. (16)
99) A secretary usually brings to the main office in the morning. (17)
100) A rich woman always invites to dinner on Fridays and Saturdays. (18)

[- spec; - hum]
101) A patient usually reads a weekly magazine in the waiting room. (18)
102) A famous architect usually designs a building in New York City. (18)
103) A high school student carries inside a backpack from Monday to Friday. (18)
104) A smart child always invents during the long, hot summer vacation. (17)

Object Topicalization in Matrix Clauses

[+spec; +hum]
105) The president, the mayor visits once a month in Washington DC. (18)
106) The lawyer, the woman sees at the shopping center on Saturdays. (17)

[+spec; - hum]
107) French wine, the famous philosopher drinks every day before bed time. (17)
108) Swiss Chocolate, the construction worker only buys once in a while. (16)

B) COORDINATE CLAUSES

Object in Coordinate Clauses

[+spec; +hum]
109) The boss admires and the secretary misses the lawyer a lot. (16)
110) The mother feeds and the babysitter washes the kid every day. (17)
111) The boss usually meets the secretary and the lawyer sees at work. (17)
112) The teacher criticizes the student and the grandmother praises a lot. (18)

[+spec; - hum]
113) The wife sells and the husband distributes Time Magazine every week. (17)
114) The teacher has and the student keeps the English Grammar at home. (16)

115) The wife washes the uniform and the policeman hangs behind the door. (18)
116) The insane woman has a box and the poor husband carries everywhere. (18)

[- spec; +hum]
117) An elderly father loves and a mother always misses a son. (18)
118) A housewife always fires and a husband criticizes a bad gardener. (18)
119) A student always respects a good teacher and parents praise a lot. (16)
120) A lawyer questions a prisoner and a policeman frightens a lot. (18)

[- spec; - hum]
121) A woman usually reveals and a close friend keeps a secret. (16)
122) A woman likes and a child usually smells a flower in spring. (16)
123) A kid usually invents a word and a parrot repeats sometimes. (17)
124) A father usually gives a toy and a son wants a lot. (16)

C) SUBORDINATE CLAUSES

Object in Subordinate Clauses
[+spec; +hum]
125) The policeman knows that the drug dealer phones the woman every day. (17)
126) The boss believes that the strange man phones the secretary every day. (17)
127) The devoted secretary sometimes announces that the boss likes a lot. (18)
128) The elderly grandfather knows that the little boy adores very much. (18)

[+spec; - hum]
129) Everybody suspects that the president has a farm outside the country. (18)
130) The mother believes that the student takes an English class on Saturdays. (18)
131) The poor woman confesses that the sick husband wants on the weekends. (18)
132) The elderly grandfather agrees that the grandson watches once in a while. (18)

[- spec; +hum]
133) The Department Head announces that the Dean fires a professor every year. (18)
134) A mother usually dislikes that a son dates a married woman. (18)
135) The friendly professor agrees that a first grade student watches a lot. (17)
136) An elderly teacher always assumes that all students do every day. (18)

[- spec; - hum]
137) The teacher suggests that the student purchases a book every month. (16)
138) The policeman argues that the young man usually steals a wallet. (17)
139) The librarian hopes that the student always puts on the desks. (17)
140) The linguistics professor asks that the student brings to class every day. (17)

GRAMMATICALITY JUDGMENT TASK [+PRAGMATIC CONTEXT]

PART I: OVERT/NULL SUBJECT

A) MATRIX CLAUSES

Subjects in Matrix Clauses

[+spec; +hum]
1) The elderly woman works for a famous pet shop in New York. (18) She usually feeds all the little animals early in the morning. (18)
2) The student from New York usually stays home on cold winter evenings.(17) He watches action movies on TV on Fridays and Saturdays.(16)
3) The intelligent student studies at a public school in New York. (17) Goes to school with an elderly woman on Mondays and Fridays. (17)
4) The businessman visits a lot of cities in Brazil every year. (17) Sells computers to some companies on the south and northeast coasts. (16)

[+spec; - hum]
5) The old English dictionary has all the most frequently used words. (16) It offers a long grammar section and a concise synonyms list. (17)
6) The World Cup happens every four years in a different country. (16) It always brings in soccer lovers of all ages from various countries. (18)
7) The tall skyscraper provides a terrific view of New York City. (16) Attracts lots of curious visitors from different countries all week long. (18)
8) The celebrated science fiction film deals with life in the future. (17) Presents a unique view about the emotional nature of human beings. (17)

[- spec; +hum]
9) A good writer writes about people from the past, present and future. (16)He usually has an intuitive knowledge about people from all eras. (17)
10) A successful businessman always spends a lot of time in the office. (18) He usually comes home from the office after nine in the evening. (17)
11) A professor usually works from Monday to Sunday all year long. (17) Needs to take a fun thirty-day vacation once or twice a year. (16)
12) A good soccer player always makes a lot of money in Brazil. (17) Practices during the week at the soccer stadium all year long. (16)

[- spec; - hum]
13) A computer helps young students, busy teachers and people in all fields. (18) It usually brings hours of fun and games to children and adults. (16)
14) A washing machine usually makes a lot of noise late at night. (16) It always disturbs all the working people in the houses nearby. (16)
15) A war brings a lot of suffering and poverty for a country. (17) Spreads hate, racism and all sorts of emotional and physical diseases. (17)
16) A big window illuminates an entire room in a crowded office. (17) Provides a pleasant and fun work environment to all the employers. (18)

PART II: OVERT/NULL OBJECT

A) MATRIX CLAUSES

Ex.: John finished reading a book about insects yesterday. *He left on the kitchen table.

Objects in Matrix Clauses

[+spec; +hum]
17) The young woman from New York City knows the French Canadian man. (17) The lawyer meets him in a coffee shop every Monday after lunch. (17)
18) The smart student from New York City admires the brilliant linguist. (17) The Department Head always visits him on Fridays and Sundays evenings. (18)
19) The young lady from a small town admires the famous country singer. (17) The elderly woman usually sees on the streets in New York City. (17)
20) The young man truly idolizes the worldwide famous Brazilian soccer star. (18) The enthusiastic little fan from a small town adores a lot. (16)

[+spec; - hum]
21) The young woman from the south desires the expensive French perfume. (16) The rich elderly woman buys it in a famous store every month. (17)
22) The young man from New York enjoys the famous Brazilian carnival. (17) The elderly man from the southeast watches it on TV all night. (16)
23) The young man from the United States sometimes reads the famous newspaper. (17) The retired professor from Boston receives at home on the weekends. (18)
24) A rich businessman from the United States usually owns a Swiss watch. (17) The famous executive from New York City wears once in a while. (16)

[- spec; +hum]
25) A big family always relies on a caring and lovely mother. (18) A lovely baby boy usually wants her around all the time. (18)
26) A busy mother usually has a lot of problems with a careless child. (18) An affectionate mother always loves him even on the very bad days. (18)
27) A big corporate firm always demands a highly qualified worker.(18) A smart employer finds in the top universities throughout the country. (18)
28) A young girl from a small town usually seeks a handsome gentleman. (16) An intelligent young lady usually meets at high school or college. (18)

[- spec; - hum]
29) In the cold winter the woman puts on a heavy warm coat. (16) In the summer the elderly lady keeps it inside the closet. (17)
30) In the summer the student always carries a bottle of fresh water. (18) The professor usually brings it to the classroom and to the library. (18)
31) In the United States a young lady usually wastes hard earned money. (18) The naive woman still spends on useless advertised products for the home (17)
32) Once in a while the neighbor calls a cheap pizza delivery store. (17) The student always orders on Wednesdays and Fridays late in the evening. (18)

B) SUBORDINATE CLAUSES

Objects in Subordinate Clauses

[+spec; +hum]
33) The bright Computer Science student truly respects the smart Italian girl. (18) Everybody knows that the professor still visits her once in a while. (17)

34) The young woman from New York City envies the pretty Mexican girl. (17) Everybody knows that the famous singer sometimes invites her for lunch. (18)
35) The French-Canadian student loves the Chinese girl. (16) The English professor confesses that he invites for dinner every day. (18)
36) The working man from a small Brazilian town trusts the famous priest. (16) The hardworking taxi driver from Rio states that he idolizes a lot. (18)

[+spec; - hum]
37) Some men, women and even children feel unhappy on a snowy day. (16) The little American girl declares that she hates it in New York. (16)
38) According to a TV advertisement, even a child needs a Dell notebook.(17) The little American boy always states that he wants it for school. (16)
39) An old person from China usually recommends the famous green tea. (18) The elderly lady announces that she sells on the streets every day. (17)
40) The tourist from Salt Lake City likes the famous Statue of Liberty. (17) The History professor reports that he views once in a while. (17)

[- spec; +hum]
41) A famous person in Hollywood always relies on a strong bodyguard.(18) The handsome film director announces that he hires one every year. (17)
42) A busy woman always searches for a zealous and trustful maid. (17)
A hardworking woman usually emphasizes that she needs her. (16)
43) A principal in a public high school sometimes hires a good teacher. (17) A busy single mother always says that she necessitates a lot. (18)
44) A young man from Italy usually respects a good soccer player. (18) A typical Brazilian man always says that he likes a lot. (17)

[- spec; - hum]
45) On a regular basis, the smart college student buys a magazine. (18) The brilliant Computer Science student admits that he reads one sometimes. (18)
46) A family in a big city usually discards an old TV set. (18) The needy hardworking woman emphasizes that she desires one right away. (18)
47) On rainy days in New York, a tourist always carries an umbrella. (18) A smart American tourist reveals that he keeps inside the backpack. (17)
48) In the United States everybody has at least one heavy winter coat. (17) A poor college student tells a friend that he wears every day. (16)

INTERPRETATION TASK

Null Anaphor in Non-finite Adjunct Clause [+ Pragmatic Context]

1) In the 80's, people heard the same story about John Lennon. When leaving the building in New York, Yoko called John Lennon.
Who left the building?
a) ( ) John Lennon
b) ( ) Yoko
c) ( ) Both of them
d) ( ) None of them

2) All the newspapers said exactly the same thing about President Bush. When preparing the speech about the war, Tony Blair met Bush.
Who prepared the speech?
a) ( ) Bush
b) ( ) Tony Blair
c) ( ) Both of them
d) ( ) None of them

Null Anaphor in Non-finite Adjunct Clause [- Pragmatic Context]

3) When entering the Court in New York, Michael Jackson saw Jay Leno.

Who entered the Court?
a) ( ) Michael Jackson
b) ( ) Jay Leno
c) ( ) Both of them
d) ( ) None of them

4) When singing on the street in Las Vegas, Katie met Tom Cruise.
Who sang on the street?
a) ( ) Katie
b) ( ) Tom Cruise
c) ( ) Both of them
d) ( ) None of them

Subjects in subordinate complement clauses with *nobody* as an antecedent

5) Nobody says that **he** feels very lonely once in a while.
Who does “he” refer to?
a) ( ) Nobody
b) ( ) Some male person
c) ( ) Both of the above
d) ( ) None of the above

6) Nobody agrees that **he** needs a psychiatrist once in a while.
Who does “he” refer to?
a) ( ) Nobody
b) ( ) Some male person
c) ( ) Both of the above
d) ( ) None of the above

Subjects in subordinate complement clauses

7) The young lawyer regrets that **he** hires a lazy secretary sometimes.
Who does “he” refer to?
a) ( ) The young lawyer
b) ( ) Some male person
c) ( ) Both of the above
d) ( ) None of the above

8) The lawyer thinks that **he** needs an office in New York City.
Who does “he” refer to?
a) ( ) The boss
b) ( ) Some male person
c) ( ) Both of the above
d) ( ) None of the above

APPENDIX L - CONSENT FORM

CONSENT TO PARTICIPATE IN NON-BIOMEDICAL RESEARCH

Brazilian-Portuguese L2 Acquisition of English Syntax-Pragmatic Interface

You are asked to participate in a research study conducted by Professor Suzanne Flynn (Professor of Linguistics and Language Acquisition) and by Silvana Z. Pacheco (PhD student), from the Department of Linguistics and Philosophy at the Massachusetts Institute of Technology (M.I.T.) and from Pontifícia Universidade Católica do RS (PUCRS, Brazil). The results of this study will be contributed to a doctoral dissertation. You were selected as a possible participant in this study because you are an adult native English speaker. You should read the information below, and ask questions about anything you do not understand, before deciding whether or not to participate.

- **PARTICIPATION AND WITHDRAWAL**

Your participation in this study is completely voluntary and you are free to choose whether to be in it or not. If you choose to be in this study, you may subsequently withdraw from it at any time without penalty or consequences of any kind. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

- **PURPOSE OF THE STUDY**

In first and second language acquisition (L1 and L2) some studies indicate that development of syntax takes place prior to development of pragmatics. In this study we intend to investigate if what on the surface might appear to be a syntactic deficit in a learner's grammar, with respect to the distribution of the grammatical subjects and objects, might be more fully understood in terms of a lack of knowledge about the pragmatics of English.

- **PROCEDURES**

If you volunteer to participate in this study, we would ask you to do the following things:

1) Complete a short questionnaire with some background information: name, sex, age, place of birth, education, and knowledge of a foreign language. This will take no longer than 5 minutes.

2) Answer Grammaticality Judgment Test 1, Batteries A and B: you will be asked to judge some sentences according to their grammatical accuracy. The number of

sentences is about 160. The sentences in this test will be presented without a previous context. This will take about 45 minutes.

3) Answer Grammaticality Judgment Test 2, Batteries A and B: you will be asked to judge some sentences according to their grammatical accuracy. The number of sentences is 76. The sentences in this test will be presented within a previous context. This will take about 30 minutes.

4) Answer Interpretation Test 1: you will be asked to answer one question about each sentence. The number of sentences is 4. It will take 3 minutes.

5) Answer Interpretation Test 2: you will be asked to identify the reference of some pronouns. The number of sentences is 6. It will take 5 minutes.

The total length of time for participation in this study will be about 1 hour and a half. The tests will be administered at MIT campus in a place to be confirmed.

- **POTENTIAL BENEFITS**

The results of this research will contribute to a better understanding of Second Language Acquisition.

- **PAYMENT FOR PARTICIPATION**

No payment is offered for participation in this study.

- **CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. All personal information and research data will be coded. Each subject will be assigned a number.

- **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact

1) Professor Suzanne Flynn - MIT Linguistics and Philosophy, 77 Massachusetts Avenue Bldg. 32-D808; Cambridge, MA 02139 USA
Office Phone: 32-D832
Email: sflynn@mit.edu

2) Silvana Z. Pacheco - - MIT Linguistics and Philosophy, 77 Massachusetts Avenue Bldg. 32-D808; Cambridge, MA 02139 USA
Phone: (617) 354-0920
Email: silvanap@mit.edu

- **EMERGENCY CARE AND COMPENSATION FOR INJURY**

"In the unlikely event of physical injury resulting from participation in this research you may receive medical treatment from the M.I.T. Medical Department, including emergency treatment and follow-up care as needed. Your insurance carrier may be billed for the cost of such treatment. M.I.T. does not provide any other form of compensation for injury. Moreover, in either providing or making such medical care available it does not imply the injury is the fault of the investigator. Further information may be obtained by calling the MIT Insurance and Legal Affairs Office at 1-617-253 2822."

- **RIGHTS OF RESEARCH SUBJECTS**

You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you feel you have been treated unfairly, or you have questions regarding your rights as a research subject, you may contact the Chairman of the Committee on the Use of Humans as Experimental Subjects, M.I.T., Room E32-335, 77 Massachusetts Ave, Cambridge, MA 02139, phone 1-617-253 6787.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____
Name of Subject

_____
Name of Legal Representative (if applicable)

_____ _____
Signature of Subject or Legal Representative Date

SIGNATURE OF INVESTIGATOR

In my judgment the subject is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

_____ _____
Signature of Investigator Date

APPENDIX M - VOCABULARY LIST

Nouns	Translation	Verbs	Translation
Adults	Adultos	There To Be	Haver
Advertisement	Anúncio	To Admit	Admitir
Attractions	Atrações	To Agree	Concordar
Audience	Público	To Annoy	Irritar
Babysitter	Babá	To Answer	Responder
Backpack	Mochila	To Arrive	Chegar
Beach	Praia	To Ask	Perguntar
Bed time	Hora de dormir	To Assume	Presumir
Beer	Cerveja	To Attract	Atrair
Bill	Conta	To Believe	Acreditar
Birthday	Aniversário	To Borrow	Pedir Emprestado
Bodyguard	Segurança	To Bother	Incomodar
Boy	Menino	To Bring	Trazer
Boyfriend	Namorado	To Bring In	Reunir
Boss	Chefe	Bring Together	Reunir
Bottle	Garrafa	To Brush	Escovar
Branch	Filial	To Buy	Comprar
Breakfast	Café da Manhã	To Call	Telefonar
Brother	Irmão	To Carry	Carregar
Building	Edifício	To Catch a Cold	Pegar um resfriado
Businessman	Empresário	To Cheat	Fraudar, Enganar
Businesswoman	Empresária	To Confess	Confessar
Bus Stop	Parada de ônibus	To Consider	Considerar
Cake	Bolo	To Criticize	Criticar
Carnival	Carnaval	To Date	Namorar
Characters	Personagens	To Deserve	Merecer
Child	Criança	To Desire	Desejar
Children	Crianças	To Dislike	Não Gostar
Cities	Cidades	To Display	Exibir
Classmate	Colega de Aula	To Disturb	Perturbar
Cleaner	Faxineira	To Do	Fazer
Clothes	Roupas	To Drink	Beber
Coat	Casaco	To Eat	Comer
College	Faculdade	To Enjoy	Gostar
Countries	Países	To Enter	Entrar
Cupboard	Armário cozinha	To Envy	Invejar
Daughter	Filha	To Exit	Sair
Dean	Reitor	To Fail	Fracassar
Death	Morte	To Feed	Alimentar
Dessert	Sobremesa	To Feel	Sentir
Dinner	Jantar	To Find	Encontrar
Diseases	Doenças	To Fire	Demitir
Door	Porta	To Float	Flutuar
Doorman	Porteiro	To Flow	Fluir
Driver	Motorista	To Frighten	Assustar
Drug Dealer	Traficante	To Give	Dar
Employees	Empregadores	To Go	Ir
Employers	Empregados	To Go out	Sair

Enchantment	Encantamento	To Get Home	Chegar em casa
Entertainment	Diversão	To Greet	Saudar
Environment	Ambiente	To Hang	Pendurar
Nouns	Translation	Verbs	Translation
Evenings	Noites	To Happen	Acontecer
Farm	Fazenda	To Hate	Odiar
Fat	Gordura	To Have	Ter, Comer
Father	Pai	To Hear	Ouvir
Field	Campo, Área	To Hire	Contratar
Flight Attendant	Comissário de bordo	To Hold	Guardar
Flower	Flor	To Hope	Esperar, Ter esperança
Forests	Florestas	To Install	Instalar
Friend	Amigo	To Invite	Convidar
Fun	Diversão	To Jog	Correr
Games	Jogos	To Keep	Manter
Gardener	Jardineiro	To Kiss	Beijar
Gas	Gasolina	To Know	Saber, Conhecer
Girlfriend	Namorada	To Leave	Deixar, Sair
Gossip	Fofoca	To Like	Gostar
Grades	Notas	To Live	Morar
(First) Grade	(Primeira) Série	To Love	Amar
Grandfather	Avô	To Maintain	Afirma
Grandmother	Avó	To Make	Fazer
Grandson	Neto	To Meet	Encontrar
Hate	Ódio	To Mention	Mencionar
High School	Ensino Médio	To Miss	Sentir saudades
Home	Casa, Lar	To Need	Precisar
Homework	Tema	To Observe	Observar
House	Casa	To Offer	Oferecer
Housewife	Dona de casa	To Order	Pedir
Husband	Marido	To Overeat	Comer em excesso
Ice Cream	Sorvete	To Own	Possuir
Intern	Estagiário	To Paint	Pintar
Kid	Criança	To Pay	Pagar
Kinds	Tipos	To Play	Jogar, Brincar
Knowledge	Conhecimento	To Praise	Elogiar
Lawyer	Advogado	To Present	Apresentar
Leather	Couro	To Provide	Fornecer
Letter	Carta	To Purchase	Comprar
Library	Biblioteca	To Push	Empurrar
Lie	Mentira	To Put	Colocar
Life	Vida	To Rain	Chover
Line	Fila	To Read	Ler
Living Room	Sala de Estar	To Realize	Perceber
Lunch	Almoço	To Recognize	Reconhecer, admitir
Maid	Empregada Doméstica	To Regret	Lamentar
Magazine	Revista	To Reject	Rejeitar
Man	Homem	To Rely on	Depender
Manager	Gerente	To Report	Relatar
Mayor	Prefeito	To Respect	Respeitar
Mother	Mãe	To Reveal	Revelar
Movies	Filmes	To Rent	Alugar

Neighbor	Vizinho	To Run	Correr
Nouns	Translation	To Say	Dizer
Neighborhood	Vizinhança	To Save	Salvar
Newspaper	Jornal	To Search	Procurar
Night	Noite	To See	Ver

Nouns	Translation
Office	Escritório
Owner	Proprietário
Paintings	Quadros
Parrot	Papagaio
Passenger	Passageiro
Play	Peça de Teatro
People	Pessoas
Pleasant	Agradável
Pocket	Bolso
Policeman	Policial
Politician	Político
Poverty	Pobreza
Priest	Padre
Principal	Diretor de Escola
Prisoner	Prisioneiro
Purse	Bolsa
Relative	Parente
Resources	Recursos
Restaurant	Restaurante
Secretary	Secretária
School	Escola
Shoes	Sapatos
Shortcut	Atalho
Singer	Cantor
Slice	Fatia
Soap Operas	Novelas
Soccer	Futebol
Soccer Stadium	Estádio de Futebol
Son	Filho
Songs	Músicas
Speech	Discurso
Spring	Primavera
Skyscraper	Arranha-Céu
Store	Loja
Stories	Estórias
Street	Rua
Student	Aluno
Subway	Metrô
Sugar	Açúcar
Summer	Verão
Sundays	Domingo
Talk	Conversa
Tea	Chá
Teacher	Professor
Teeth	Dentes
Thousands	Milhares

Verbs	Translation
To Seek	Procurar
To Seem	Parecer
To Sell	Vender
To Sleep	Dormir
To Smell	Cheirar
To Smoke	Fumar
To Snow	Nevar
To Spend	Gastar (Tempo, Dinheiro)
To Spread	Espalhar
To Start	Começar
To State	Declarar
To Stay	Ficar
To Steal	Roubar
To Store	Armazenar
To Study	Estudar
To Support	Ajudar
To Talk	Falar
To Teach	Ensinar
To Tell	Dizer
To Think	Pensar
To Trust	Confiar
To Type	Digitar
To Visit	Visitar
To Wait	Esperar
To Walk	Caminhar
To Want	Querer
To Wash	Lavar
To Waste	Desperdiçar
To Watch	Assistir
To Wear	Vestir
To Whisper	Cochichar
To Win	Ganhar
To Work	Trabalhar
To Worry	Preocupar-se

Tourist Guide	Guia Turístico
Town	Cidade
Toy	Brinquedo
Traffic	Trânsito
Trash	Lixo
Tree	Árvore
Trouble	Problema

Nouns	Translation
Truck	Caminhão
Tuna	Atum
Umbrella	Guarda-Chuva
University	Universidade
Vacation	Férias
View	Visão
Waiting Room	Sala de Espera
Wallet	Carteira
War	Guerra
Washing Machine	Máquina Lavar Roupa
Water	Água
Weather	Clima
Weekdays	Dias de semana
Weekends	Finais de semana
Wife	Esposa
Wine	Vinho
Winter	Inverno
Woman	Mulher
Work	Trabalho
Worker	Trabalhador

Adverbs	Translation
Always	Sempre
Daily	Diário
Often	Frequëntemente
Nowadays	Atualmente
Only	Somente
Sometimes	Às vezes
Still	Ainda
Truly	Realmente
Usually	Geralmente
Very	Muito
Weekly	Semanal

Other Words & Phrases	
Word	Translation
A lot	Muito
At Least	No Mínimo
As soon as possible	O mais breve possível
Even	Mesmo
Income Taxes	Imposto de Renda
Once in a while	De vez em quando

Adjectives	Translation
Affectionate	Amoroso
Awesome	Impressionante
Best	Melhor
Boring	Enfadonho, chato
Bright	Brilhante
Brilliant	Brilhante
Busy	Ocupado
Careless	Descuidado
Caring	Cuidadoso
Chubby	Gordinho
Crowded	Lotado
Devoted	Dedicado
Elderly	Idoso
Expensive	Caro
Famous	Famoso
Friendly	Amigável, simpático
Fun	Divertido
German	Alemão
Good	Bom
Handsome	Bonito
Hardworking	Quem trabalha bastante
Harmful	Nocivo
Heavy	Pesado
Huge	Enorme
Kind	Gentil
Late	Atrasado
Lazy	Preguiçoso
Little	Pequeno
Lonely	Só
Loving	Amável
Married	Casado
Naive	Ingênuo
Old	Velho
Polite	Gentil
Poor	Pobre
Pretty	Bonita
Rainy	Chuvoso
Retired	Aposentado
Sick	Doente
Smart	Esperto
Tall	Alto
Terrible	Terrível

Some	Alguns

Terrific	Maravilhoso
Tiny	Muito pequeno
Tired	Cansado
Trustful	Confiável
Unique	Único
Warm	Quente
Wonderful	Maravilhoso
Worldwide	Mundialmente
Younger	Mais Jovem

APPENDIX N - STATISTICAL ANALYSIS

Regression analysis, the statistical procedure employed, models the relationship between one explained variable (also denominated dependent, predicted variable, regressand or Y-variable) and one or more explanatory variables (also denominated independent variables, control variables, regressor or X-variable) using a linear equation. Simple regression refers to models that have one explanatory variable. Multiple regression refers to models that have two or more explanatory variables.

The basic assumption underlying linear regression analysis is that the Y-variable can be estimated as a linear function of one or more X-variables plus an error term. For example, the Y-variable can be the L2 proficiency and the X-variable the age of immigration. In the simple regression model, the linear regression analysis is represented by the following equation:

$$Y_i = \beta_0 + \beta_1 X_i + e_i. \qquad (1)$$

The goal is to estimate the coefficients β_0 and β_1, where β_0 is the intercept and β_1 is the angular coefficient. The error term is e. When β_1 is greater than zero the Y-variable and the X-variable raise or decline together. When β_1 is lower than zero the Y-variable and the X-variable move in opposite directions. The method employed to estimate both parameters is the ordinary least square (OLS)[54]. The basic concept of linear regression is expressed in figure 5. The OLS computes the values of β_0 and β_1 from the observations on the values of the X-variable and Y-variable.

[54] Gujarati (2003, p. 1-10) presents an introduction to regression analysis and the basic principles of ordinary least squares, including the properties of the error term.

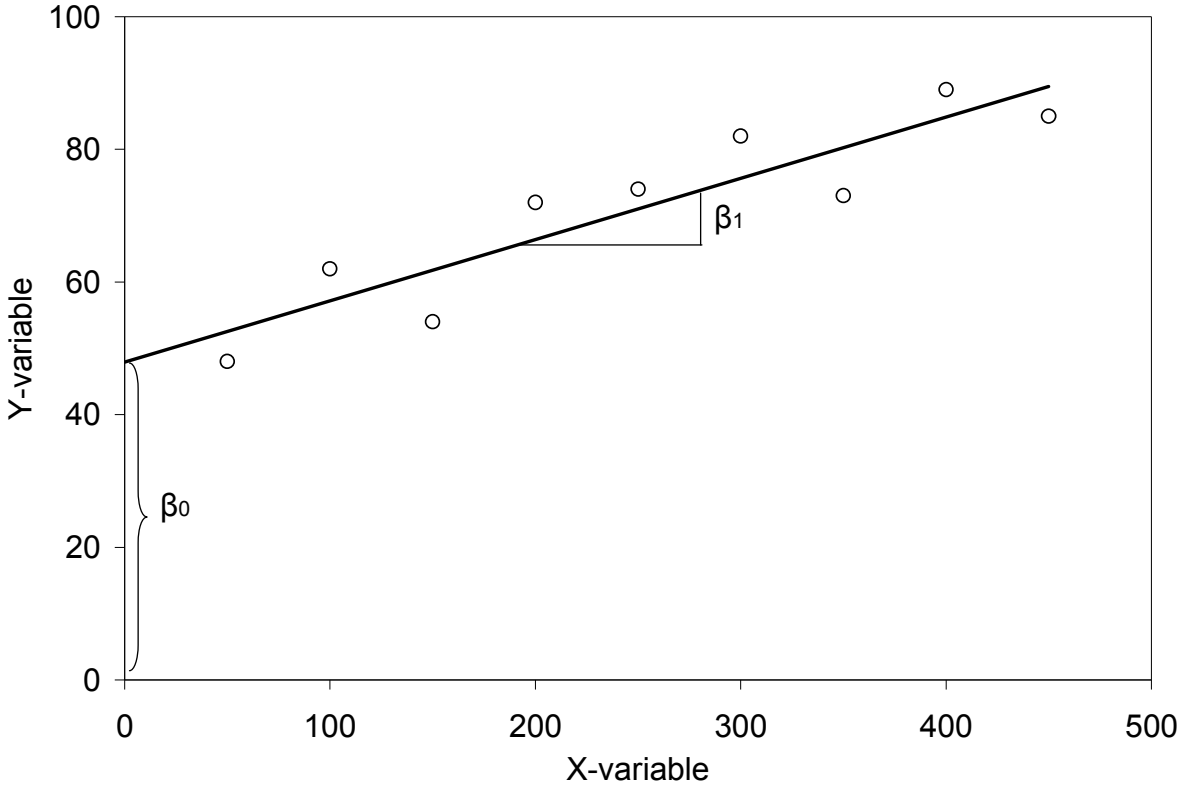

Figure 5 - Representation of a regression line

The explanatory variables can be quantitative (price, income, temperature, number of correct answers) and qualitative (gender, religion, geographical location, linguistic proficiency group). Dummy variables are employed in the case of qualitative variables, taking the value one (1) whenever a qualitative characteristic that it represents happens, and zero (0) otherwise. For example, 1 can indicate that a person is female and zero that a person is male. Dummies are artificial variables employed to classify the data in specific groups.

In this study, each L2 proficiency group originates a dummy variable. Therefore, there are three dummy variables, representing the basic, intermediate and advanced proficiency levels adopted in this study. Table 23 shows how the learners' proficiency levels are classified in the three dummy variables.

Table 23 - Categorization of Ss by Dummy variables

Learners' Proficiency Level	D_B	D_I	D_A
Basic	1	0	0
Intermediate	0	1	0
Advanced	0	0	1

Note: D_B, D_I and D_A correspond to Dummy Basic, Dummy Intermediate and Dummy Advanced.

Regression models in which all X-variables are dummies are called analysis of variance models (ANOVA). Regression models in which the X-variables are qualitative and quantitative are called analysis of covariance models (ANCOVA). Regression models with dummy variables are particularly useful to compare the mean values between two or more groups. For example, it is possible to compare the average result obtained by basic, intermediate and advanced L2 learners in a task.

In this study, a multiple regression analysis is employed to compare the mean percentage of correct answers obtained by the Ss in the three L2 Proficiency Levels, in the Grammaticality Judgment and Interpretation Tasks. The econometric model used is the following:

$$Y_j = \beta_B D_{Bj} + \beta_I D_{Ij} + \beta_A D_{Aj} + e_j \qquad (2)$$

where Y_j is the percentage of correct answer of individual j in a Task, D_{Bj} is a dummy variable with value 1 if the individual j belongs to the basic group and 0 otherwise, D_{Ij} is a dummy variable with value 1 if the individual j belongs to the intermediate group and 0 otherwise, D_{Aj} is a dummy variable with value 1 if the individual j belongs to the advanced group and 0 otherwise, and e_j is an error term[55]. Gujarati (2003, p. 245) shows that the coefficient β_B is the mean of the percentage of correct answers of the basic group; β_I is the mean of the percentage of correct answers of the intermediate group; and β_A is the mean of percentage of correct answers of the advanced group. Figure 6 shows the basic concept underlying this model.

[55] For an explanation about the error term see Gujarati (2003, p. 53-60). It is assumed that the mean value of the error term is zero and follows a normal distribution. Under these hypotheses, the error term does not play any significant role in the results.

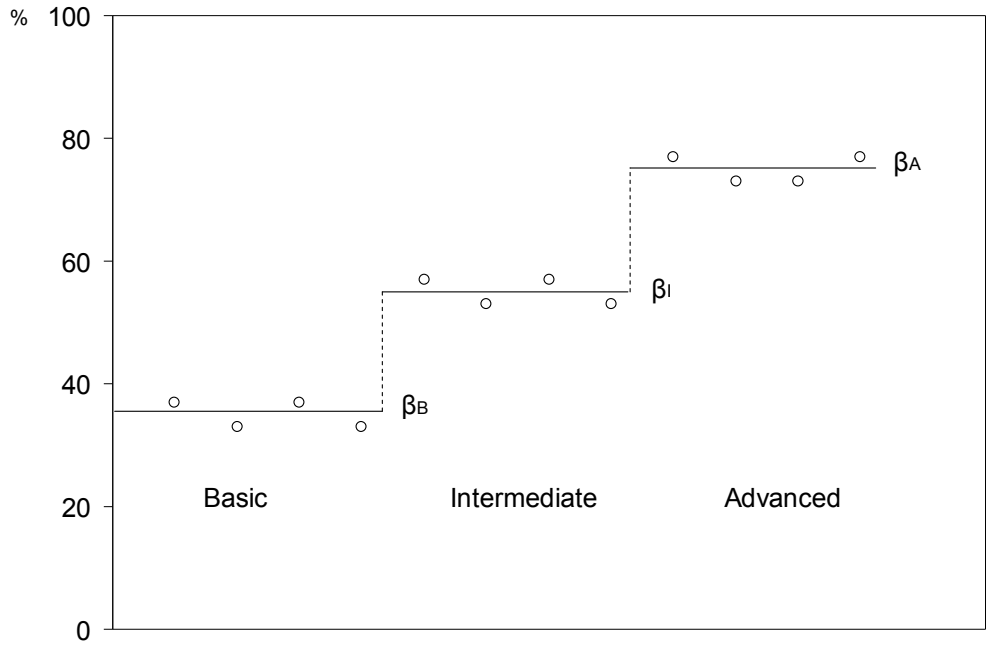

Figure 6 - Hypothetical representation of the regression model on dummy variables for each learners´ proficiency level.

It is possible to extend model (1) to compare the performance of the mean percentage of correct answers obtained by the Ss in the Grammaticality Judgment and Interpretation Tasks in different sentence structures. In order to compare two sentence structures, a dummy variable has to be added to model (1). The dummy variable assumes value 1 if the sentence follows a specific sentence structure, and zero otherwise. Table 24 presents the categorization of the hypothetical sentence structures A and B into a dummy variable.

Table 24 - Categorization of sentence structures by Dummy variables

Sentence Structure	D_S
Structure A	0
Structure B	1

Therefore, the econometric model for testing two sentence structures assumes the formula:

$$Y_{ABj} = \beta_0 + \beta_1 X_{Tj} + \beta_2 D_{Sj} + e_j \qquad (3)$$

where Y_{ABj} is the percentage of correct answers of individual j in sentence structures A and B, X_{Tj} is the linguistic proficiency of individual j and D_{Sj} is a dummy variable which assumes value 0 for sentence structure A and value 1 for sentence structure B. Then, for sentence structure A, $D_{Sj} = 0$, the regression takes the form:

$$Y_{Aj} = \beta_0 + \beta_1 X_{Tj} + \beta_2 * 0 + e_j = \beta_0 + \beta_1 X_{Tj} + e_j \qquad (4)$$

For the sentence structure B, $D_{Sj} = 1$, the regression takes the form:

$$Y_{Bj} = \beta_0 + \beta_1 X_{Tj} + \beta_2 * 1 + e_j = \beta_0 + \beta_2 + \beta_1 X_{Tj} + e_j \qquad (5)$$

This methodological procedure is similar to estimate one regression for each sentence structure. Equation (4) is the regression model for sentence structure A, while equation (5) is the regression model for sentence structure B. The difference between sentence structures A and B is determined by β_2. On one hand, when β_2 is positive and statistically greater than zero, the percentage of correct answers in structure B is higher than in structure A, for the same proficiency level. On the other hand, when β_2 is negative and statistically lower than zero, the percentage of correct answers in structure B is lower than in structure A, for the same proficiency level. When β_2 is not statistically different from zero, the percentage of correct answers in structure B is equivalent to structure A. Figure 7 presents a representation of this econometric model when β_2 is negative, figure 8 when β_2 is positive and figure 9 when β_2 is equal to zero.

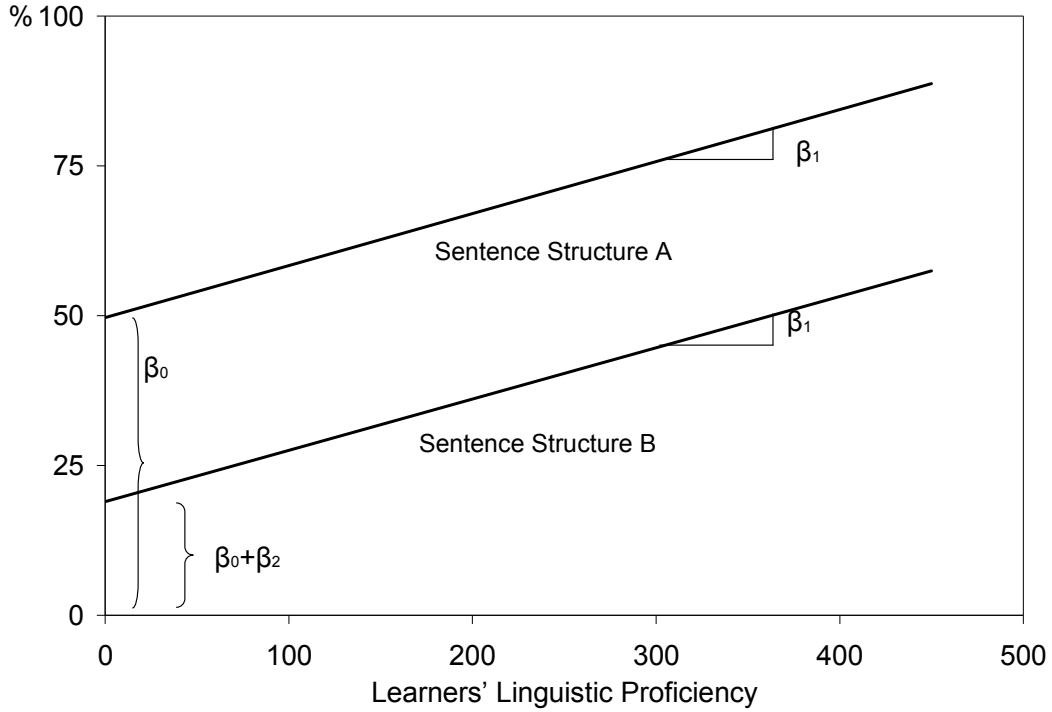

Figure 7 - The basic representation of the regression model for the comparison between two sentence structures when β_2 is negative.

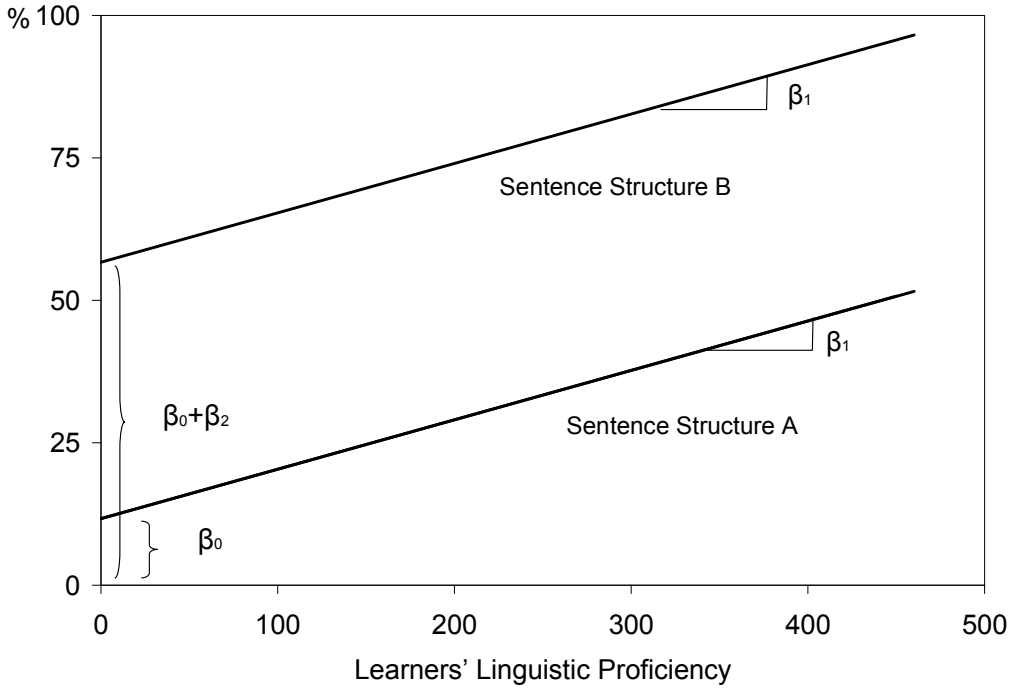

Figure 8 - The basic representation of the regression model for the comparison between two sentence structures when β_2 is positive.

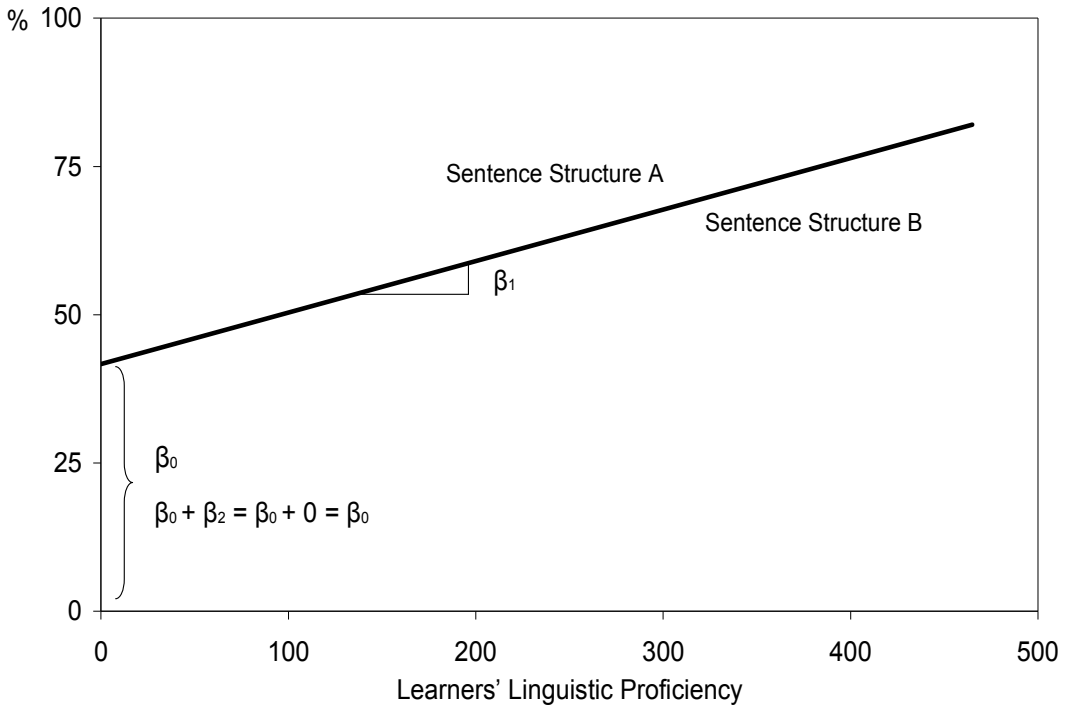

Figure 9 - The basic representation of the regression model for the comparison between two sentence structures when β_2 is equal to zero.

Silvana Zardo Pacheco

possui graduação em Licenciatura Em Letras pela Universidade Federal do Rio Grande do Sul (1992), mestrado em School Of Education - New York University (1997) e doutorado em Lingüística e Letras pela Pontifícia Universidade Católica do Rio Grande do Sul (2007). Atualmente é professora titular do Centro Universitário Ritter dos Reis. Tem experiência na área de Letras, com ênfase em Línguas Estrangeiras Modernas

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Dados Pessoais

Nome	Silvana Zardo Pacheco
Filiação	ALTE PACHECO e WILMA ZARDO PACHECO
Nascimento	31/10/1966 - PORTO ALEGRE/RS - Brasil
Carteira de Identidade	8034814668 SSP - RS - 07/12/1983
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Endereço residencial	RUA SÃO MANOEL, 2129 APT 101 PARTENON - Porto Alegre 90620110, RS - Brasil Telefone: 51 32179799
Endereço profissional	Centro Universitário Ritter dos Reis RUA ORFANOTRÓFIO,555 ALTO TERESÓPOLIS - Porto Alegre 90840440, RS - Brasil Telefone: 32303333

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Formação Acadêmica/Titulação

2002 - 2007	Doutorado em Lingüística e Letras. Pontifícia Universidade Católica do Rio Grande do Sul, PUC/RS, Porto Alegre, Brasil Título: SYNTAX-PRAGMATICS INTERFACE: BRAZILIAN-PORTUGUESE L2 ACQUISITION OF ENGLISH, Ano de obtenção: 2007 Orientador: Prof Dr. SÉRGIO DE MOURA MENUZZI Bolsista do(a): Coordenação de Aperfeiçoamento de Pessoal de Nível Superior
1995 - 1997	Mestrado em School Of Education. New York University, NYU, Estados Unidos Título: MEDIA WORKSHOP NEW YORK WEB PAGE, Ano de obtenção: 1997 Orientador: Prof MICHAEL CALLERY Bolsista do(a): Coordenação de Aperfeiçoamento de Pessoal de Nível Superior
1987 - 1992	Graduação em Licenciatura Em Letras. Universidade Federal do Rio Grande do Sul, UFRGS, Porto Alegre, Brasil

Atuação profissional

1. Centro Universitário La Salle - UNILASALLE

Vínculo institucional

1998 - 1999	Vínculo: Colaborador , Enquadramento funcional: PROFESSORA ASSISTENTE , Carga horária: 4, Regime: Parcial

Atividades

03/1998 - 07/1999	Graduação, Ciências da Computação
	Disciplinas Ministradas: *LÍNGUA INGLESA*

2. Centro Universitário Ritter dos Reis - UNIRITTER

Vínculo institucional

1998 - Atual	Vínculo: Professora , Enquadramento funcional: Professora titular , Carga horária: 20, Regime: Parcial

Atividades

03/1998 - 12/1998	Serviço Técnico Especializado, Faculdade de Educação Ciências E Letras, Curso de Letras
	Especificação: *ASSESSORIA À COORDENAÇÃO DO CURSO DE LETRAS NA ELABORAÇÃO DA GRADE CURRICULAR NO QUE SE REFERE À ELABORAÇÃO E UTILIZAÇÃO DO LABORATÓRIO DE INFORMÁTICA*
06/1998 - Atual	Graduação, Curso de Letras
	Disciplinas Ministradas: *LÍNGUA INGLESA I , LÍNGUA INGLESA II , LÍNGUA INGLESA III , LÍNGUA INGLESA IV , LÍNGUA INGLESA V , INGLÊS INSTRUMENTAL PARA CURSO DE SISTEMAS DE INFORMAÇÃO*
03/2000 - Atual	Graduação, Sistemas de Informação
	Disciplinas Ministradas: *INGLÊS INSTRUMENTAL*
08/2003 - Atual	Extensão Universitária, Faculdade de Educação Ciências E Letras, Curso de Letras
	Especificação: *Curso de Língua Inglesa*

3. Secretaria Municipal de Educação - SMED

Vínculo

institucional

1989 - 2001	Vínculo: Servidor público , Enquadramento funcional: Outro (especifique) , Carga horária: 0, Regime: Parcial

Atividades

12/1989 - 05/1994	Outro
	Especificação: *PROFESSORA DE EDUCAÇÃO INFANTIL*
03/1994 - 08/1994	Ensino fundamental
	Especificação: *LÍNGUA INGLESA*
03/1994 - 08/1994	Ensino fundamental
	Especificação: *LÍNGUA PORTUGUESA*
08/1997 - 05/1998	Serviço Técnico Especializado
	Especificação: *ASSESSORIA PEDAGÓGICA ÀS ESCOLAS DA REDE MUNICIPAL DE PORTO ALEGRE, NA ÁREA DE EXPRESSÃO*
03/1998 - 1999	Ensino fundamental
	Especificação: *LÍNGUA INGLESA*
04/1999 - 2001	Serviço Técnico Especializado
	Especificação: *ASSESSORIA PEDAGÓGICA AOS PROFESSORES MUNICIPAIS DE ENSINO FUNDAMENTAL*

Áreas de atuação

1. Línguas Estrangeiras Modernas
2. Lingüística Aplicada

Idiomas

Inglês	Compreende Bem , Fala Bem, Escreve Bem, Lê Bem
Espanhol	Compreende Bem , Lê Bem

Produção em C, T & A

Produção bibliográfica

Demais produções bibliográficas

PACHECO, S. Z., FLYNN, Suzanne
1. **Syntax-Pragmatics Interface: Brazilain-Portuguese L2 Acquisition of English**, 2006. (Conferência ou palestra,Apresentação de Trabalho)

PACHECO, S. Z., FLYNN, Suzanne
2. **Syntax-Pragmatics Interface: Brazilian-Portuguese L2 Acquisition of English**, 2005. (Conferência ou palestra,Apresentação de Trabalho)

PACHECO, S. Z., FLYNN, Suzanne
3. **Syntax-Pragmatics Interface: Brazilian-Portuguese L2 Acquisition of English**, 2006. (Outra,Apresentação de Trabalho)

Produção Técnica

Trabalhos Técnicos

PACHECO, S. Z.
1. **PROJETO ONLINE COM PROFESSORES DA UNIVERSITY OF BRITISH COLUMBIA, CANADÁ**, 1999

PACHECO, S. Z.
2. **NOVAS TECNOLOGIAS COMO INTERNET E MULTIMÍDIA PARA PROFESSORES DO COLÉGIO BANDEIRANTES DE SÃO PAULO**, 1998

PACHECO, S. Z.
3. **ESTÁGIO- MEDIA WORKSHOP NEW YORK**, 1996

Demais produções técnicas

1. PACHECO, S. Z. **Oficina - Compreensão em leitura em L2**, 2003. (Extensão, Curso de curta duração ministrado)

2. PACHECO, S. Z. **LÍNGUA INGLESA**, 1999. (Extensão, Curso de curta duração ministrado)

Orientações e Supervisões

Orientações e Supervisões concluídas

(Orientações de teses e dissertações coincidentes com informações na base CAPES, a partir do ano de 1996)

Monografias de conclusão de curso de aperfeiçoamento/especialização

1. Mônica Dias Fontana Fagundes. **An analysis of grammar lessons in two EFL textbooks**. 2006. Monografia (Letras) - Centro Universitário Ritter dos Reis

2. Jacqueline Conceição Isoton. **Children learning English as a foreign language: analyzing grammar lessons in textbooks**. 2006. Monografia (Letras) - Centro Universitário Ritter dos Reis

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