THE DEVELOPMENT OF COMPLEX SYNTAX AND THE SELECTION OF MOOD BY FOREIGN LANGUAGE LEARNERS OF SPANISH

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One of the most studied points of grammar in the Spanish foreign language classroom is the contrast between the indicative and the subjunctive. In spite of such emphasis, research has consistently reported that, at the end of two years of university-level instruction, students select mood poorly in oral and written production. Research has focused, however, on what learners cannot do with mood selection and has given little attention to what they can do. Therefore, this dissertation has two goals: (1) to detail the extent to which students can select for mood at the end of the traditional two-year university sequence; and (2) to attempt to account for learners' performance with respect to their linguistic development and to their production limitations and abilities.

A total of 78 students completing their fourth semester of Spanish participated in three production tasks (Study 1: N=40; Studies 2 and 3: N=38) that assessed their abilities to select mood in noun phrase clauses. Accuracy was high

when the indicative was necessary but it was poor when the subjunctive was necessary. Moreover, parallel to that which has been reported in acquisition studies of Spanish first language learners, these subjects showed a tendency to associate subjunctive forms with propositions that lack truth value (e.g., in modality contexts such as volition, doubt, denial, etc.) rather than with those that have truth value (e.g., in the context of personal commentaries).

Nevertheless, the data suggest that the major obstacle that impedes the selection of mood with native-like accuracy was the learners' overall inability to spontaneously produce utterances with complex syntax, namely, those containing subordinate clauses. In conversational speech, learners tended to produce only single clause utterances and coordinate structures. Even in highly controlled production tasks whose aim was to elicit utterances with subordinate clauses, learners still produced many simple utterances.

The results of this study offer two considerations for Spanish foreign language educators: (1) Exhaustive accounts of the indicative/subjunctive dichotomy have very little effect on learners' abilities to select mood in obligatory contexts; and (2) A significant effort should be directed at the development of learners' syntactic competence before the study of the indicative/subjunctive dichotomy. The dissertation concludes with recommendations on how to modify Spanish foreign language curricula according to these considerations.

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Chapter One: Introduction

1.0 Introduction.

One of the most studied points of grammar in the Spanish foreign language (FL) classroom is the contrast between the indicative and the subjunctive (Terrell, Baycroft, and Perrone, 1987). In spite of such emphasis, research has consistently reported that, at the end of two years of university-level instruction, students select mood poorly in oral and written production (Blake, 1983, 1985; García, 1981; Terrell, Baycroft, and Perrone, 1987; Lafford and Collentine, 1989). Research has focused on what learners *cannot* do with mood selection, however, and have given little attention to what they *can* do. Since mood selection is primarily limited to subordinate clauses, an understanding of when mood both is and is not properly selected after two years of university-level FL instruction would also indicate the potential of such learners to produce complex utterances.[1] Therefore, this dissertation has two goals: (1) to detail the extent to which students can select for mood after completing two years of FL Spanish study at the university level; and (2) to attempt to account for their abilities and limitations in developmental terms.

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[1] The term **complex structure** appears often in linguistic literature. No formal treatment to date has detailed which types of language behavior fall into the category of **complex**, however. Complexity is associated with quantities of words and clauses, embedding, and intralexical relations. Ross (1969) speaks of movement constraints in 'complex' noun clauses (e.g., **El hombre que vive allí**). Harris (1981) proposes sentences be categorized as 'complex' if they result from tranformations which combine two independent sentences. Waugh (1976) refers to 'complexes' that use more than one word to convey a single idea.

This dissertation will report on how the learner's interlanguage (IL) manifests the indicative/subjunctive mood distinction. It is not my intent to investigate whether it is difficult to acquire the indicative/subjunctive distinction, which has already been shown, but rather to understand why it is so difficult to make mood selection processes productive in the IL. It is claimed that after two years of university-level instruction, FL learners of Spanish do not exhibit even near native-like mood selection behavior in nominal clauses, neither in planned nor spontaneous production, if their intent is to communicate (i.e., as opposed to practicing the production of such forms in a drill-like exercise). The IL is not sufficiently developed in resources to produce structures involving complex syntactic and morphological rules, especially in spontaneous speech, since successful spontaneous communication greatly depends on the efficient use of attention and memory.

The purpose of this chapter is to introduce the primary assumptions about FL acquisition and production that are held throughout the dissertation. First, the types of linguistic competence necessary for being proficient in a FL are described. Important linguistic, cognitive, and social considerations are presented. Second, to understand the mood selection acquisition process, research on the acquisition of syntax and morphology in a second language (L2) context is summarized. Subsequently, what is currently known about the acquisition of complex morphosyntactic structures is outlined. The last section presents the research questions to be addressed followed by an outline of the rest of the dissertation.

1.1 Learning a Second Language.

The L2 learner is at odds with two forces that influence what is produced: internal and external. The internal forces relate to the learner's knowledge base and cognitive limitations, such as attention and working memory. Learners need to know linguistic elements such as the vocabulary and the grammar of the L2. They must also produce language in the face of a cognitive deficit in the form of a working memory whose extent is significantly less than that which is available for L1 production (Cook, 1977; 1991). Learners' knowledge of the L2 and their cognitive potential for processing sentences, however, are not the only variables that affect performance; external forces also determine how the L2 can be manifested. The degree to which an utterance is morphosyntactically simple or complex can be predicted by the type of discourse being produced (e.g., previously produced utterances, the genre/style of writing). For instance, knowing how to ask questions and make simple statements are essential for conversations, whereas narratives require such elements as the utilization of the L2 tense system and the production of indirect speech. That is, the characteristics of the linguistic context "surrounding" an utterance determine its relative simplicity and/or relative complexity. Society is also an important determinant of linguistic form. Learners must know how to adjust their lexical choices according to the formality of the situations in which they participate.

Canale and Swain (1980) propose that learners need four types of competence to achieve native-like performance in the L2: grammatical

competence, strategic competence, discourse competence, and sociolinguistic competence.[2]

Grammatical competence refers to a learner's knowledge of the linguistic code. Knowledge of the syntactic, morphological, phonological, and phonetic systems of a language is necessary. Learners must also have an extensive vocabulary to communicate in the L2 (i.e., a lexicon).

Strategic competence involves knowing how to make up for gaps in one's knowledge of the target language (TL) or to correct utterances. This entails using available knowledge to produce a message that might otherwise be more efficiently or quickly produced if a learner possessed more grammatical, discourse, and sociolinguistic knowledge or were able to produce utterances with greater automaticity. For example, circumlocution is essential for compensating for knowledge gaps in the lexicon. If a TL term is not readily available to a speaker, rephrasing or describing often results in successful communication. Additionally, monitoring the grammaticality of one's utterances helps to avoid errors.

Discourse competence relates to a learner's knowledge of how to present a series of propositions cohesively. In essence, discourse competence is important for presenting messages in such a way that one's audience has to do the least amount of work possible to understand the ideas being communicated. In conversation, for instance, discourse knowledge is required to appropriately indicate that a new topic is being introduced (e.g., ***¿Te acuerdas del examen que***

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[2] Although language knowledge and behavior have been referred to in many ways (e.g., Saussure's *langue* and *parole*, *signifier* and *signified* in semiotics), according to Newmeyer (1986: 71), Chomsky (1964) is the first to coin the terms *competence* and *performance* to refer to such notions.

hice ayer? **Pues, me suspendieron**). It also involves familiarization with the conventions of turn taking. In extended discourse, such as narratives or descriptions, knowing how to be cohesive in both thought and form requires discourse competence. Learners may come to realize that they can effectively relate a series of events if they are presented in a logical, sequential order. They must also learn TL conventions for indicating the relationship between independent propositions within a context (e.g., through transitional expressions such as **entonces**, **después**, **sin embargo**). Knowing how to avoid redundancy and to refer to previous discourse with pronouns and grammatical markers such as gender in adjectives is also part of one's discourse competence.

Sociolinguistic competence helps one to present ideas in a way that is acceptable to the speech community in which the TL is spoken. Learners need to know how to choose the form of their message according to the register in which they operate. Learners must also know what is appropriate within a culture; e.g., differentiating between **tú** and **usted**, or knowing that in some cases a polite request must be used instead of an imperative (e.g., **¿No me puedes prestar la sal?** versus **¡Préstame la sal!**)

The development of the grammatical and discourse components is especially important for a learner to begin to make native-like mood selection in Spanish. The indicative and the subjunctive are in opposition mainly in embedded clauses and marking for mood requires the encoding of grammatical inflection. The discourse component needs to be developed since the difference between the indicative and the subjunctive has been characterized by reference to terms that classify how propositions are presented in discourse, e.g., **assertion**,

presupposition, and **old** versus **new information** (Lavandera, 1983). Furthermore, Terrell, Baycroft, and Perrone (1987) speculate that the frequency with which the subjunctive appears in native discourse varies according to the communicative function of a particular discourse; e.g., narrative, description, etc.

1.2 The Study of Interlanguage Grammar.

Until the late 1960s, L2 learners were rarely the focus of language acquisition studies. Learning a L2 was assumed to be like learning any other subject matter and pedagogues relied more on the advice of learning theorists than on that of linguists for recommendations on how the L2 should be taught (Ellis, 1990). Selinker (1972), following Chomsky's (1957) assumption that language is a unique skill and therefore an independent source of knowledge, posited that L2 learners develop a new source of (linguistic) knowledge, independent of both the L1 or any other available knowledge source. He termed this L2 knowledge source the IL.

Chomsky (1985) has argued that the route taken by children in L1 acquisition is guided by a set of innate linguistic principles, referred to collectively as the *language acquisition device* (LAD), that essentially limit the types of hypotheses that a learner can make about the TL's structure. Support for his hypothesis comes from similarities in developmental stages through which speakers pass in mastering their L1 and in the similarities of underlying structure between seemingly unrelated languages. Selinker, therefore, assumed that the

LAD was available to guide the learning of the L2 as well. Subsequent research supported this view, implying that learners with quite different L1 backgrounds demonstrate similar developmental patterns when learning a common L2 (e.g., Dulay and Burt, 1974; Larsen-Freeman, 1976). This led researchers to posit a universal, natural order of acquisition motivated by innate principles of language acquisition.

A great deal of research has continued to follow Chomskyian assumptions when studying and accounting for the L2 acquisition process. In Chomsky's most recent works, he has posited that the LAD is actually a number of parameters that are set by children based on the structure of the input. How the parameters are set distinguishes one grammar (or language) from another. The major questions in L2 research within this framework have been whether such parameters are still available to the adult L2 learner and whether they are reset specifically to the L2 (cf. White 1985; Flynn, 1984, 1986). If two distinct parameter settings are available to learners, they probably compete in determining the underlying structure and form of their utterances.

Although most L2 researchers subscribe to the hypothesis that an IL underlies most L2 activity, not all account for development by the interaction of competing L1 and L2 parameter settings. Many study L2 development within a form-function framework (e.g., Huebner, 1979; Schachter, 1986). These studies seek to explain why variation is exhibited by a speaker at a given stage of development. Most variation has been attributed to the fact that the function of IL forms is different from their TL function (i.e., as they were presented to learners as input). For example, while it may appear that a particular learner vacillates

between the forms **no** and **don't** for negation in sentences such as **John no/don't take that**, a close form-function analysis may reveal that **no + VP** is used for statements and **don't + VP** for imperatives (Ellis, 1990:50-51). This line of research has also shown that L2 development is not guided primarily by the assignment of form to grammatical meaning but rather by the assignment of form to pragmatic meaning. For example, it has been documented that forms such as **please** serve a modality function generalizable to a number of situations in which a learner wants to affect the action of another, e.g., **Please bread = I want you to give me the bread**.

Givón (1979) provides a framework that is especially helpful for studying how the IL develops the capability to produce complex grammatical structures. Table 1.1 characterizes two developmental stages through which learners pass in developing complex morphosyntactic competence.

Table 1.1. IL Developmental Stages (Givón, 1979:223).

Presyntactic	Syntactic
a. Topic-Comment Structure.	Subject-predicate structure.
b. Loose conjunction.	Tight subordination.
c. Slow rate of delivery.	Fast rate of delivery.
d. Word-order is governed mostly by one pragmatic principle; old information goes first, new information follows.	Word-order is used to signal semantic case functions.
e. Roughly one-to-one ratio of verbs-to-nouns in discourse with verbs being semantically simple.	A larger ratio of nouns-over-verbs in discourse with verbs being semantically simple.
f. No use of grammatical morphology.	Elaborate use of grammatical morphology.[3]
g. Prominent intonation-stress marks the focus of new information; topic intonation is less prominent.	Very much the same, but perhaps not exhibiting as high a functional load, and at least in some languages totally absent.

[3] The elements that characterize the surface structure of syntactic mode speech help to maintain coherence (Givón, 1990). The following will exemplify how verbal inflections are important for cohesively presenting information in a narration:

> El jueves pasado, Carlos se despertó tarde a las nueve de la mañana. Había pasado casi diez horas estudiando para un examen de español. Se levantó y salió corriendo de su apartamento porque iba a empezar a las nueve y media.

Presumably, the writer is aware that the pluperfect tense in the second sentence is helpful to the reader. It clarifies that the event **pasar estudiando(él,diez horas)** was realized before **despertarse(Carlos,tarde)**. Anderson (1985) claims that it is easier to understand events presented in a linear rather than a non-linear fashion. Linearity in a narration relates to time. If events are presented in the same order as they were realized (e.g., **Carlos pasó diez horas estudiando para su examen y se despertó tarde a las nueve**) the probability that the addressee will understand the temporal relationship of the events is higher than if they were presented non-linearly. Thus, one of the primary roles of the perfect tenses is to signal (1) that events are not being presented linearly, and (2) that the event in question took place before the event that has been either topicalized or previously presented

He posits that learners first experience a presyntactic stage, in which word order is dictated by the learner's need to describe pragmatic relationships between constituents such as topic-comment, and in which morphology is not intentionally encoded into a message. At this point, grammatical inflections are usually relics of forms frequently provided in learner input that are incorporated into the IL as homogenous morphemes (i.e., as chunks). For example, learners in the presyntactic stage might correctly say **yo quiero** not because they are making subject-verb agreement but rather because they have concatenated two independent chunks: **/jo + kjiéro/**. If the same learners frequently produced strings such as **nosotros quiero**, they would most likely have concatenated **/nosótros + kjiéro/** which, through a disregard for inflectional accuracy, would suggest that they were still operating in the presyntactic stage. Subsequent to the presyntactic stage is the syntactic stage. At this point that the IL begins to emulate the TL, especially in terms of its syntactic and morphological systems.

Even though Givón uses the term "presyntactic stage" to refer to linguistic behavior at early stages of development, the term is only intended to be a characterization, not a description. Any manipulation of the order of a proposition's words to effect a particular interpretation is indeed a syntactic behavior. The term, however, is meant to reflect the relative degree to which underlying subject-verb-object nodes of an utterance's phrase structure establish word order. In the presyntactic stage, where any proposition usually has one predicate and one argument, word order is motivated by how new or "non referential" the argument is in the discourse: if the argument is being introduced, word order will most likely be ARGUMENT+PREDICATE as in **John eat**,

whereas if it has already been mentioned in the discourse the word order will most likely be PREDICATE+ARGUMENT as in **Eat John** (Givón, 1984).[4] In the syntactic stage, if a speaker wishes to topicalize an argument, all syntactic and morphological constraints on the form of an utterances are generally observed. For example, if the object of **John ate *the cereal*** is topicalized, the rules of English syntax require that the object node have a lexical manifestation (i.e., a co-referent) as in ***The cereal*, John ate *it***. That is, in the presyntactic stage, word order is most determined by pragmatic variables whereas in the syntactic stage it is determined by underlying phrase structure.

Givón (1979) also insists that even L1 learners progress from the presyntactic to the syntactic stage. Even after the syntactic stage in the L1 has been reached, one never completely abandons presyntactic behavior, however. Once the L1 has been fully developed and syntactic behavior dominates, presyntactic-like behavior is not completely abandoned. Givón terms the presyntactic-like behavior observed subsequent to L1 acquisition **pragmatic mode operations** and syntactic behavior **syntactic mode operations**. When even a proficient of a language is under communicative pressure and has little time for planning discourse, pragmatic mode behavior is often exhibited. When reformulation is possible (such as in the written word), however, syntactic mode operations dominate.

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[4] According to Givón (1990), the limit to the number of arguments, or "degrees of topicality" (Givón, 1990:901), that propositions in natural languages can have is approximately three. According to Du Bois (1985), predicates in oral discourse seldom have more than two arguments. Givón (1990) argues that such behavior is reflective of working memory limitations on the amount of information that can be affiliated with any one event or state.

Givón's framework is especially useful to the study of the acquisition of mood. It makes predictions about the relative difficulty one will have with complex syntactic structures at a given stage of development. For example, it predicts that learners will coordinate clauses before learning to embed them. The recurring use of single clause utterances in extended discourse (i.e., uttering more than just two or three propositions in any one turn in a conversation) is also a sign of presyntactic stage operations. He also claims that presyntactic stage speakers often concatenate one clause after the other with few or no transitional devices, such as conjunctions. Givón (1979) summarizes the syntax of presyntactic behavior in the following:

> Virtually no syntactic subordination can be found, and verbal clauses are loosely concatenated, usually separated by considerable pauses. (224)

Furthermore, Givón's theory predicts that only the most semantically and pragmatically salient inflectional paradigms are most likely to be acquired whereas those that are highly grammaticalized (i.e., those that are regulated by surface structure rules rather than serving a primary semantic role) will only be acquired late in development. It will be shown below that selecting between the indicative and the subjunctive is generally limited to subordinate clauses and that its appearance is largely dictated by surface structure features. As such, learners might only be expected to produce the distinction once they have achieved

syntactic stage operations or when they have a great deal of time to plan their utterances.

1.3 Grammar and the Foreign Language Curriculum.

Recent approaches to language instruction no longer assume that understanding and being able to manipulate grammatical structures is most important for learning a FL. Rather, pedagogues realize that grammatical knowledge is only one tool needed by the learner.

> Under the impact of grammar-based views of the nature of language, language syllabuses were traditionally expressed in terms of grammar, sentence patterns, and vocabulary. As a result of the more recent movement toward communicative theories of language and language learning, syllabuses have tended to be expressed more in communicative terms. (Richards, 1990:9)

Learners are still expected to learn the FL's grammatical and lexical systems, although most agree that curriculum goals should be to produce language users that can successfully comprehend and communicate ideas in various discourse types. For instance, whereas novice learners are expected to negotiate for meaning (i.e., the comprehension and communication of ideas) in face-to-face conversations, more advanced learners are expected to be able to effectively narrate and describe in one-way communications.

Some researchers believe however that grammatical syllabi continue to characterize the university FL experience (Alexander, 1990; Finneman, 1987). VanPatten (1989) summarizes the role of grammar study in the FL curriculum.

> For some time, twentieth century language teaching has been dominated by the assumption that language = grammar, that language teaching is the inculcating of grammatical competence in the learner, a competence from which all other competences emerge or at least depend. In addition, most foreign language programs at the college level are modeled upon the following: teach all of the grammar the first year; [and] review all of the grammar the second year.[5] (25)

The amount of study dedicated to the indicative/subjunctive distinction in the Spanish FL curriculum seems to be in conflict with pedagogical recommendations. Terrell, Baycroft, and Perrone (1987) estimate that 40% of all second semester Spanish class time is spent on mastering the skills necessary for mood selection even though Bull (1947) reports that the subjunctive makes up only about 5% of all conjugated verb forms in written Spanish. Nevertheless, the ACTFL Guidelines specify that the ability to operate in both "formal and informal situations" is only required for a "Superior" rating (cf. Omaggio, 1985: 198-99). The speaking objectives for "Semester 4" Spanish students implies that there is limited need for the subjunctive in developing speaking ability since the learner is

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[5] Of course, the scope of language study, primarily carried out by linguists, has been centered on the analysis of grammar. This is apparent in the writings of structuralists all the way up to contemporary generative grammar studies. Tarone and Yule (1989:69) summarize how language studies have influenced the assumptions of pedagogues: "There is...a very long tradition of linguistic analysis which has been devoted to the identification of the grammatical components of language. If learners can demonstrate that they know the rules, then they must surely possess grammatical competence."

predominantly expected to "speak Spanish well enough to generate and **conjoin** [emphasis mine] some longer sentences which narrate and describe..." (Medley, 1985:31). Since within Givón's framework, complex morphosyntactic structures such as the subjunctive appear to be more necessary for formal situations, complex structures that involve embedding and therefore deal with mood selection should not then be a major preoccupation of first and second year university language programs.

1.4 Research Focus and Questions to be Addressed.

The above sections have contextualized the acquisition of complex morphosyntactic structures with respect to a number of developmental and pedagogical issues. The development of grammatical and discourse competence is especially important for the successful acquisition of complex processes such as those involved in mood selection in Spanish.

The study of mood selection development involves the investigation of the development of a myriad of syntactic structures. It seems reasonable therefore to narrow the focus of this dissertation's inquiry, to that of sentences that involve mood choice in NP clauses.[6]

A NP clause is one that has the same syntactic distribution as a lexical NP.

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[6] The subjunctive form also appears in imperatives, e.g., **¡No *hagas* eso!**, adjectival clauses, e.g., **Busco una casa que *sea* pequeña**, and adverbial clauses, e.g., **Volveré cuando me *sienta* mejor**.

(1.1a) [$_{S'}$ **Quiero** [$_{NP}$ **una manzana**]]]

(1.1b) [$_{S'}$ **Quiero** [$_{S'}$ **que** [$_{S}$ **me hagas un favor**]]]]

(1.2a) [$_{S'}$ **me gusta** [$_{NP}$ **la paella**]]

(1.2b) [$_{S'}$ **me gusta** [$_{NP}$ **que estés aquí**]]

The dependent clause verb **querer** has an NP complement in both (1.1a) and (1.1b). The complement in (1.1) is lexical, whereas in (1.2) it is a clause. The verb in (1.2a) has a lexical subjects but in (1.2b) it has a clausal subject. For expository ease, bipropositional sentences with one matrix clause verb and one NP clause will be referred to as **NPSs**.

(1.3) NPS: [$_{S'}$ NP VP [$_{S'}$ **que** [$_{S}$ NP VP]]]]

or

[$_{S'}$ [$_{NP/S'}$ **que** NP VP] VP]

The following questions are addressed in this dissertation. The first two questions involve empirical investigation. The third question, however, requires possible explanations for the data collected to answer Questions 1 and 2 .

1. **After four semesters of university Spanish instruction, to what extent is the learner able to make mood selection appropriately in NP clauses?**

It is hypothesized that, when tested, learners will poorly select for mood in NP clauses. Rather than simply attempting to ascertain whether learners can select for mood after two years of instruction, which has been the goal of most inquiries on this subject (e.g., Terrell, Baycroft, and Perrone, 1987; García, 1981), this study also seeks to provide an understanding of what such learners both can and cannot do. A review of previous IL studies of mood development, discussed in Chapter 2, shows that learners do not begin to make mood selection with native-like accuracy until very late in development, due in part to poor morphological development but most importantly due to the long and arduous process of syntactic development. Thus, this study attempts to describe the extent to which IL morphological and syntactic components have been developed after two years of instruction.

2. **How does the accuracy with which fourth semester students select for mood in NP clauses vary according to the degree to which their utterances are planned?**

Since there appears to be a correlation between planning and morphosyntactic complexity, it is expected that learners will not produce the syntactic structures (i.e., NPSs) that necessitate mood selection in unplanned discourse. Even after they produce the relevant syntactic structures, mood

accuracy in subordinate clauses is expected to be low. Learners will probably only produce the relevant syntactic structures and make appropriate inflectional distinctions in planned speech.

3. **What developmental and cognitive explanations can be offered for the manner in which fourth semester students produce complex utterances and select mood?**

It is hypothesized that the data will reveal that the fourth semester Spanish student's IL is still operating in the presyntactic stage. It is also hypothesized that even if learners produce the appropriate syntactic environment for them to select mood, factors such as working memory limitations and a lack of proceduralization impede learners from attending to all relevant semantic and syntactic considerations in mood selection in NP clauses.

1.5 Overview of Subsequent Chapters.

This dissertation contains five chapters. Chapter Two reviews the literature relevant to the study of mood selection in Spanish and its development by non-native speakers. Since mood selection involves a number of semantic and syntactic considerations, the second chapter will examine the nature of modality and how it manifests itself in natural languages. Additionally, the second chapter

will examine issues relevant to the acquisition of mood selection skills. Literature that deals with notions relevant to overall cognitive development is outlined. Research on the development of Spanish as a L1, L2, and a FL is also included. Chapter Three explains how the data were collected. It also describes the subjects who participated in the study. Chapter Four presents and analyzes the data collected for the study. Chapter Five answers the research questions posed in this chapter. A proposal will follow on: (1) how much curriculum designers should allow for the study of morphosyntactic constructs relevant to mood selection during the typical four-semester university FL sequence; and (2) how to order the presentation of morphosyntactic constructs relevant to mood selection during this period (e.g., subordination, the subjunctive mood). This chapter also summarizes the limitations of the dissertation. A short discussion of some possible contributions to the theoretical models used herein and some suggestions for future research conclude the dissertation.

Chapter 2: Literature Review

2.0 Issues Relating to the Development of Mood Choice.

Mood selection in Spanish requires the ability to produce complex utterances (Terrell, Baycroft, and Perrone, 1987). Consequently, there are numerous issues that must be considered in studying and then accounting for this aspect of FL development at any stage.

The foremost consideration for the researcher is methodological. L2 learner production often varies between pidgin and native-like behavior, depending on how much attention is given to the form of a message (Tarone, 1988). Given such disparity in IL behavior, proposals on the most reliable means by which to measure the IL's developmental status are reviewed here. To account for development and performance, research on the type of knowledge structures and cognitive processing abilities necessary for the production of complex utterances is surveyed. The syntactic and morphological capabilities that learners need to master to make mood selection are described followed by an examination of the literature on the cognitive mechanisms required for the production of complex utterances. Finally, literature on L1 and L2 learners of Spanish is reviewed to understand the steps that are taken particular to the mastery of mood selection.

2.1 How the Researcher Should Assess Interlanguage Development.

In the study of IL development, researchers must be very careful of how they gather their data. Tarone (1988) believes that conclusions on IL development based on data collection tasks such as acceptability judgments and "fill-in-the-blank" exercises must be received with great caution. Essentially, she argues that such tasks not only tap the IL but also other knowledge sources, such as the learner's L1 competence. She believes that to study the IL, participants must be focused on producing meaning rather than on the structural, or formal, properties of an utterance. To appreciate her position, it is important to understand the nature of the IL as a source of knowledge and its relation to other knowledge sources.

Speakers possess an independent language faculty. Support for this claim comes from research reporting that, as learners become more fluent in a language, production becomes localized to the left hemisphere of the brain (Hakuta, 1986). Consequently, when knowledge of the L2 is incomplete, production is highly susceptible to *permeation*: the formulation of utterances based on knowledge sources other than the IL, such as the L1 or an L3 (Rivers, 1990:57). For example, an utterance in which a learner has made a verb agree with its subject may have resulted from consideration of mathematical principles (i.e., of number compatibility) rather than from the interpretation of information in an underlying inflectional node by the morphological component. Since novice L2 learners use both their incipient IL and other knowledge sources to produce utterances, linguistic or nonlinguistic, it is difficult to gather data that reflects the status of the IL at any point of development. Thus, how does one limit the permeation of non-IL knowledge sources during production?

Tarone (1983) has argued that, when learner utterances are communicatively rather than linguistically motivated (i.e., they believe their task is to communicate a message rather than to manipulate a morphological or syntactic structure, as in a grammar exercise), the independent language faculty is almost exclusively drawn on during production. When attention is diverted from form, *vernacular* speech is yielded: the style employed in conversational speech. The vernacular is more systematic and reflective of universal principles of language development. For example, Tarone (1983) notes that vernacular data reflect the influence of markedness principles on phonological development whereas careful speech often shows transfer of L1 rules. Furthermore, whereas IL forms and constructions are relatively invariant in vernacular speech, whether or not they are correctly produced, there is much less systematicity in careful speech production as performance ranges from highly erroneous to highly accurate, containing both pidgin and native-like utterances.

Flynn (1986) also argues that conversational speech is best for obtaining data largely stemming from the IL. For example, she presents oral speech samples that appear to be motivated by universal principles of co-indexation whereas her data from acceptability judgments do not appear to reflect such principles.

Ellis' (1985) **Variable Competence Model** of L2 production is another consideration for obtaining data that reflects the IL almost exclusively. He hypothesizes that there are two types of IL production processes: primary and secondary. Primary processes are the easiest and therefore the first to be employed in IL production. Secondary processes are more difficult for the learner to use. When learners have little time to plan utterances, primary processes are almost

exclusively employed. If there is time to plan utterances, secondary processes may also be utilized. The implication in the terminology alone is that limiting the amount of time learners have to plan utterances, as is the case in oral speech (Givón, 1979), is best for looking at the IL's composition. Ellis also asserts that IL speech is more systematic than other styles since "it is not subject to the variable influences of other knowledge sources" (1985:86).

In summary, data derived from speech production motivated by the need to communicate ideas rather than to manipulate TL structures appear to be the best source with which to assess the IL's status at any stage of development. It is also presumed that unplanned utterances are more likely to reflect the IL's true status than planned utterances.

2.2 Spanish Mood Choice: Morphosyntactic and Semantic Considerations.

There are numerous morphological and syntactic considerations in the selection of mood in Spanish. All finite verbs simultaneously inflect for tense (past, present, or future), mood (indicative or subjunctive), person (first, second, or third), and number (singular or plural). Additionally, one must choose between the indicative and the subjunctive in the production of embedded clauses more than in matrix clauses. The following will exemplify when and how a speaker chooses mood in NP clauses.

As mentioned in 1.4 above, the indicative may appear in any type of clause, matrix or embedded. With two exceptions, the subjunctive is limited to embedded clauses.[1] Mood is selected in nominal, adjectival, and adverbial clauses, as exemplified in (2.1a) to (2.3c).

Noun Phrases:

(2.1a) **Sé *una cosa.***

(2.1b) **Sé *que tienes tiempo.***

(2.1c) **Quiero *una manzana.***

(2.1d) **Quiero *que me des una manzana.***

Adjective Phrases:

(2.2a) **Necesito mi lápiz *favorito.***

(2.2b) **Necesito mi lápiz *que tiene tinta roja*.**

(2.2c) **Necesito un carro *nuevo.***

(2.2d) **Necesito un carro *que funcione.***

Adverbial Phrases:

(2.3a) **Trabajo *pronto*.**

(2.3b) **Trabajo *cuando llegue el jefe*.**

(2.3c) **Trabajo *cuando necesito dinero*.**

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[1] Takagaki (1984) believes that at some level of representation -- most likely Logical Form (Chomsky, 1981) -- imperatives are subordinate structures. He regards structures such as **¡Venga usted!** and **¡Que venga usted!** "as a variant of complex sentences with the main clause omitted either completely or partially" (251). The subjunctive seems to appear in matrix clauses necessarily preceded by an adverb of doubt or denial (e.g., **Tal vez venga**). Nevertheless, the adverb must be preposed to the VP (e.g., ***Venga tal vez**) which reinforces the hypothesis that subjunctive forms must somehow have a "subordinate" status. Takagaki also points out that the subjunctive is impossible without the co-occurrence of the adverb. The adverb in this second so-called exception serves as "a kind of 'semi-matrix'" (251).

Additional proof comes from Latin: there were two negators in Latin, **non** and **ne**; interestingly, the distribution of **ne** was limited to embedded clauses and imperatives. Harris (1974) argues that the subjunctive served as a redundant marker of subordination in Latin, hence the term ***sub-junctive***.

Typologically, when a clause has the same distribution as a noun, it is considered a nominal (NP) clause. In functional terms, when a NP clause is an argument of a proposition's predicate, the clause assumes the role of either a subject or a complement, as in the following two examples:

NP Subjects:

(2.4a) ***Su trabajo*** **no le gusta a su novia**.

(2.4b) ***El que Juan trabaje*** **no le gusta a su novia**.[2]

NP Complements:

(2.5a) **Siempre quieren *algo*.**

(2.5b) **Siempre quieren *que hagas algo difícil*.**

Solé and Solé (1977) report that there are three circumstances in which the subjunctive must be provided in NP clauses. If these conditions are not satisfied, an indicative form must mark the clause.

The first condition is termed *Volition or Desire*. When an independent clause, or the "governing notion" (Solé and Solé, 1977:168), either implies or suggests a command, the embedded clause with the requested action or state must have a subjunctive form, as in (2.6-7).

(2.6) **Te prohibió que *fueras* allí**.

(2.7) **Quiero que lo *hagan* ahora**.

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[2] The preferred syntax for these propositions is **A su novia no le gusta su trabajo** and **A la novia de Juan no le gusta que (él) trabaje**, respectively.

For Solé and Solé, wishes also fall into this category:

(2.8) **Espero que todo *esté* bien**.

The second context requiring the subjunctive involves *Doubt, Denial or Conjecture*. A NP clause must have a subjunctive form if it is qualified by one of these notions via the matrix clause.

Doubt:
(2.9) **Dudo que *puedan* terminar a tiempo**.

Denial:
(2.10) **Niego que *haya* sido Juan el criminal**.

Conjecture:
(2.11) **Temo que no me *entiendan***.

For Solé and Solé, the embedded propositions in (2.9-11) would be either hypothetical or denied.

Finally, if a matrix clause of a biclausal sentence indicates *Emotion or Personal Inclination*, its embedded clause must be subjunctive.

(2.12) **Siento que no *puedas* venir con nosotros.**
(2.13) **Es lástima que te *sientas* tan mal.**

As mentioned above, the indicative is not excluded from appearing in embedded clauses. Instead, the two inflections are in complementary distribution. For example, negated matrix clauses denoting either doubt or denial necessitate the indicative.

(2.14) ***No dudo*** **que él** ***puede*** **completar ese trabajo.**
(2.15) ***No niego*** **que ese proyecto** ***puede*** **realizarse.**

Solé and Solé make no attempt to argue for a single underlying idea that is invariantly associated with the subjunctive. Rather, two assumptions are held in their account of the subjunctive in NP clauses: (1) various surface structure phenomena govern the employment of the subjunctive, which usually take the form of lexical information found in a matrix clause; and (2) the use of the subjunctive is largely limited to embedded clauses. Therefore, for Solé and Solé, it appears that the use of the subjunctive is more grammaticalized than determined by semantic notions that are independent of surface structure features.

Nevertheless, a review of the history of theoretical treatments of mood selection in NP clauses reveals that most have advocated a unitary account: the presence or absence of a single semantic feature can account for the appearance of either mood (Takagaki, 1984). Researchers such as Klein (1974), Terrell and Hooper (1974), and Lunn (1989) have attempted to show that at a very abstract level of representation, these mood paradigms are semantically dichotomous. Close examination of these studies reveals a pattern: the indicative is attributed a single semantic feature, while the subjunctive lacks that feature. That is, the

subjunctive is defined not in terms of what it represents, but rather in terms of what it DOES NOT represent.

Klein (1974) proposes that the indicative denotes assertion while the subjunctive conveys non assertion. However, Bell (1980) believes that the notion of non assertion is insufficient, since in such a model the subjunctive would not denote a feature, but rather the absence of a feature. Deguchi (1980) also rejects Klein's hypothesis since it implies that the indicative is the marked of the two paradigms; i.e., [+assertive]. Deguchi notes that unmarked structures are much more functional than their marked counterparts, which would clearly not be the case with the indicative and the subjunctive: the subjunctive is much more restricted syntactically than the indicative and therefore should be recognized as the marked of the two.

Terrell and Hooper (1974) also conclude that the indicative is associated with assertion. The finite verbs of non-asserted and presupposed propositions, if found in embedded clauses, carry the subjunctive inflection. Terrell (1976) further argues that matrix clauses always receive the indicative marking since they are always asserted, except in the case of imperatives. Terrell and Hooper (1974) insist that, instead of being forced to use the subjunctive because of formal surface structure characteristics, such as matrix clause triggers (e.g. **querer que**, **dudar que**), a speaker "chooses" the inflection independently (492).

There are limitations on making this choice, however. For example, the subjunctive cannot appear in matrix clauses with the intent of denoting doubt (e.g., **Juan cante** does not imply **Es dudoso que Juan cante**). Furthermore, both

Deguchi (1980) and Palmer (1986) can find no justification for claiming that the verb in sentences such as **No lo creo** is asserted.

Lunn (1989) attempts to show how prototype theory can help to explain mood selection in Spanish.[3] Assuming that Klein (1974) and Terrell and Hooper (1974) are correct in their analyses, Lunn attempts to define the prototypical meaning of the feature [±assertion]. Unfortunately, the assumptions that she makes about the relationships of the indicative and the subjunctive to the notion of assertion are as problematic as previous proposals. The indicative is argued to be associated with the prototypical idea of assertion whereas the subjunctive indicates that a proposition is not presented in a prototypical fashion. If a proposition is presented under the auspices of *doubt*, *denial*, *volition*, *evaluation*, etc., it fails to be a prototypical proposition.

What must be emphasized is that in none of these well known accounts of Spanish mood selection is a single definable semantic notion associated with the subjunctive. Since the indicative and the subjunctive are, however, assumed to represent dichotomous notions, researchers have been satisfied with positing that the subjunctive's appearance denotes an absence of assertion. Nevertheless, no single definition has been proposed for non assertion. Researchers only suggest that features such as *doubt*, *volition*, and *emotion* are not assertive. Foster (1982) is not satisfied with unitary accounts of the subjunctive. Although he realizes that

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[3] In prototype theory, one speaks of semantic *extensions*, the total number of members that belong to a set, or semantic field. The most *typical* of these members is the prototype. For example, for some a sparrow might be the prototypical bird of the extent of birds. The reader is referred to Clark and Clark (1977) and Geeraerts (1989) for examinations of the theory's basic tenets.

the subjunctive inflection does have informative value, he does not believe that it has the same value in all realizations.

> By me] no claim is made that the surface forms called the subjunctive do not represent meaning: But there is, it is alleged, neither a one-to-one correspondence between any feature or complex of features on the semantic level that can be called subjunctive, nor is there any reasonable or comprehensible statement that we can make about the sort of underlying semantic structures represented by surface structure forms. In short, abstract feature/category A may or may not be represented by a surface subjunctive, while a surface subjunctive will represent a large number of abstract features and categories, only some of which will have a common semantic denominator (such as [Jussive] or [Optative] for some structures). But the notion of 'Subjunctive because of Negation, Indefiniteness, etc.' is too tenuous and not sufficiently specifiable to provide an adequate prediction of when a subjunctive form will or will not appear on the surface structure. (133)

Thus, the scenario appears to be the following: the indicative is the unmarked, default mood that is not restricted from any syntactic environment; the subjunctive is the marked mood, largely restricted to embedded clauses. In terms of meaning, the subjunctive appears only when particular modalities are present,

defined by either the circumstances surrounding a speech situation or lexical information found in a sentence's matrix clause. For example, the subjunctive inflection does not solely indicate that utterances such as **¡No comas eso!** is an imperative, rather the speaker's kinesics, intonation, and the speech situation itself reinforce such an interpretation; if the inflection were necessary the affirmative command **¡Come eso!** would always be interpreted as a declarative, such as **She eats that**. When the subjunctive appears in embedded clauses, it is not the only relater of modality; lexical information in the matrix clause conveys the modality qualifying a proposition. For example, in (2.16), the modality of doubt is manifested in the matrix clause.

(2.16) ***Dudo*** **que Juan** ***cante*** **bien.**

Similarly, in (2.17) and (2.18), subjunctive inflections do not carry the burden of relating the modalities of *volition* and *evaluation*, respectively. Instead, the matrix clause relates those modalities.

(2.17) ***Quiero*** **que me** ***hagas*** **un favor.**
(2.18) ***Es triste*** **que no** ***puedas*** **venir.**

Thus, similar to the gender inflection in an adjective that agrees with its antecedent, *mood* in NP clauses is largely a redundant marker of the *modality* presented either in the speech situation or in the matrix clause of a sentence.

Consequently, the position taken here is similar to that of Foster (1982). This approach has important ramifications for determining how successful FL learners will be in acquiring the subjunctive. Acquisition will not be measured according to the strength of the association between subjunctive forms and a single, abstract notion of modality (e.g., assertion, presupposition), but instead it will be assumed that learners need to associate the subjunctive with a variety of modality notions, such as *volition*, *doubt*, *denial*, and *emotion*. Therefore, it is imperative to refer to a framework of modality to study IL mood selection.

To date, the most comprehensive treatment of modality in linguistic literature, both theoretically and typologically, is that of Palmer (1986). He outlines the semantic scope of modality as well as its morphosyntactic manifestations in different languages of the world.

Important to Palmer's framework is his differentiation of mood from modality. *Modality* is a qualification of an utterance that might otherwise be a declarative. Three types of modality can circumscribe a proposition: (1) judgments or proof of its veracity; (2) indications of a desire to affect its realization; or (3) indications of its ramifications. Modality is manifested by lexical agents or constructs such as **obviamente**, **creo que**, and **desafortunadamente**. *Mood*, however, is the grammaticalization of modality (Palmer, 1986:28-9), which usually takes the form of a modal, as in English (e.g., **can**, **should**, **may**, etc.), or an inflectional paradigm, as in the Spanish subjunctive. An analogy can be found in the reflection of gender in Spanish: whereas **mujer** is feminine, the adjectival inflection {-**a**} in the phrase **una mujer bonita** is a grammaticalized manifestation of (feminine) gender.

The following examples illustrate these three types of modality and how they take various lexical forms. Each of the (a) sentences from (2.19) to (2.20) is a simple, unqualified declarative. The basic underlying proposition in each of the (b) sentences, however, is qualified by some modality. The deductive adverb **aparentemente** in (2.19b) shows that the speaker has evidence of the proposition in (2.19a).

(2.19a) **No entiende**.
(2.19b) ***Aparentemente* no entiende**.

The conditional clause **si me permites** in (2.20b) shows that the realization of (2.20a) must be affected in part by the addressee.

(2.20a) **Iré contigo**.
(2.20b) ***Si me permites*, iré contigo**.

The adjective **sorprendente** in (2.21b) shows that the complement of (2.21a) was evaluated by the speaker of (2.21b) as being surprising.

(2.21a) **Dijo una cosa**.
(2.21b) **Dijo una cosa *sorprendente*.**

In each of the above cases the modality is indicated in lexical rather than grammatical terms.

Modality is manifested inflectionally in the subjunctive *mood* in (2.22).

(2.22) **El profesor me dijo que sup*iera* todo el vocabulario**.

The inflection {**-iera**} indicates that the professor wanted the vocabulary to be memorized. This is one of the few instances in which the burden of denoting a proposition's modality falls on the verbal inflection of the embedded clause alone.

Table 2.1 exemplifies Palmer's various categories of modality.

Table 2.1. Typology of Modal Categories (Palmer, 1986).

Modality	Example
Epistemic Categories	
Evidentials	
Evidence: Visual	*Veo que tiene muchas cosas*
Evidence: Sensory	*Oigo que están jugando afuera*
Report: Declarative	*Dicen que vienes hoy*
Report: Directive	*Le dicen que no se ponga triste*
Judgments	
Inference	*Es evidente que juega bien*
Confidence: Knowledge	*Saben que trabajas aquí*
Confidence: Belief	*Creen que es muy bonita*
Confidence: Uncertain Belief/Doubt	*Dudan que trabajes mucho*
Deontic Categories	
Volitives	*Quiero que lo estudies*
Evaluatives	
Commentary	*Es bueno que ya no vayas*
Reaction	*Me sorprende que sea tan fuerte*

Palmer (1986) proposes two classes of modality: (1) epistemic modality, which indicates one's commitment to the truth value of a proposition; and (2) deontic modality, which indicates either (a) one's will to affect the realization of a particular action or state, or (b) one's reaction to an action or a state.

There are subclasses of epistemicity. The primary distinction is between *evidentials* and *judgments.* Evidential modality expresses that knowledge of a proposition has come by way of proof; either by sight, sensation, or a report. Judgments indicate the faith one has in the truth value of a proposition despite any evidence. Judgments exhibit certainty, probability, possibility, or speculation.

Deonticity indicates a person's relationship to an event or state before or after its realization. In *volitives*, one desires that an action or state be realized. In *evaluatives*, one has analyzed or been affected, either physically or emotionally, by the realization of an action or state.

Palmer summarizes his conception of the difference between epistemicity and deonticity in the following:

> [The] distinction between epistemic and deontic modality is essentially part of the wider distinction between the use of language to inform and the use of language to act, between language as a 'mode of action' and language as a 'countersign of thought'. (20)

Since it was argued above that mood in Spanish NP clauses is regulated by matrix clause lexical elements, it is important to enumerate which matrix clause modalities govern the indicative and which govern the subjunctive in NP clauses.

The indicative appears in an NP clause in all but two instances in which a matrix clause is characterized by epistemic modality. When a matrix clause subject is not completely committed to the truth value of a proposition, the embedded clause needs a subjunctive form. If a matrix clause indicates a report, either the indicative or the subjunctive is needed; the embedded clause morphology reflects the mood of the original utterance. For example:

(2.23a) **¡Díganme la verdad!**
(2.23b) **Les dice que le digan la verdad.**

(2.24a) **No necesitas nada.**
(2.24b) **Dice que no necesitas nada.**

Each of the (a) sentences in (2.23) and (2.24) contains a single clause. In each of the (b) sentences in (2.23) and (2.24), the (a) sentence is being reported. When a simple proposition contains subjunctive morphology, it is maintained in the report, as in (2.23b). Likewise, if the original morphology is indicative, the reported embedded clause reflects that mood as well, as in (2.24b).

There is little to discuss about deonticity in terms of mood association. Whenever a matrix clause denotes deontic modality, the embedded NP clause proposition must be marked for the subjunctive.

In summary, it has been argued in this section that there are a number of modalities associated with the indicative and the subjunctive. When a matrix clause is characterized by epistemic modality, the embedded proposition that it qualifies must carry an indicative inflection in most cases. When a matrix clause is characterized by deontic modality or by a few epistemic modalities the embedded proposition that it qualifies must be marked for the subjunctive. Nevertheless, an understanding of the linguistic variables that determine mood selection is perhaps not sufficient to understand learner development or performance. To this end, the following section describes developmental and cognitive models that are useful for studying IL mood selection capabilities.

2.3 Developmental and Production Considerations for the Study of L2 Development and Production.

This sections details the developmental and production variables that affect performance as it concerns complex utterances. This developmental model that is used has already been outlined above in section 1.2, namely, Givón's (1979) model for the study of morphosyntactic development. The bulk of this section outline's the production variables that determine learner performance, which are felt to be best understood through models of cognition.

As mentioned above, Givón (1979) posits that there are two major stages of language development and that the likelihood that complex and morphologically accurate utterances will be produced depends on one's stage of development (cf.

Table 1.1 in Section 1.2). In the study of mood selection, it is important to keep in mind that learners still in the "presyntactic stage" will favor the production of loosely conjoined over complex utterances. They also will not attend to morphological accuracy during production. If complex utterances cannot be produced, the learner will not have to select mood. Conversely, if a complex utterance happens to be produced, the chances are minimal that mood will properly be selected, especially if the subjunctive is required. Once a learner operates comfortably in the syntactic stage, both complex utterances are produced and mood is selected with native-like accuracy.

L2 acquisition researchers increasingly rely on cognitive theories especially to explain L2 development and performance.[4] Consideration of the cognitive processes relevant to mood selection in NP clauses requires familiarity with various lines of research. The first point to be addressed is the role of working memory in IL production. Subsequently, the role of knowledge structures and their use by the learner in the face of both memory and time constraints is outlined. These points are discussed first with respect to general cognitive notions of learning and then with respect to a cognitive theory of learning that is specific to language.

All cognitive activity, regardless of its nature (e.g., linguistic, mathematical, logical), is constrained by the limited capacity of working memory and attention (Anderson, 1985). Cook (1977, 1991) proposes that L2 learners must overcome a *cognitive deficit*, in that less working memory is available for

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[4] Cognitive models can also be useful in accounting for development and so will be refered to in the context of development and production.

processing L2 sentences than L1 sentences. The speed with which working memory can use a knowledge source, regardless of any deficit under which it may work, depends on "activation level" (Anderson, 1985).

Activation level refers to the readiness of a knowledge structure to be retrieved for use prior to its utilization during cognition. If a knowledge structure remains at a low activation level, much more working memory must be allocated for retrieving it; less memory is required for using knowledge structures at a high level of activation. For Anderson (1985), a positive correlation exists between the frequency of a structure's use (i.e., how often it is retrieved) and level of activation. Thus, one of the reasons that the L1 is used with such spontaneity is that its knowledge structures are constantly being retrieved and so remain at a high level of activation. Thus, to be unhindered by working memory, the cognitive deficit must be overcome and the L2 knowledge source must be at a high level of activation.

Anderson (1983, 1985) also provides a cognitive model for studying the development of knowledge structures, representations of information stored in long-term memory. He argues that there are two types of knowledge: *declarative* and *procedural.* Declarative knowledge is composed of propositions, or facts. It is often referred to as knowledge ABOUT things in the world. For instance, knowing that a basic clause consists of [NP VP] is an example of declarative (linguistic) knowledge. Knowing that the inflections associated with the subjunctive and that the indicative and the subjunctive are [+tense] inflections would also be examples of declarative knowledge. In the initial stages of acquisition, declarative knowledge is relied on (O'Malley and Chamot, 1990). One

cannot rely on declarative knowledge alone to produce L2 utterances, however. One must know *how* to use and combine these language facts to produce an utterance.

According to Anderson (1983, 1985), when a set of declarative structures is frequently called on in the same sequential order to complete a task, the individual declarative structures fuse to become a *production system*, sometimes referred to as a *procedure.* There are two types of procedures. Some do not vary; they accomplish the same task and weigh the same variables every time. Such production systems would take the form of ONCE X has been completed THEN complete Y, in which case X and Y are constants. For example, in learning to change the gears of a car, there is (relatively) no variation in the process of shifting from first to third gear. Other procedures, however, must be customizable to fit varying circumstances. These consist of IF-THEN conditions that consider variables rather than constants. Such procedures would actually consist of conditions under which various declarative knowledge structures, or classes of knowledge structures, would be used to complete a type of goal. For example, those who are highly skilled math problem solvers probably make use of a finite set of highly generalizable procedures, i.e., algorithms applicable to any set of variables.

A number of examples of procedural knowledge can be proposed relating to the selection of mood in Spanish: if a clause is to be subordinated to another, the complementiser **que** must be encoded in the derivation before the clause itself; if an infinitive's theme-vowel is /**a**/, its present subjunctive inflection must carry the vowel /**e**/; and, if a verb's first person singular present tense conjugation is

irregular (e.g., **haga** < **hago** < **hacer**), subjunctive forms must use irregular form as their stem.

In other words, whereas declarative knowledge involves knowing things, procedural knowledge involves knowing how to use declarative knowledge or how to achieve goals, ranging from knowing how to walk (i.e., putting one foot in front of the other) to choosing a direct object pronoun (i.e., if the antecedent is feminine use **la**, otherwise use **lo**). The selection of mood involves understanding the interaction of lexical, syntactic, and morphological propositions. For example, if the current clause being encoded is dependent, and the matrix clause denotes the modality of doubt, then the embedded clause must have a subjunctive form.

Anderson believes that, the more a particular set of declarative knowledge structures is used, the more it becomes proceduralized, allowing for greater processing ease in tasks that involve many declarative knowledge structures. Presumably, production systems are less burdensome for working memory since attention is not so much directed at its individual declarative structures as it is directed at the production system as a whole. There is, however, a trade-off: it is less likely that one can consciously attend to, and therefore report on, the individual declarative structures that compose a highly proceduralized production system (Anderson, 1985).

To understand both IL development and performance, it is important to be aware of the types of declarative and procedural knowledge that the learner will need. Figures 2.1 and 2.2 illustrate some of the declarative and procedural knowledge structures necessary for making mood selection in NP clauses.

Figure 2.1 Declarative Knowledge Necessary for Mood Selection.

Figure 2.2 Procedural Knowledge Necessary for Mood Selection.

Overall, the production of syntax largely requires procedural knowledge. The production of relevant morphologically appropriate utterances draws on a balance between declarative and procedural knowledge. Only about five declarative propositions are required to produce syntactically appropriate utterances. Three are most important: knowing (1) that a clause is composed of [NP VP]; (2) that a VP can take a NP complement; and (3) that a NP can take the form of a S. Nevertheless, when a choice must be made between encoding one of two constituent types, as with **COMP → {Ø,que}** and **NP → {Det N,S'}**, a production system must determine what knowledge structures were previously utilized. Similarly, there are lexico-subcategorical conditions that must be evaluated in order to determine whether a verb will take a complement NP or not. For example, **querer** needs a complement whereas **existir** does not.

Much knowledge is necessary for inflecting verbs, particularly declarative knowledge. A learner must know the infinitival as well as the irregular first-person-singular present indicative stems of verbs. For example, the verb **hacer** uses {**as-**} for a number of conjugations, e.g., **hace**, but it also employs {**ag-**} for the first person singular in the present and for all present subjunctive forms, e.g., **haga**,
{**is-**} for the preterite, e.g., **hice**, and {**ar-**} for the future, e.g., **hará**.[5] The conjugation of each verb depends on its verb class and therefore the particular thematic vowel associated with that class. Producing a finite verb form also requires knowing person/number morphemes. Additionally, a learner must know

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[5] *Brace notation*, or *curly brackets*, indicates that a string is a morpheme. The dash '-' conjoined to the string indicates that the morpheme is bound: the morpheme cannot stand as a word but rather it must be an affix.

various tense/mood/aspect morphemes for utterances requiring inflections other than the present indicative or subjunctive (Terrell and Salgués, 1979).

A number of procedures are also required for properly choosing embedded clause verbal inflections. To employ the embedded-clause-morphology procedures, a procedure must have first checked whether the utterance meets relevant syntactic parameters (i.e., the relevant clause must be dependent). Furthermore, in choosing the embedded clause's verbal inflection, the speaker must analyze the matrix clause's modality. After this point, either indicative or subjunctive subroutines will be invoked. An appropriate stem must be chosen; for example, if the conjugation is second person singular of the indicative, the {**as-**} stem must be employed and
{**ag-**} if it undergoes subjunctive procedures. The thematic vowel may be substituted, as in the case of first-person-singular conjugations of the present indicative (e.g., **habl** + **a** □ **habla** + **o**), or in the case of a third-person-singular conjugation for a verb of the third class (e.g., **viv** + **i** □ **viv** + **e**). All finite verb forms undergoing subjunctive procedures have their thematic vowel substituted (e.g., **com** + **e** □ **com** + **a**).

Although Anderson provides insight into how the knowledge that motivates behavior is represented, his ideas cannot account for all L2 acquisition data. Bialystok and Ryan (1985) provide a framework that is particularly useful for studying what learners do with their declarative and procedural knowledge structures during production. According to Bialystok and Ryan, all knowledge structures must be "controlled". Control involves a three step process: (1) directing attention to the particular knowledge structure to be used, be it

declarative or procedural; (2) retrieving and placing it in working memory; and (3)coordinating its contribution into the production of the utterance.[6]

Bialystok and Mitterer (1987) speak of *effective control*.[7] The more effectively a knowledge structure is controlled, the greater both accuracy and automaticity will be. Effective control involves attending to only relevant knowledge structures and properly coordinating the contribution of each to the derivation of an utterance. Ineffective control might involve the use of so much working memory to retrieve a knowledge structure, due to its low level of activation, that other knowledge structures relevant to the production of an accurate utterance are disregarded. An example of inefficient attention might be the selection of the wrong thematic vowel for the wrong mood, or disregarding the mood choice procedure completely (and therefore the subsequent stem and thematic vowel selection procedures). Improper coordination may result, for instance, in the application of the mood choice procedures to the matrix clause rather than to the embedded clause.

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[6] This has been adapted from a model of language production proposed by Bialystock and Ryan (1985). *Control* is only one dimension of the model. Another important dimension that can account for production behavior, which has little relevance to this dissertation, is *Analysis*. Bialystock and Ryan believe that while much of one's knowledge of the L2 is *analyzed*, a large portion remains *unanalyzed*. That is, although words are homogenous entities, their individual (bound) morphemes can be recognized and substituted by the learner consciously or unconsciously. Unanalyzed knowledge is what many researchers have termed "chunks" or "formulaic" strings. For example, a vocabulary item that elementary level learners of Spanish use even before they are introduced to the subjunctive is **¡No se preocupe!**. The subjunctive inflection is probably not recognized (i.e., unanalyzed) by the learners although production is flawless.

[7] *Effective control* is a termed used only recently by Bialystok and her colleagues (e.g., Bialystock, 1990). Beforehand, one spoke of low versus high control. If one produces utterances with automaticity while still producing ungrammatical utterances however -- as may be the case with fossilized ILs --control may be high although not effective, assuming that all relevant knowledge structures have been incorporated into long-term memory.

2.4 First and Second Language Mood Choice Development in Spanish.

In this section the literature on the acquisition of the subjunctive in L1, L2, and FL contexts will be reviewed. Little is known about either the route that is taken by learners or about the various developmental stages through which they pass (e.g., the different form-function realizations) before mastering the morphological and syntactic operations necessary for mood selection.

Studies that examine L1 acquisition of Spanish mood selection all report that the process is finalized relatively late. Usually the indicative becomes productive, generalized to all non-past finite verb forms; the subjunctive then begins to systematically manifest itself, being associated only with the modality of *volition* and/or embedded structures whose temporal reference is posterior to the speech situation (i.e., states/events yet to be realized as in **Te llamo cuando *llegue***). Only in later stages does the subjunctive paradigm become associated with all epistemic and deontic modality types. When the subjunctive begins to be productive, the inflection appears only with the most frequently heard lexical items of each modality class (e.g., **dudar que** and **no creer que** within incomplete belief, **querer que** and **pedir que** within volition, **no me gusta que**, and **qué bueno que** within evaluation).

Gili Gaya (1972) examined the acquisition of mood selection in preschool (i.e., three to five years of age) and school-age (i.e., from five to ten years of age) children in Puerto Rico. For all of the possible syntactic environments in which

mood selection is relevant, he found great variation in inflectional accuracy. He notes that the subjunctive use of preschoolers was highly variable, appearing to depend more on the lexical rather than the modality makeup of the matrix clause or on the actual adverbial construction used. For example, children might use the subjunctive after the matrix clause **querer que** and after **para que** but not after **prohibir que** or **tan pronto como**. Only in the speech of school-age children was the subjunctive generalized to all reports of *directives*, *volitives*, and adverbial clauses with future time reference. Gili Gaya believes that those lexemes with which the subjunctive is last associated are less frequent in learner input (e.g., **suplicar que**, **con tal que**). Moreover, he suggests that the subjunctive is not fully acquired until adolescence when society most pressures the child to conform to linguistic norms. Sociolinguistic compliance as an agent of complex structure development has been argued for elsewhere. Rowe (1992), in looking at the L1 acquisition of monolingual speakers of English, relates that complex syntactic structures are not productive until adolescence. He believes that one of the most important factors influencing development at this stage is peer pressure to conform to prescriptive norms.

Blake (1983) looked at the order of acquisition of the various uses of the subjunctive in children. His subjects were native, working-class Spanish speakers ranging from ages four to twelve. He observed mood selection for the various ages within six categories: indirect commands, adverbial clauses, adjectival clauses, dubitative predicates, attitudinal predicts, and assertive predicates. Within Palmer's (1986) framework, the indirect commands correspond to *reports of directives* and *volitives*, dubitative predicates to *uncertain belief/doubt*, attitudinal

predicates to *evaluatives*, and assertive predicates to all non-subjunctive epistemic categories (e.g., relevant evidentials and judgments). Children appropriately use the subjunctive in the context of *reports of directives* and *volitives* by about the age of five. Subsequently, the subjunctive goes on to be associated with *uncertain belief/doubt* and *evaluatives*. While the use of the subjunctive with indirect commands is generalized to most matrices, Blake argues that associating the subjunctive with its other nominal categories (e.g., *uncertain belief*, *evaluatives*, etc.) is done almost on a matrix verb-to-matrix verb basis, as Gili Gaya (1972) reports.

> No doubt the children are unfamiliar with most of the lexical items which form the core inventory for these nominal matrices [i.e., of *uncertain belief/doubt* and *evaluatives*]. The matrices of doubt and comment are infrequently used even in adult speech...The children most probably learn mood choices and the lexical items associated with these nominal clauses in much the same fashion: on a one-by-one basis. (Blake, 1985:167)

Aside from the argument that the subjunctive's use in directives is the most frequent of the NP clause uses, Blake posits that its initial function in the developing L1 grammar is defined temporally rather than modally. It initially appears in L1 speech in nominal, adverbial, and adjectival clauses with future time reference with respect to the speech situation; therefore, its role is to mark for the future events or states in syntactically subordinate propositions, as in (2.25a-c).

(2.25a) **Quiero que me lo des.**
(2.25a) **Ven para que me hagas algo que comer.**
(2.25a) **Se lo digo a Papá cuando llegue.**

There have been a number of studies that have examined the acquisition of mood selection in bilingual preschool and early elementary school bilingual children. Martínez-Bernal (1972) reports that mood selection is poor in early school years since complex syntactic constructions are not, on the whole, productive until the age of ten or so. Similar to Gili Gaya's report, however, González (1971) and Brisk (1972) report that children use the subjunctive with volitives upon entering school. The association of the subjunctive with notions such as *uncertain belief* and *evaluatives* does not come until very late in development (Floyd, 1983). Brisk (1972) even suggests that at early stages of development, the subjunctive may be a redundant marker of subordination such that in any embedded clause, regardless of the matrix clause modality, the subjunctive appears.

According to Floyd (1983), bilingual adolescents residing in the United States tend to associate the subjunctive exclusively with directives, a few matrix clause predicates relating to volition, and a few adverbials that introduce future propositions. She also claims, however, that a number of studies that examine the speech of bilingual adults older than thirty years report mood selection behavior consistent with prescriptive norms. Floyd believes that an important determinant is generational experiences. It is highly likely that older generations spend their

adolescence in a culture such as Mexico in which the stresses of conformity to prescriptive norms have a powerful effect on linguistic behavior. Younger generations probably either abandon widespread Spanish use by adolescence or do not feel the need to conform to prescriptive norms, having spent their whole lives in environments in which Spanish is stigmatized and of little socio-economic worth. As such, it is not surprising that the subjunctive paradigm for these speakers behaves as if it were surface structure dependent rather than fully systematized.

All studies investigating development in both L2 and FL environments have reported that mood selection is acquired late. García (1981) looked at FL learners' abilities to use the subjunctive in recognition and production tasks. She found that FL learners are best able to make mood selection when they have to recognize appropriate contexts for the indicative. Her subjects' ability to produce the subjunctive in obligatory occasions was poor. García predicts that, in spontaneous speech, indicative forms would be generalized to all finite verbs.

Veguez (1984) investigated the abilities of L2 learners of Spanish to make mood selection in an oral proficiency interview after having spent a year in Spain. He showed that rather than mastering mood selection processes, his subjects had developed elaborate strategies for avoiding the production of embedded structures. Overall, given the amount of time spent in the target culture, mood selection accuracy was surprisingly low in the few obligatory occasions that it arose. Veguez suggests that more formal instruction concentrating on complex structures needs to be a part of study abroad curricula.

As mentioned above, Terrell, Baycroft, and Perrone (1987) looked at mood selection abilities in FL learners of Spanish at the end of their first year of university instruction. Their subjects participated in a written and an oral exam. In the written exam, however, the subjunctive was provided in 92.0% of all obligatory contexts. In the oral exam, it was provided in only 12.4% of all obligatory contexts. They conclude that first year students have not arrived at the point in which they can monitor their own output.[8] Additionally, they predict that formal instruction is not sufficient for FL learners to acquire the indicative/subjunctive mood distinction.

Lafford and Collentine (1989) reported that FL learners of Spanish completing two years of university-level instruction show little accuracy in making mood selection. They found 94.6% mood selection accuracy when the indicative is obligatory but only 33.3% when the subjunctive is required. Similar to Veguez (1984), they hypothesize that learners avoid structures that make mood selection obligatory.

Stokes (1988, 1990) investigated the differential effects of study abroad and formal instruction on the development of mood selection skills. His data reveal that residence in the target culture (i.e., Spain) produces significant improvements. Only an insignificant positive effect could be found for formal instruction, however. Similar to Krashen (1982), Stokes concludes that formal instruction is necessary for preparing students to use the FL in the target culture, although it is not sufficient for subjunctive acquisition.

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[8] *Monitoring* is a term coined by Krashen (1982). It refers to a learner's conscious examinations of the form, content, and appropriateness of utterances.

In summary, it appears that native-like mood selection in Spanish is achieved late in any learning context (i.e., L1, L2, or FL) since successful acquisition depends on the mastery of complex syntactic structures and sociolinguistic pressures to conform to prescriptive norms. Given that the subjunctive has been shown to be motivated by syntactic, and therefore surface structure, variables rather than by a single, discernible or even salient feature (cf. section 2.2), it should be of no surprise that social forces are necessary for helping native speakers to tailor their grammar to prescriptive standards. Finally, studies that have specifically looked at mood-selection acquisition among L2 and FL learners indicate that both formal instruction and exposure to the target culture are necessary for Spanish mood acquisition.

2.5 Summary.

The present chapter has presented a number of issues relating to the development of mood selection abilities in a FL. To obtain data that accurately represents the learner's potential to make mood selection requires looking at both oral and written utterances produced as a result of learner attention to the semantic content rather than linguistic form. There are also numerous linguistic variables to be considered in the study of mood selection development. Contrary to the positions of some researchers (e.g., Terrell and Hooper, 1974), it is not the position taken here that the selection of mood in Spanish NP clauses is determined by the presence or absence of a single feature such as [±assertion], but rather that the

indicative is the default paradigm and that the subjunctive appears only under certain conditions of modality, usually defined lexically in the matrix clause. In terms of development, learners must apparently be albe to process syntactic stage operations to attend to the numerous cognitive variables that determine mood selection in NP clauses. Numerous declarative and procedural constructs are necessary. Relevant production systems must in addition be effectively controlled to compensate for memory and time limitations.

The review of the literature on the acquisition of Spanish mood selection may provide some insight into behaviors to be found in early IL speech. The subjunctive paradigm is almost always acquired in a piecemeal fashion, with forms appearing initially with only some of the matrix clause verbs that require it. If acquisition is achieved, it invariantly comes late in linguistic development. The influence of prescriptive norms may also play an important role. Specifically for the FL learner of Spanish, although formal instruction is undoubtedly necessary, it may not be enough for learners to master all relevant processes.

Chapter Three: Methodology

3.0 Introduction: Research Methods.

The first section characterizes the subjects that participated in the studies. The second section defines the assumptions that were used in the design of each of the tasks and their corresponding materials. The last section delineates the form in which the data were scrutinized and the statistical means by which all analyses were made.

The results of three studies will be used to answer the research questions posed in section 1.4 above. The central goal of this dissertation is to determine the extent to which learners of Spanish can appropriately make mood selection after four semesters of university FL study (i.e., the first research question). The data from Study 2, an oral production task, are the primary basis for addressing this question. Oral data is necessary since production must be spontaneous to maximally ensure that only the IL, and not other knowledge sources such as the L1, contributes to the creation of utterances. Study 2 was also important for addressing this question since it controlled the participants' output; in Study 1, a conversational task, there were not enough instances of NP clauses to measure mood selection abilities.

The results of three different studies are used to answer the second question, which inquires into the effects of varying degrees of planning on the successful production of complex utterances and so native-like mood selection.

Production resulting from minimal planning (i.e., highly spontaneous) is reflected in Study 1, oral interviews between the researcher and the participants. Slightly more time for planning utterances was possible in Study 2 since, although the mode of production was oral and therefore utterances were relatively unplanned, they were given a set amount of time (ten seconds) to provide responses that was also felt to be ample for the task at hand. Study 3, a written production task, placed no limits on the amount of time that the participants had to answer questions and so represents the results of greater time for planning.

The third question calls for both a developmental and a production explanation of the data. The data from all three studies will be used to determine if the learners have achieved the syntactic stage or are still operating at the presyntactic stage (Givón, 1979). Since, however, Givón appears to measure development by oral production, the data from Studies 1 and 2 will be most considered in this matter. The production variables affecting performance will be discerned from consideration of the data from all three studies and the models/notions of cognition outlined in section 2.3 above.

3.1 The Sample.

For this dissertation, a total of 78 subjects from two populations participated in three studies. At the time of the data collection, all of the

participants were enrolled in a fourth semester Spanish FL course, whose instructor was the researcher.[1] As such, the databases are cross-sectional.

To clearly understand *how* mood selection abilities are developed by FL learners, a longitudinal study would be most desirable. To appreciate why a cross-sectional study was undertaken, the goal of this dissertation must be kept in mind: The author wanted to evaluate learners' abilities to make mood selection after the traditional four-semester sequence of (university) Spanish study. A longitudinal study is generally only feasible if, through several semesters, a researcher follows a small sample of subjects; e.g., four to five subjects. Since a longitudinal study could not evaluate a sufficiently large cross-section of a fourth semester population, it would be impossible to make generalizations about learners' potential to develop mood selection abilities by the end of the fourth semester. Nevertheless, it is reasonable to ask, then, why random sampling was not employed for the data collection task. The researcher neither had the authority or means to mandate that students from classes other than his own participate in the tasks, nor did he have the financial support to offer students an incentive for their participation in the tasks.

For the first study, the researcher re-analyzed the data obtained for his master's thesis at Arizona State University (Collentine, 1988) specifically to examine the complex utterances produced by the participants and mood selection accuracy. The interviews took place at the end of the Spring semester of 1987. Although a total of 48 students participated in the interviews, only 40 were chosen

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1 To ensure that all students would participate in the task, participation was incorported into the course syllabus, and thus was mandatory.

for the database since eight had learned Spanish in a bilingual household. The course consisted of five contact hours of instruction a week. To fulfill the foreign language requirement for most bachelor's degrees in the College of Liberal Arts at Arizona State University, this course must be completed with a grade of C or better.

All of the students who participated in the second and third studies were completing the final course of their undergraduate FL language requirement at the University of Texas at Austin. The tasks were completed near the end of the Spring semester of 1992. A total of 40 students participated although the contributions of two students were disregarded since both were native or near-native Spanish speakers: one had been raised in Panama from birth to age fourteen while the other had spoken Spanish at home in Texas from birth until enrolling at the University of Texas at Austin. The course is considered to be a fourth semester language course, with three hours of instruction a week (Spanish 312L). To fulfill the foreign language requirement for most bachelor's degrees in the College of Liberal Arts at the University of Texas at Austin, Spanish 312L must be completed with a grade of C or better.

The curricular goals of the course are to produce students who are able to use Spanish in all four of the basic skills: speaking, listening, reading, and writing. Unfortunately, no departmental statement exists at either Arizona State University or the University of Texas at Austin detailing the level of expertise students that must achieve to complete their FL requirement.

3.2 Tasks Used for Data Collection.

This section summarizes the data collection tasks, outlining the assumptions behind the design of the tasks. A description of the testing procedures follows.

3.2.1 Assumptions Held in the Design of the Test Procedures.

It is assumed that many knowledge sources (e.g., the IL, L1, an L3, etc.) can potentially contribute to the production of utterances. For example, the phenomenon known as "L1 transfer" results when the learner uses both the IL and the L1 to produce a sentence. To ensure that only the IL is being drawn on during production, participants should be motivated to communicate ideas rather than to manipulate grammatical structures. Responding to questions/assertions in a conversation, to pictures, or answering questions about a story would most likely focus the learner on the communication of idea. Grammatical drills, "verb completion" exercises (e.g., choosing the appropriate conjugation for the infinitive in **Marta quiere que Alberto _____ (ir) también**), and acceptability judgments tend to focus learners on the linguistic form of their utterances, which increases the chances of alternative knowledge sources contributing to production.

Subjects should also be allowed as little time as possible to plan utterances. Tarone (1983) claims that, with greater time for planning, there is an increased

possibility that a learner will produce an utterance with the help of alternative knowledge sources. Thus, oral production tasks are more likely to isolate production from the IL faculty whereas data produced from written production tasks may be more permeated by other knowledge sources (Rivers, 1990).[2]

3.2.2 Study 1: Oral Interviews.

The interviews resulting from Study 1 reflect the extent to which learners produce complex morphosyntactic structures in simple, two-way conversations. The focus of the interview was on communication since the participants were informed that the intent of the interview was to measure their abilities to discuss a number of topics previously dealt with in the classroom. The content areas on which the topics were based had been studied and practiced during the course, ranging from everyday survival themes (e.g., transportation, money matters, and numbers) to factual/current event issues (e.g., press, media, cultural, and moral issues). Furthermore, given that the task's format was conversational, there was minimal time for the subjects to plan their utterances. Each interview lasted approximately ten minutes.

The indicative/subjunctive dichotomy was the most recurring grammatical point studied in the course. Therefore, a concerted effort was made to elicit

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[2] Moreover, to force the subjects to hypothesize a context from written stimuli displaces the context (i.e., makes it less tangible to the reader), which has been proven to impede spontaneous (i.e., unplanned) production (Blank et al, 1978; Hatch, 1978).

utterances that were both structurally and propositionally complex (e.g., **¿Qué quieres que haga el presidente para la gente sin vivienda?**).

3.2.3 Study 2: Picture Test and Elicited Oral Data.[3]

The sample groups for Study 2 were the University of Texas at Austin participants. This controlled oral task was necessary since the subjects who participated in Study 1 produced so few sentences with the phrase structure that would necessitate mood selection in embedded clauses (i.e., NPSs). Furthermore, the database from Study 1 was not extensive enough to study the selection of mood in all the modality contexts described by Palmer (1986); e.g., *volitives*, *visual evidence*, etc.

Regarding the assumptions described earlier, every effort was made to focus the subjects' attention on communication rather than on the production of particular grammatical structures. Students responded orally to aurally posed questions, in which case there was little time for examinations of linguistic form. Communication was also encouraged since a picture relating to each of the questions asked was included to help the participants to readily define the situation on which they were to comment. Moreover, for the sake of spontaneity, although a number of controls were placed on the syntactic structure and the information to be included in responses, learners were only allowed ten seconds to respond to any question. To eliminate the possibility of perceiving the study's target structure, a number of diversionary questions were posed that did not force participants to produce NPSs.

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[3] See Appendix 1 for a description of the materials used in this study.

The following is a description of the task. The participants were presented with a set of drawings. Figure 3.1 is an example of one of the contexts.

Figure 3.1 Example Drawing from Study 2 Test Materials.

For questions targeting the production of a NPS, two people or objects were labeled to control for the number of clauses to be included in a response. Additionally, a caption was provided to control for the propositional information to be included in a response.

The subjects were instructed to use the following criteria for answering questions: (1) answers had to relate to both the drawing and the caption; and (2) answers had to include any and all labeled persons or objects in the drawing. For

example, an appropriate response to a question based on the context in Figure 3.1 such as **¿Qué están haciendo los dos empleados?** would be **María está aconsejando a Carlos**. Likewise, an appropriate response to a question such as **¿Qué quiere María?** would be: **María quiere que Carlos trabaje más**. In conjunction with the drawing's labels, the former question would be considered diversionary whereas the latter's aim would be to produce an NPS.

From the forty-four different drawings, a total of fifty-three questions were posed. A total of thirty-three of the test questions targeted NPSs while the remaining twenty were diversionary. For each of the matrix clause modality types, there were three test items. Five of these modality contexts require the subjunctive in NP clauses: *reports of directives*, *uncertain belief/doubt*, *volitives*, *commentaries*, and *reactions*. The remaining six require the indicative in NP clauses: *visual evidentials*, *sensory evidentials*, *reports of declaratives*, *inferences*, *knowledge*, and *belief*.

The task was presented to native and advanced speakers of Spanish (N=10) to test its validity for eliciting NPSs. The native/advanced group provided NPSs in every targeted instance, showing the task to be highly reliable.

3.2.4 Study 3: Reading Test and Elicited Written Data.

The sample groups for Study 3 were the two sections of fourth semester students who participated in Study 2. The purpose of Study 3 was to elicit utterances with the same syntactic structures and modality contexts as in Study 2

but in written rather than oral form. It seemed reasonable to assume that, since Study 1 showed that complex utterances are still difficult for learners at this stage of development (as will be shown below), production variables such as working memory may hinder production. If so, it is likely that the utterances produced in the oral tasks underrepresent the learners' linguistic abilities. Moreover, since Givón (1979) claims that complex utterances with subordinate structures are more common in formal/planned discourse, a written production task was necessary

To ensure that the participants were concentrating on communication rather than on the form of their responses, questions were posed about people, objects, events, and interactions in each reading passage. It was impossible, however, to control for the amount of time spent on planning responses, which probably increased the likelihood that attention could be focused on form. The subjects were not informed of the type of structures being targeted, however, and diversionary questions were included in the task.

The task was presented to the students via a computer software program. The participants read various short stories/narratives, all of which were followed by one or two questions pertaining to the story/narrative. The software program, narratives, and questions were written by the researcher. Figure 3.2 provides an example of a story screen and its corresponding question screen.

Figure 3.2 Sample Program Screens of the Written Task.

The vocabulary used in the readings related to general topics (e.g., clothing, time, weather, etc.), everyday survival topics (personal/biographical information, restaurants, health, money matters, etc.), and topics of a factual nature (e.g., current events, leisure, politics, etc.).

To minimize the amount of information that the participants could lifted from the input text for responses, the program only allowed them to review the text once. As soon as an answer had been input (i.e., the **Enter** key was pressed), participants were not able to revise it. As in Study 2, controls were incorporated into the task to limit the content and structural properties of answers. As seen in the question screen of Figure 3.2, specific persons or objects were labeled that the subjects had to include in their answers. The purpose of forcing the subjects to base their answers on the labels, the context, and the questions themselves was to elicit NPSs. For example, an acceptable answer to Question 1 in Figure 2 would necessarily be an NPS whereas a response to Question 2 would not. Diversionary questions were incorporated into the task as well.

A total of forty-four questions were posed based on fourteen readings. Two test items for each of the eleven modality contexts tested mood selection abilities. Had there been three test items per modality context, as in Study 2, the number of questions would increase by eleven, which would have made the exam too long. Additionally, there were twenty-two diversionary questions.

Study 3 was also subjected to task validity verification. A group of ten native and advanced speakers of Spanish completed the task. As in Study 2, the native/advanced group provided NPSs in every targeted instance, suggesting that it, too, was highly reliable.

3.3 A Characterization of the Databases and Analysis.

The interviews for Study 1 were recorded on cassette tapes. Each interview was transcribed and stored as a word processing file. For each of the respondents' turns, the number of individual sentences was determined. Since the aim of the dissertation was to examine mood selection in nominal clauses, each sentence in the corpus was coded for one of four syntactic types: (1) a monopropositional utterance; (2) a bipropositional utterance containing an embedded clause; (3) a bipropositional utterance containing an embedded clause other than a nominal clause; and (4) a bipropositional utterance containing a coordinate structure.

While a vast majority of multipropositional utterances only had two propositions, a small number had three or more. If a sentence had three conjoined propositions, for example, two coordinate structures were counted since the third was conjoined to one of the two preceding propositions. A few sentences had more than one NP clause as well. Since a NP clause is subordinate to a verb that determines the mood of its own verb and since the aim of the study was to study NP clause mood selection, each NP clause was counted as a single complex utterance with a matrix and an embedded nominal clause. Consequently, an analysis of NP clause mood selection accuracy was possible.

Each student's responses to the questions in Study 2 were recorded on cassette tapes at the University of Texas at Austin language laboratory. Subsequently, answers were transcribed and stored as word processing file. Target question responses were coded for three variables: (1) matrix clause modality; (2)

phrase structure; and (3) in the event that the targeted phrase structure was, the mood of the embedded clause verb.[4]

The participants' answers for the Study 3 task were recorded on a computer disk holding the software program. As in Study 2, each of the subjects' answers were stored in individual word processing files. Since the written task elicited the same types of structures as the controlled oral task, the data were analyzed in the same manner as those of Study 2.

Two inferential statistical analyses were used to help interpret the data. Various *t-tests* that measure the differences between means were employed. This test was generally used to determine if the number of tokens provided for two variables whose appearance was not interdependent was significantly different. For example, the number of NPSs provided in the context of *volitives* had no effect on the frequency of their appearance in the context of *evidentials* in any of the study. Nevertheless, a t-test might have been employed to determine if significantly more subordinate clauses were provided for one context than for the other. The formulas used to calculate t-tests are outlined in Statistics in Language Studies (Woods, Fletcher, and Hughes, 1986). Chi-square analyses were used as well. These were generally employed if the researcher wanted to determine if the number of tokens provided for two sentence types whose appearance was interdependent was significantly different. For instance, the number of subordinate and coordinate clauses provided in the context of *evaluatives* was interdependent since one type was often used instead of the other. Chi-squares

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[4] When the participants responded with the targeted phrase structure, none of their answers had subjunctive forms in the matrix clause.

were also helpful in determining if the number of tokens provided for more than two categories (e.g., matrix clause modalities) varied significantly. For instance, the chi-square test would be able to indicate if the number subordinate clauses provided in the context of *volitives* was significantly more than in the context of *evaluatives* and *uncertain belief/doubt.* The IBM personal computer statistical package Pandora (Veldman, 1991) was used for the calculation of chi-squared tests.

Given the number of students who participated in the study and that each of the participants provided numerous responses, it was suggested that the level of significance for this dissertation be set at p=.01.[5] The statistical package Pandora (Veldman, 1991) was also used for the calculation of all probabilities.

[5] After consultation, this level of significance was determined in conjunction with Dr. Orlando Kelm at the University of Texas at Austin.

Chapter 4: Results of Data Collection Tasks

4.0 Introduction.

This chapter presents the data of three studies whose participants were students completing their fourth semester of Spanish FL instruction at an American university. The first study examines IL behavior in a conversational setting. Tentative conclusions are drawn on the extent to which the learner produces morphosyntactically complex utterances in face-to-face, informal/unplanned speech after four semesters of FL instruction. The second study measures the learner's capacity for making mood selection in NP clauses when producing oral, unplanned discourse. The third study characterizes the learner's ability to select mood in NP clauses in a written production task. The assumption is that, regardless of one's level of proficiency in a given language, the production of subordinate structures and attention to morphology is more likely to be successful in planned than in unplanned discourse (Givón, 1979, 1990).

4.1 Study 1: Oral Interviews.

In Study 1, forty interviews were conducted between the researcher and students, each of approximately ten minutes in length. The topics, nominated by the interviewer, were preplanned, although the questions were generally

unplanned. All of the participants' utterances were unplanned. The goal was to tentatively establish whether, after four semesters of instruction, the IL is at the presyntactic stage or has achieved the syntactic stage of development (Givón, 1979). It was also hoped that some idea of the learner's cognitive limitations and abilities during production could be inferred from the data although such a task undoubtedly does not control output enough to draw any substantive conclusions on this aspect of performance.

As discussed in detail in Chapter 1 Section 1.2, learners pass through two stages: a presyntactic stage followed by a syntactic stage. If a learner is still operating in the presyntactic stage, one will most likely find topic-comment structure, loose coordination, a roughly one-to-one ratio of nouns to verbs, and limited conscious use of grammatical morphology. Moreover, in conversations most turns will consist of monopropositional utterances. The syntactic stage is characterized by subject-predicate structures, tight subordination, a larger ratio of nouns over verbs as well as a dependency on inflectional morphology to present the relationships of distinct propositions cohesively.

Two types of behavior in Study 1 that were predicted by Givón (1979) to be good indicators of syntactic development were quantified: the number of embedded versus conjoined clauses, and the ratio of nouns to verbs. Two of Givón's criteria, however, were unquantifiable given the nature of Spanish's verb inflectional system and the type of database. Spanish does not require the use of subject pronouns since verbal inflections reflect their person and number (e.g., **canto**, **bailamos**). To determine whether the subject of a sentence is topicalized requires either the presence of the subject pronoun (e.g., **Juan, él canta muy bien**)

or knowing that the speaker purposely generated a null subject (e.g., **Juan, Ø canta muy bien**), which is impossible to determine from surface structure alone. Since no instances of subject topicalization accompanied by an overt subject pronoun were found in the corpus, it is impossible to determine whether this was a productive strategy in the interviews. It is also impossible to determine whether a learner of Spanish is using formulaic chunks or purposely encoding morphological inflections. For example, with respect to verbs, many instances of the same verb must be produced by a speaker to determine whether one form is generalized to all uses of a verb (e.g., ***Juan *tengo***, ***María y Carmen *tengo***, **Yo *tengo***) or whether it has intentionally been inflected, correctly or incorrectly, by the speaker. Such detailed form-function analyses require longitudinal data bases. An analysis of NP clause mood selection accuracy will nevertheless be presented.

It was necessary to examine how the IL encodes bipropositional utterances in order to determine if conjoining was favored over embedding. It will be shown that the participants exhibited presyntactic stage behavior if significantly more coordinate than embedded structures were found. Conversely, a tendency to embed suggests syntactic stage operations.

Each sentence of the corpus was coded for one of three types of syntactic characterizations:

(1) A monopropositional utterance with only a matrix clause. These utterances would contain only a subject (be it explicit as in **Juan canta** or null as in **Cantamos**) and a finite verb form. Any complements would have to be substantive (e.g., **Juan quiere *helado***) rather than clausal (e.g., **Juan quiere *que le des helado***). Utterances with this phrase structure will be referred to as **MATs**

herein. The following describes the phrase structure of these utterances with an example:

(4.1a) MAT: [$_{S'}$ NP VP]

(4.1b) [$_{S'}$ [$_{NP}$ **Juan**] [$_{VP}$ **canta**]]

(2) A bipropositional utterance with a matrix and an embedded clausal complement. The matrix clause verb of utterances of this type had to have either a finite clausal complement (e.g., **Quiero que me hagas un favor**) or a finite clausal subject (e.g., **Me gusta que estés aquí**). As mentioned 1.4 above, these types of utterances are referred to as **NPSs** herein.

(4.2a) NPS: [$_{S'}$ NP [VP [$_{S'}$ **que** [$_{S}$ NP VP]]]]

or

[$_{S'}$ [$_{S'/NP}$ **que** [$_{S}$ NP VP]] VP]

(4.2b) [$_{S'}$ **Yo** [**quiero** [$_{S'}$ **que** [$_{S}$ **María cante**]]]]

(3) A bipropositional utterance with two conjoined matrix clauses. A number of bipropositional utterances were conjoined by coordinating conjunctions such as **y**, **porque**, and **pero**. These types of constructs will be referred to as **CONJs** herein.

(4.3a) CONJ: [$_{S'}$ NP VP] & [$_{S'}$ NP VP]

Where **&** is any coordinating conjunction (e.g., **y**, **o**, **porque**).

(4.3b) [$_{S'}$ **Juan cante**] y [$_{S'}$ **María baila**]

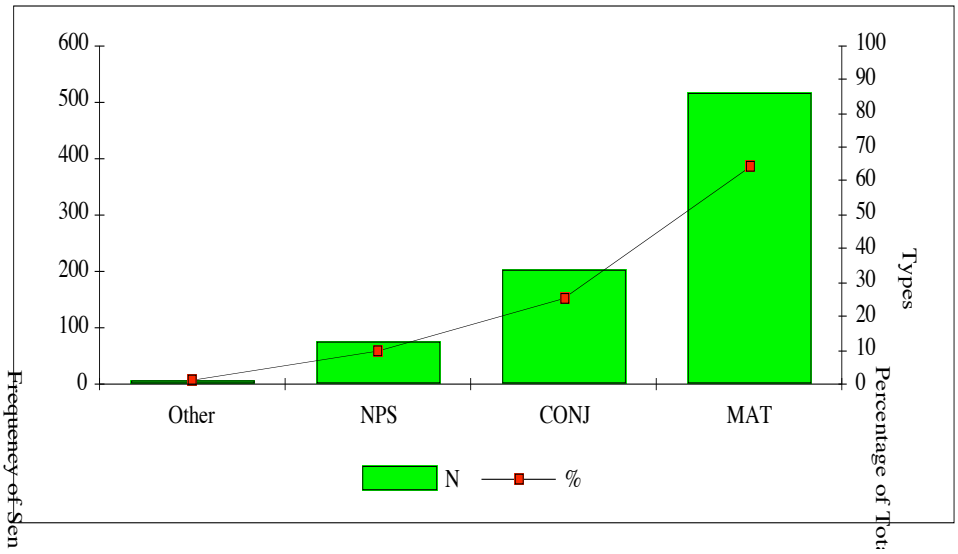
(4) Since the aim of this dissertation is to examine mood selection in nominal clauses, all other bipropositional utterances were grouped into the same category. Sentences containing, for example, adjectival clauses (e.g., **Juan conoce a una muchacha que sabe bailar**) and adverbial clauses (e.g., **Te llamo cuando tenga tiempo; Hablaremos si vienes a la fiesta**) formed this category.

Table 4.1 depicts the type of syntactic structures produced by the subjects and Graph 4.1 provides a visual illustration of the data and the differences in frequencies.

Table 4.1 Percentage of Occurrences of Syntactic Types Produced by Learners in Conversation.

Sentence Type	Frequency	Percentage of Total
MAT	517	64.3
CONJ	202	25.1
NPS	77	9.6
Other Bipropositional Utterances	8	1.0
Total	804	

Graph 4.1 Graphic Illustration of Percentage of Occurrences of Syntactic Types Produced by Learners in Conversation.



The subjects exhibited what appears to be presyntactic behavior. In spite of the interviewer's efforts to elicit complex utterances, a total of 64.3% of all learner utterances were MATs ($\chi^2_{(3)}$=758.62; p<.0001). Although Givón's model does not directly comment on the relationship between MATs in oral speech and presyntactic mode operations, in the discussion of his developmental model, he implies that a preponderance of MATs in conversational speech is indicative of poor proficiency:

> Short turns - thus shifting, choppy coherence - is indeed the early childhood norm. (Givón, 1990:951)

Givón (1979) also notes that paratactic concatenation of propositions in (relatively) extended discourse is another indication of presyntactic behavior. The following are examples of this use of MATs in the interviews.

(4.1)

In a discussion on Senator Gary Hart's personal problems during his 1987 presidential campaign.

Interviewer: **Y ¿qué tal la prensa, tiene el derecho de revelarle todo al público?**
Subject 4: **No sé / no necesita revelar todo porque algunas veces pueden lastimarse [i.e.hacer daño].**
Interviewer: **¿Es justo que miren las casas de otros?**
Subject 4: **No pienso es justo / pero al mismo tiempo la gente tiene // necesita saber / pero es muy difícil // no es negro o blanco / es gris.**

Later in the same interview.

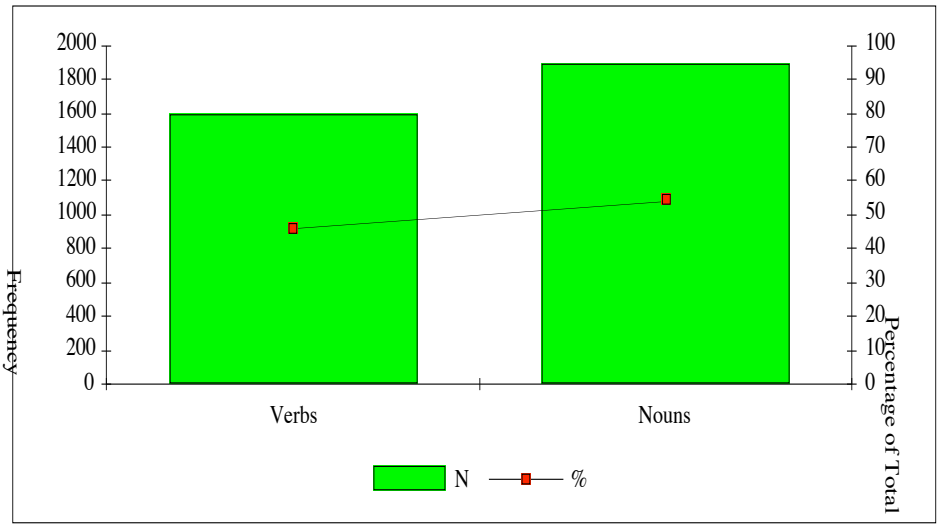
Interviewer: **¿Por qué estudias español entonces?**
Subject 4: **Porque estudiaba en el colegio / muchas personas hablan español en los EEUU // es muy common.**

An examination of the subjects' multipropositional utterances strongly suggests that presyntactic stage behavior was most common. In bipropositional utterances, the subjects clearly favored conjoining to embedding, since 25.1% of all their utterances were CONJs while only 9.6% were NPSs ($\chi_{(2)}$=202.37; p<.0001). Only 1.0% of all utterances in the study were anything other than

CONJs or NPSs, each of which were conditional sentences containing an adverbial clause headed by **si** (e.g., **Si tengo tiempo, voy a tomar más clases**).

The ratio of nouns to verbs was also tabulated, depicted here in Graph 4.2.

Graph 4.2 Ratio of Nouns to Verbs Provided by Students.



If the participants were operating in the presyntactic stage, an almost one-to-one ratio of nouns to verbs should be found. That is, most propositions would contain only a single argument. If most propositions were complex, they would be multiargumental and a larger ratio of nouns to verbs would be found (Givón, 1979).

Significantly more nouns (N=1898; 54.3%) than verbs (N=1601; 45.7%) were produced, yielding a ratio of 1.2:1 ($\chi_{(1)}$ =25.21; p<.0001). This suggests

that more biargumental utterances were produced than one would expect if the learners were limited to presyntactic stage operations.

Nevertheless, it became evident in the analysis that determining the propositional complexity of a group of learner utterances requires more than counting the number of nouns and verbs in the corpus as Givón's (1979) model suggests. Spanish's null subject parameter allows for a proposition to have more than one argument at deep structure even if only one noun is manifested at surface structure (e.g., **Estudiamos matemáticas**). Therefore, both the number of overt subject pronouns (N=264) and the number of null subjects (N=430) should be added to the total number of nouns. It is interesting to note that these subjects used null subjects significantly more than overt subjects ($\chi_{(1)}=39.71$; $p<.0001$), which suggests that they were relying on verb morphology to some degree to reflect the subjects of sentences. The inclusion of pronominalized subjects (overt as well as null) in the tabulation of nouns substantially increases the ratio of nouns (61.8%; 2584/4184) to verbs (38.2%; 1600/4184) from 1.2**:**1 to 1.6:1. Therefore, it must be concluded that regardless of the lack of phrase structure sophistication in the subjects' manifestations of bipropositional utterances, individual propositions themselves were far from simplistic.

The degree to which the subjects used verbal inflections to maintain discursive cohesion was also examined. Rather than use formulaic chunks, in which case verb inflections would be mere relics of forms memorized by the learner as homogenous (i.e., unanalyzed) morphemes, these learners appear to inflect verbs, which implies the onset of syntactic stage operations. As reported in Collentine (1988), inflecting verbs for person, number, aspect, tense, and mood

was done poorly by these subjects when a marked form was needed.[1] For example, when the unmarked first person-singular-present-indicative form was needed, accuracy was likely to be high. When a marked form such as a first person plural imperfect subjunctive form was needed, accuracy was consistently poor. Mood selection in NP clauses was also examined. Of the 76 NPSs, only 24 (31.6%) required a subjunctive inflection. Of those 24 utterances, the correct inflection was only provided in three instances, yielding an accuracy of only 12.5%.

Therefore, although these learners inflect verbs, accuracy is often poor, especially if a form is heard less in the input and/or required less in production. In spite of the fact that conjugations are frequently studied and practiced in the Spanish FL curriculum, the data suggest that the knowledge structures responsible for producing verbal inflections are not sufficiently proceduralized to exhibit syntactic stage operations consistently in unplanned conversational speech.

4.1.1 Discussion of the Data from Study 1.

The data indicate that the IL does not operate entirely in presyntactic nor syntactic stage operations after four semesters of university instruction, although the former are favored. Regarding syntactic development,

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1 The degree of markedness of any form was determined by its relative frequency both in learner input and in learner production. Unmarked forms are more frequent than marked forms.

infrequent complex utterances and a preference for either single clause utterances or coordinate structures imply that, although syntactic stage operations are possible, presyntactic stage operations dominate in oral, conversational IL speech. Nevertheless, the multiargumental structure of the learners' propositions is probably the best confirmation of the onset of syntactic stage operations. As regards morphological development, accuracy is high on the whole. This is due, however, to the subjects' more frequent use of unmarked forms (e.g., present indicative verbs). When they had to produce marked forms, such as the subjunctive, accuracy was poor. Thus, indicative forms were probably used in a default fashion in conversational speech, which could easily account for the high accuracy with which the indicative was selected and the low accuracy with which subjunctive forms were chosen in obligatory contexts.

The strongest indication that some syntactic stage operations can be used by learners at this stage of development was the widespread use of multiargumental propositions. This also indicates that some of the cognitive limitations realized in the presyntactic stage are being overcome since more "pieces" of information are being coodinated into utterances than what would probably be found if presyntactic stage operations were only possible. Givón (1979) proposes that the extreme of the presyntactic stage is characterized by propositions with only one argument (i.e., a one-to-one ratio of nouns to verb). In this study, the participants provided significantly more nominal arguments than the verbs to which they were predicated. Since all other observations pointed towards the learners' favoring of presyntactic stage

operations, it may very well be that a transitional phase between the presyntactic and syntactic stage is the use of multiargumental propositions.

Concerning morphological development, the data indicate that these learners operate between the extremes of the presyntactic and the syntactic stages. Regardless of their grammatical accuracy, all verbs forms that must be finite are inflected in unplanned speech, which is probably a byproduct of the traditional approach taken to Romance FL instruction, which involves numerous hours of studying and practicing verbal inflections (Terrell, Baycroft, and Perrone, 1987; Lee, 1987).

It is interesting to note that the figure for mood accuracy found in this study is equally as low as that found in Terrell, Baycroft, and Perrone's (1987) study. As such, all indications suggest that two years of university level Spanish FL study is not sufficient enough time to develop the ability to select mood with even near-native-like accuracy in conversational speech.

4.2 Study 2: Picture Test and Elicited Oral Data.

The purpose of Study 2 was to gather data on IL Spanish mood selection processes after two years of university study. It was argued in section 3.2.3 that, since Study 1 did not provide a data base that lends itself to the study of NPSs and all the possible modality contexts upon which mood selection must be based, both a controlled and a contextualized task eliciting oral data was deemed necessary. By controlling output, the probability of avoidance of the production of complex

structures was decreased. Furthermore, since the subjects were given what was felt to be sufficient time to produce utterances under the assumption that the production of complex sentences orally necessitates more time than that which is allowed in a face-to-face conversation, any cognitive limitations of the learners that impeded revealing the IL's fullest potential in the conversational task would less affect the successful production of complex utterances.

The database of Study 2 consisted of numerous bipropositional utterances produced by the subjects. The goal of each test item was to elicit a NPS even though diversionary questions were incorporated. The means by which data was elicited as well as the subsequent examination of mood selection capabilities rested on the assumption that the mood of a NPS's nominal clause (e.g., the complement clause of **Creo que [NP está satisfecho]**) is determined by its matrix clause's modality (e.g., **Quiero que...** induces the subjunctive whereas **Sé que...** generates the indicative). Therefore, the test items were intended to elicit a representative of Palmer's (1986) eleven modality categories in NPSs, as outlined in Table 2.1 in section 2.2 above.

For expository ease, some terms to be used herein should be defined. Reference will be made to *indicative modalities* and *subjunctive modalities*. An *indicative modality* is one of Palmer's (1986) modality types that, in the matrix clause of an NPS, causes the NP clause verb to be in the indicative. If the lexical items of a NPS's matrix clause denote, for example, *knowledge* or *belief*, the nominal clause must have an indicative form. Consequently, *subjunctive modalities* are those that cause the subjunctive.

The terms *indicative context* and *subjunctive contexts* will also be referred to a great deal. *Indicative context* refers to questions in the elicitation task targeting NPS responses whose matrix clause modality requires an indicative form for its NP clause (e.g., **¿Qué crees? > Creo que Juan está feliz**). Conversely, *subjunctive context* refers to questions that elicited a subjunctive form in the NP clause of a response (e.g., **¿Qué dudan? > Dudan que Juan esté feliz**).

4.2.1 Syntactic Analysis of Participant Responses.

Although the design of the task was to elicited NPSs from the subjects -- apparently reliable as suggested by the native/advanced speaker corroboration (cf. Section 3.3.2) -- numerous utterances were not NPSs, which took the form of CONJs and MATs. The production of non-NPSs is interesting since throughout the test the subjects were repeatedly reminded of the structural criteria according to which they were to respond to test items. This suggests that even if learners at this stage of development can produce complex structures, it probably is not yet an easy one.

Table 4.2 describes the types of utterances produce, characterizing responses in two ways. Each utterances was analyzed according to its structural pattern and its matrix clause modality.

Table 4.2 Frequency of Responses in Study 2 based on Syntactic Characterization and Targeted NP Clause Mood.

Structure Type	Syntactic Characterization	Targeted Mood of Response's Embedded Clause* Subjunctive N	%	Indicative N	%	Totals N	%
Embedded	[s' NP V [s' que [s NP VP]]]	288	53.0	427	64.8	715	59.5
	[s' NP V [s' Ø [s NP VP]]]	29	5.3	50	7.6	79	6.6
	[s' NP V [s' para [s NP VP]]]	12	2.2	3	0.5	15	1.2
	[s' NP VP [s' porque [s NP VP]]]	6	1.1	3	0.5	9	0.7
	[s' NP V [s' Other [s NP VP]]]	1	0.2	0	0.0	1	0.1
Coordinate	[s' NP VP] & [s' NP VP]	81	14.9	27	4.1	108	9.0
Monopropositional	[s' NP VP]	126	23.2	149	22.6	275	22.9
	Totals	543		659		1202	
	No Answer	27	4.7	25	3.7	52	4.1
	Totals	570		684		1254	

* All target questions aimed at eliciting NPSs. Thus, although not all responses were NPSs, they are categorized according to the intended mood of the response's NP clause.

Four syntactic patterns were found in the corpus: (1) those that matched the NPS structural specifications, consisting of a matrix and an embedded NP clause; (2) those that were equal to NPS structures in phrase structure but that lacked the complementiser **que** (e.g., ***María dice es un buena idea**); (3) those that contained two conjoined clauses whose conjunction was either **porque** or **y**; and (4) monopropositional utterances in the form of a single matrix clause.

4.2.1.1 NPS Responses.

NPSs were produced in 64.8% of all responses in indicative contexts but only in 53.0% of subjunctive contexts. The difference between the number of NPSs produced in indicative (M=11.24; s=4.04; N=38) and subjunctive (M=7.58; s=4.31; N=38) contexts was significant ($t_{(74)}$=3.83; p=.0005).

The occurrence of an NPS, in both indicative and subjunctive contexts, depended largely on the type of modality found in a matrix clause. For both subjunctive ($\chi^2_{(4)}$=51.41; p=.0001) and indicative ($\chi^2_{(4)}$=55.80; p=.0001) contexts, the number of NPSs provided varied significantly by modality type.

In indicative contexts, almost a third (23.9%; 102/427) of all NPSs were produced from *reports of declaratives* (e.g., **Juan dice que está enfermo**). Questions eliciting *beliefs* were second in terms of yielding NPSs (20.4%; 87/427). However, NPSs whose matrix clause was to denote *sensory evidence* (e.g., **Oigo que los chicos necesitan ayuda**) represented only 5.2% (22/427) of all NPSs provided.

In subjunctive contexts, more than one-third of all NPSs (34.7%; 100/288) had matrices denoting *uncertain belief/doubt* (e.g., **No creo que lo sepan**). The participants were least likely to produce NPSs in subjunctive contexts when a *transmission of a command* was targeted (e.g., **Le dice que le traiga agua**), comprising only 11.5% (33/288) of all NPSs in subjunctive contexts.

4.2.1.2 Responses without the Complementiser QUE.

Some responses lacked the complementiser **que**. More complementiser omissions were found in indicative (63.3% ;50/79) than in subjunctive (36.7%; 29/79) responses. A t-test showed the differences between complementiser omissions in indicative (M=1.32; s=1.16; N=38) and subjunctive (M=0.76; s=0.93; N=38) contexts to approach significance ($t_{(74)}$=2.32; p=.0218).

In indicative contexts, a complementiser omission did not seem to be related to the modality of the matrix clause verb ($\chi^2_{(6)}$=7.36; p=.1941). In subjunctive contexts, however, there was a strong effect for modality type ($\chi^2_{(4)}$=12.90; p=.0118). The complementiser was most often omitted in *directives* (69.0%; 20/29); there were about as many complementiser omissions in *reports of directives* (N=11) as in *volitives*. The claim that the **que** was omitted in such instances assumes that the phrase structure of such utterances met the specifications of a NPS, however. Most omissions in *directives* seem to be attributable to the participants' use of paratactic strategies.[2] In most cases, the subjects appear to have juxtaposed an imperative to the utterance's matrix clause, as exemplified in (4.5a-d).

(4.5a) [Subject A13] **El jefe quiere la empleada // manda esta carta**
(4.5b) [Subject B4] **El jefe quiere / man /mande esta carta / a la empleada**
(4.5c) [Subject B19] **El jefe quiere la empleada / mande / la carta**

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2 According to Crystal (1991) the term *parataxis* - or *paratactic* - is used to refer to "constructions of equal status which are linked solely through juxtaposition and punctuation/intonation." Sato (1989) also uses this term to refer to how early L2 learners juxtapose two matrix clauses to create bipropositional utterances.

The most convincing argument for the claim that the second proposition in these examples is an imperative is that a pause always precedes the second verb. The effect is that the second proposition is always initiated with a verb as in the case of imperatives (e.g., **¡Manda esta carta!**).

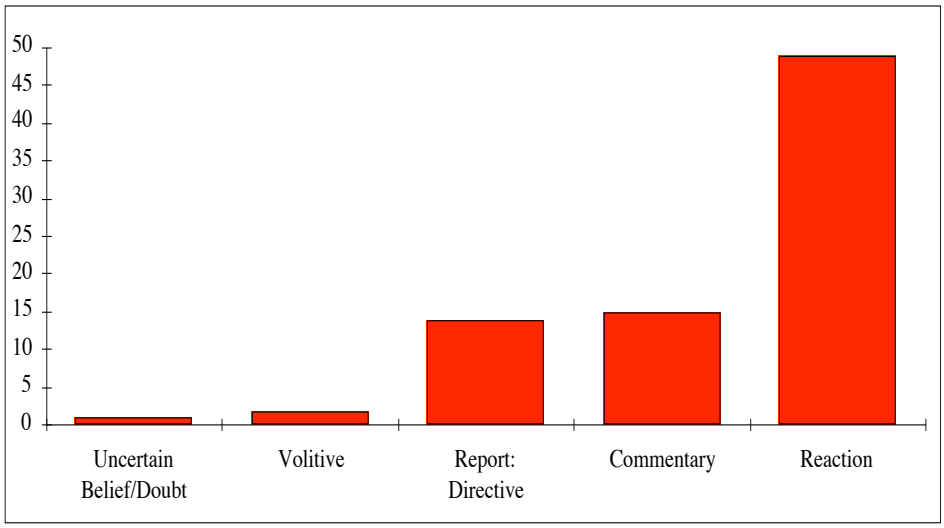
4.2.1.3 CONJ Responses.

In spite of the controls placed on the production of NPSs, CONJs were still produced. In comparison to Study 1, however, few CONJs were produced in Study 2, which were found in only 9.0% of all responses. CONJs were clearly more prevalent in subjunctive (14.9%) than in indicative (4.1%) contexts. For example, to say something along the lines of **Está triste porque su brazo está roto** instead of **Está triste que su brazo esté roto** was more common than to say **Antonio se siente mal y nadie sabe** instead of **Nadie sabe que Antonio se siente mal**. The difference between the mean number of CONJs produced per student in subjunctive (M=2.13; s=2.03; N=38) and indicative (M=0.71; s=0.56; N=38) contexts was highly significant ($t_{(74)}$=4.16; p=.0002). A feasible interpretation of this behavior is that, as suggested by Study 1, the subjects used conjoining as a strategy to avoid the cognitive difficulties involved in embedding (cf. Figure 2.2 in section 2.3).

Furthermore, a one-way chi-square analysis indicated that the production of CONJs depended on the matrix clause modality of the question($\chi_{(4)}$=93.51;

p=.0001). Graph 4.3 shows the frequency of CONJs produced in each of the five subjunctive modality contexts.

Graph 4.3 Frequency of CONJs Provided in Subjunctive Contexts by Matrix Clause Modality.



Of the 81 CONJs produced in subjunctive contexts, 60.5% (49/81) resulted from questions eliciting *reactions* (e.g., **Me sorprende que pueda hacer tanto**). In fact, whereas NPSs comprised only 31.6% of all *reactions*, 43.0% were CONJs. The sentences in (4.6) are participant examples of the types of CONJs provided for *reactions*. Those in (4.7) are examples of NPSs.

(4.6a) Subject A1: **Mario está triste porque // son brazo es roto**.
(4.6b) Subject A4: **Los padres preocupada porque Carla no necesita mirar la televisión ahora**.
(4.6c) Subject B7: **Carlos es sorprendendo porque la fruta es horrible**.

(4.7a) Subject B24: **Es triste que Mario tiene un // un brazo roto**.
(4.7b) Subject B6: **Los padres están preocupados que Carla mire la televisión**.
(4.7c) Subject A12: **Carlos sorprende // que // la fruta es rotten // es horrible**.

Does the use of coordinate structures obscure the semantic relationship between the propositions of such utterances?[3] Sanford and Garrod (1981) suggest that analyzing the propositional content of utterances based on typologies of sentential thematization (i.e., syntactic structure) may often lead to erroneous conclusions. The NPS is only a syntactic characterization, not necessarily a structural icon of the pragmatic relationship between the matrix and the embedded clause. Behaviors common to the presyntactic mode, such as conjoining, may well enough report on the relationship between two events/states. The sentences in (4.8) show that, whether embedding or conjoining relates a bipropositional utterance in which one proposition is a *commentary* on the second, the presentation of information and the pragmatic relationship between both propositions remains constant.

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[3] In this instance, since in evaluatives there is a cause and effect relationship between the embedded and the matrix clause, respectively (e.g., in **A Carlos le sorprende que la fruta esté mal**, Carlos' surprise is motivated by the fruit being bad) the notion "semantic relationship" here refers to one event/state's effect on another event/state.

(4.8a) **Es triste que Juan trabaje tanto**.

(4.8b) **Es triste porque Juan trabaja tanto.**

The use of coordinate structures when the modality of a bipropositional utterance is *volition* or *uncertain belief*, however, either misrepresents the relationships between propositions (e.g., **Quiero/Dudo porque Juan *trabaja**) or requires that their order of presentation be changed (e.g., **Juan trabaja porque quiero**).

The use of CONJs also indicates that after four semesters of instruction learners do not always make their utterances syntactically appropriate to what Levinson (1983) terms "conversational structure". Many of the CONJs produced violations of *adjacency pairs* (Schegloff and Sacks, 1973). In a conversation, two responses constitute an adjacency pair when one turn (i.e., a question) follows another (i.e., a response). Furthermore, each turn must be uttered by a different speaker (i.e., the task questioner and the individual student). Conversational regularities in adjacency pairs are determined by two rules: (1) turn 1 is the first part of a multipropositional idea and turn 2 the second, in which case the latter's phrase structure is determined on the first; and (2) each part is of a distinct type. In a data elicitation task, *part 1* is any question posed and *part 2* its response. The response type is determined by the form of the question. In this study, questions were based on a matrix clause containing an interrogative pronoun (e.g., **¿Qué quiere?**). According to specifications on the informational content of responses, the interrogative pronoun's referent had to be a clause subordinate to the original question's matrix clause. An adjacency pair such as **A: ¿De qué está sorprendida**

la mujer? B: Está sorprendida porque la fruta está mala violates the principle of regularity in adjacency pairs since **qué** needs to be answered with a nominal constituent (i.e., either a NP or a S'). Thus, although the syntactic structure is, on the whole, acceptable at the sentence level, learners still produced many unacceptable utterances according to principles of conversational structure.

4.2.1.4 MAT Responses.

About one-fifth (22.9%) of the participants responses were MATs, single clause utterances. The sentences in (4.9) exemplify how MATs were typically produced.

(4.9a) **¿Qué duda el policía?**
(4.9b) ***El ladrón es Bugsy**.

One might expect that such *superordination*, or encoding a proposition in a matrix clause that must be in an embedded clause according to adjacency pair principles, would be more frequent in subjunctive contexts. As in the case of CONJs, using such a strategy would avoid having to attack the complex production systems that yield subjunctive forms. Yet the data suggest that superordination is just as likely in indicative contexts. The difference between the means of MATs produced per student in indicative (M=3.92; s=1.78; N=38) and subjunctive (M=3.32; s=1.45; N=38) contexts was not statistically significant ($t_{(74)}$=1.61; p=.1077). Therefore, it

must be concluded that MATs are not necessarily used as a strategy to avoid subjunctive procedures.

4.2.2 Morphological Analysis of Participant Responses.

Study 2 also aimed at prompting NPSs containing a representative sample of each of the eleven modalities that can characterize the matrix clauses of such utterances (based on Palmer (1986); see Table 2.1 in section 2.2). The six indicative modalities are all epistemic: *sensory evidence*, *visual evidence*, *reports of declaratives*, *inference*, *belief*, and *knowledge.* The other five are subjunctive modalities. Two of the subjunctive modalities are epistemic: *reports of directives* and *uncertain belief/doubt.* The other three are deontic: *volitives*, *commentaries*, and *reactions*.

Table 4.3 shows the accuracy with which the participants selected mood in NP clauses. The data is organized according to modality type and the mood each one affects. For example, *visual evidence* elicits the indicative whereas *reactions* elicit the subjunctive.

Table 4.3. Accuracy Scores for Mood Selection in NP Clauses.

Modality of matrix clause	Freq. of correct mood in NP clause	Freq. in matrix clause of NPS	NP clause mood accuracy
Indicative Contexts:			
Knowledge	72	77	93.5
Report: Declarative	93	102	91.2
Evidence: Sensory	20	22	90.9
Belief	79	87	90.8
Inference	72	82	87.8
Evidence: Visual	49	57	86.0
	385	427	90.2
Subjunctive Contexts			
Report: Directive	16	33	48.5
Volitive	25	66	37.9
Uncertain Belief/Doubt	36	100	36.0
Commentary	15	53	28.3
Reaction	5	36	13.9
	97	288	33.7

The accuracy of mood selection in NP clauses was much higher in indicative contexts than in subjunctive contexts. The indicative was supplied in 90.2% of all obligatory occasions while the subjunctive was produced in only 33.7%.

A chi-square analysis of the data was used to determine whether the frequency of correct answers was significantly different from what one would expect from a native speaker. Since the native/advanced speakers selected the appropriate mood in nominal clauses with 100% accuracy in this same task in both indicative and subjunctive contexts, it was concluded that the expected frequencies

for correct mood selection should be the number of obligatory occasions for each mood, or the number of NPSs produced for each modality type. The subjects selected NP clause mood with native-like accuracy in indicative contexts ($\chi_{(5)}$=4.40; p=.4949), but not in subjunctive contexts ($\chi_{(4)}$=129.13; p=<.0001).

A chi-square analysis could not be used to test the variation in mood selection in indicative and subjunctive contexts since there were six indicative modalities and five subjunctive modalities. Furthermore, since the mean accuracy percentage for each of the indicative modalities was much higher than for each of the subjunctive modalities, a comparison of standard deviations misrepresents the variation between the two sets. For example, a standard deviation of 10 for a set of data whose mean is 20 translates to greater variation than for a set whose mean is 90. Thus, a *coefficient of variation* (V = s ÷ M) test, which computes the relative variation of the elements in sets with different means, was used to compare the variation in mood selection between the indicative and subjunctive modality types.

NP clause mood was correctly chosen for each of the six indicative modalities with relatively the same accuracy. The average accuracy score for indicative modalities was 90.0% (N=6) with a standard deviation of 2.69. Although the average accuracy score provided for the five subjunctive modalities was only 32.9%, however, the standard deviation was 12.84. Thus, although the coefficient of variation between the indicative modalities was only 0.03 (2.69/90.0), it was 0.39 (12.84/32.9) between the subjunctive modalities. This indicates that, after four semesters of FL instruction, success in mood selection depends much more on matrix clause modality in subjunctive than in indicative contexts.

The data suggest that it is possible to draw some generalizations on the mood selection of the subjects in this study. The two modality types that elicited the most subjunctive forms were semantically related; both denoted directives. The subjunctive forms were provided most in the context of *reports of directives*, and martrix clauses that constituted a *volitive* elicited the next highest number subjunctive forms. Matrix clauses denoting *uncertain belief/doubt* yielded only slightly fewer subjunctive forms than *volitives*. The subjects were least successful in providing subjunctive forms in the context of *evaluatives*, since even fewer subjunctive forms were provided in the context of *commentaries* and *reactions* than in the context of *uncertain belief/doubt*.

The difficulty of the subjects in Study 2 to produce subjunctive forms in obligatory contexts is similar to that of L1 learners of Spanish. It was reported in Section 2.4 that children learning Spanish have the least amount of difficulty in providing subjunctive forms in the context of *directives* while they rarely produce subjunctive forms in the context of *evaluatives* (Gili Gaya, 1972).

4.2.3 Discussion of the Data from Study 2.

Like Study 1, the results of Study 2 suggest that, after four semesters of university Spanish FL instruction, learners find themselves somewhere between the extremes of the presyntactic and syntactic stages. The study confirms that these learners can produce complex utterances and properly select mood in oral tasks. The syntactic mode operation of embedding is, nevertheless, difficult to

sustain at this stage of development. Only a little more than two-thirds of the questions eliciting NPSs had the appropriate morphosyntactic structure. The use of pragmatic mode operations in spite of the task's controls indicates, therefore, that learners still are not entirely comfortable with syntactic mode operations.

Instead of the complex syntactic structures that were specifically elicited by the task, the learners often produced coordinate structures and used paratactic principles to concatenate bipropositional utterances. Both of these strategies were much more likely to be observed if a question aimed at the production of a subjunctive form. For example, there were three times as many coordinate structures produced in response to questions that created subjunctive contexts (N=81) than to those that created indicative contexts (N=27). Moreover, regarding *directives*, the subjects seemed more inclined to juxtapose an imperative to a MAT than to embed a proposition to a matrix clause that would have produced either a *volitive* or a *report of a directive*.

It is nevertheless unclear whether these manners of encoding bipropositional utterances were used in response to some difficulties inherent to the processing of verbal inflections or of the complex phrase structure required for NPSs. Both indicative and subjunctive contexts map propositions onto matrix clauses containing an embedded clause (i.e., an NPS). Thus, the coordinate and paratactic structures may have been produced to avoid processing embedded clause morphology. The observation that many more complementiser omissions were produced in indicative than in subjunctive contexts, however, suggests that parataxis is a more generalized reaction to complex syntax. Therefore, the

difficulties that learners face during oral production may primarily be the result of the complexities inherent involved in the production embedded structures.

An examination of the literature on L2 acquisition and on cognition reveals that it is entirely plausible that learners who cannot sustain syntactic mode operations will use parataxis as a strategy for mapping multipropositional utterances. Furthermore, such strategies seem to be used more in the earliest stages of acquisition (i.e., the presyntactic stage). Sato (1988) reports that learners often qualify propositions such as **I can do it** by juxtaposing them to a matrix clause chunk such as **Ithinkthat** (i.e., **I think that I can do it**) before using embedded structures in a systematic fashion.[4] For Samuels and Laberge (1983), with parataxis the selection of mood could be divided into two separate tasks, an independent selection for each of the two concatenated matrix clauses. Samuels and Laberge contend that, although subdividing the task is cumbersome, it helps to ensure that the task is completed. Thus, paratactic strategies may indicate that there is not enough working memory for the learners to process complex utterances. If the production systems that yield complex morphosyntactic structures were more proceduralized, working memory would not be such a hindering element for these learners.

Another strategy used to evade complex utterances is to produce a single clause utterance. In fact, MATs were produced by the subjects more than coordinate structures. It was shown that the use of MATs also implies that, while syntactic appropriateness may be monitored at the sentence level, probably little

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[4] Sato (1988) was able to determine when matrix clause chunks were being employed since her study was longitudinal.

consideration is given to syntactic principles of conversational structure. This seems to be another indication that these learners still experience numerous difficulties with the TL syntax.

There does not seem to be any substantial evidence for L1 transfer in the corpus. A minute total of the responses (1.2%; 15/1254) had the preposition **para** for the complementiser of an embedded clause (e.g., **Juan quiere *para María salga bien**), presumably influenced by English, as in **John wants for Mary to do well**. Additionally, even if the instances of **que** omissions were simple exclusions of an embedded clause complementiser in a sentence whose phrase structure consisted of a matrix and an embedded clause, the number of observed occasions 6.3% (79/1254) is nevertheless not enough to further argue for any common use of a generalized strategy of L1 transfer.

In sum, these data probably indicate that the IL has at least developed to the point where it emulates TL syntactic norms when forced to confront embedding. The IL is maturing in terms of its potential to produce complex syntax. Learners at this stage of development, nevertheless, cannot sustain such syntactic mode operations, as shown by the numerous uses of coordinate, paratactic, and monopropositional utterances in spite of the task's controls on the syntactic structure of output.

Regarding morphology, providing the proper mood inflection is quite difficult in oral speech for learners at this stage of development, especially when a subjunctive form is required. Although 67.4% (482/715) of all NP clauses had the correct mood, the subjects were significantly less successful in selecting mood in subjunctive contexts.

These figures are consistent with those found in other IL studies on mood selection (e.g., García, 1981; Terrell, Baycroft, and Perrone, 1987). The same conclusions will not be drawn here, however. In most of these studies, conclusions have followed the following rationale: since the subjunctive is rarely produced in obligatory contexts, learners do not generally have access to knowledge that would indicate when to use the subjunctive. Nevertheless, this position suggests that learners actually process bipropositional sentences only erring in the selection of mood in subjunctive contexts. Conversely, the position implies that learners accurately select mood in indicative contexts. It does not seem logical that, at the same time that learners are struggling with both TL syntax and the subjunctive, they have mastered all of the processes that lead to the production of indicative forms. A more feasible explanation for the discrepancy between mood selection accuracy in indicative and subjunctive contexts is that an *indicative default strategy* was often employed by the subjects. Matrix clause mood must always be indicative whereas, in embedded clauses, one must always "select" either the indicative or the subjunctive mood. A simple yet infallible hypothesis for the IL grammar would be that no mood must be selected but rather only indicative forms are used for all [+tense] verbs, regardless of whether they are found in matrix or embedded clauses. If so, the high accuracy of mood selection observed in indicative contexts and the preponderance of indicative forms in subjunctive contexts could easily be accounted for.

4.3 Study 3: Reading Test and Elicited Written Data.

As discussed in section 2.2.4 above, Study 3 paralleled Study 2 in that its purpose was to elicit NPS utterances. Study 3 differs from Study 2 in that the participants provided written answers to written questions. Since, in oral production tasks, production may underrepresent the learner's potential to produce complex morphosyntactic constructs, a written task was felt to be necessary. A written task was also necessary since complex utterances are most likely to be produced when there is time for planning (Givón, 1979).

4.3.1 Syntactic Analysis of Participant Responses.

As in Study 2, although only NPSs were targeted, a number of other structures were provided. Some were similar to NPSs, apparently containing a matrix and a NP clause. CONJs and MATs were encountered as well. Table 4.4 presents a tabulation of the participants' responses according to syntactic structure and mood context.

Table 4.4 Frequency of Responses in Study 3 based on Syntactic Characterization and Targeted NP Clause Mood.

Structure Type	Syntactic Characterization	Targeted Mood of Response's Embedded Clause* Subjunctive N	%	Indicative N	%	Totals N	%
Embedded	[s' NP V [s' que [s NP VP]]]	206	64.6	289	72.6	495	69.0
	[s' NP V [s' Ø [s NP VP]]]	17	5.3	12	3.0	29	4.0
	[s' NP V [s' para [s NP VP]]]	27	8.5	0	0.0	27	3.8
	[s' Ø [s' que [s NP VP]]]	10	3.1	10	2.5	20	2.8
	[s' NP V [s' Other [s NP VP]]]	1	0.3	5	1.3	6	0.8
Coordinate	[s' NP VP] & [s' NP VP]	29	9.1	0	0.0	29	4.0
Monopropositional	[s' NP VP]	29	9.1	82	20.6	111	15.5
	Totals	319		398		717	
	No Answer	61	16.1	58	12.7	119	14.2
	Totals	380		456		836	

* All target questions aimed at eliciting NPSs. Thus, although not all responses were NPSs, they are categorized according to the intended mood of the response's NP clause.

The same four syntactic patterns were found in Study 3 as in Study 2: those that were (1) NPSs; (2) sufficiently similar to NPSs, different only for a missing **que** complementiser; (3) CONJs; and (4) MATs. The proportion of NPSs to all responses was somewhat higher than in Study 2: 69.0% of the subjects' responses were NPSs, as opposed to 57.0% in Study 2. Table 4.5 compares the responses given in both studies.

Table 4.5 A Comparison of Syntactic Structures Provided in Study 2 and Study 3.[5]

Syntactic Structure Type	Study 2 (Oral data) N	%	Study 3 (Written data) N	%	Totals N	%*
Embedded	819	68.1	577	80.5	1396	66.8
Conjoined	108	9.0	29	4.0	137	6.6
Monopropositional	275	22.9	111	15.5	386	18.5
Totals	**1202**		**717**		**1919**	

* These proportions were used to determine the expected frequencies.
($\chi^2(2) = 36.97$; $p<.0001$)

A chi-square test comparing the frequencies of embedded, coordinate, and simple matrix clause utterances between the two studies shows that the proportions of the three structural types varied significantly between the two studies. The difference is mostly attributable to a greater number of responses with embedded NP clauses in Study 3; a total of 80.5% of all responses were either NPSs or contained a matrix and an embedded clause. Only 4.0% of all responses were CONJs, less than half of the 9.0% recorded in Study 2. Thus, the ability to produce embedded structures is possible at this stage of development and greatly facilitated when learners have time to plan.

5 Herein, the data from Study 1 are not compared with those from Studies 2 and 3 since a representative sample of all of the possible syntactic patterns and matrix clause modalities was not produced by the participants in Study 1.

4.3.1.1. NPS Responses.

The participants were more likely to produce NPSs in indicative than in subjunctive contexts. The percentage of NPSs in indicative and subjunctive contexts was 72.6% and 64.6%, respectively. The difference between the number of NPSs produced in indicative (M=7.61; s=3.96; N=38) and subjunctive (M=5.42; s=3.19; N=38) contexts was significant ($t_{(74)}$=2.65; p=.0096).

The occurrence of an NPS in indicative contexts appears not to depend on matrix clause modality. A chi-square test showed that the production of NPSs depended on matrix clause modality type ($\chi^2_{(4)}$=36.56; p<.0001). The proportional imbalance can largely be attributed to an outlier: only 11 NPSs were provided when a question targeted a response denoting *sensory evidence* (e.g., **Oímos que Juan no está bien hoy**). By excluding the outlier, the production of NPSs appears not to depend on matrix clause modality in indicative contexts ($\chi^2_{(4)}$=1.86; p=.7650).

Both Study 2 and Study 3 suggest that learners are not likely to produce a NPSs if its matrix clause is to denote *sensory evidence* (e.g., **Siento que alguien está en el cuarto**). Only 5.2% of all NPSs had a matrix clause denoting *sensory evidence* in Study 2 and in Study 3 they comprised only 3.8% (11/289) of the total. This apparent anomaly can be explained by Palmer's (1986) report that, universally, *sensory evidence* is a less reliable indicator of the truth value of a proposition's than *visual evidence*. He notes that in many languages, the degree of commitment implied by elements indicating *sensory evidence* in comparison to *visual evidence* is the same as that of *uncertain belief* to *belief*; in either case, the

latter indicates greater commitment to a proposition's truth value. In fact, Palmer (1986) notes that on the whole, *evidentials* in English are subjective rather than objective indicators of truth value since they are often accompanied by the modal **can** (e.g., **I *can* see you**, **I *can* smell something cooking**). Thus, given the greater amount of attention and working memory available to produce utterances in Study 3, this "sensing is not believing" phenomenon may have competed with the IL rules (i.e., *sensory evidence* in Spanish appears to be reliable since it is associated with the indicative) and at times lead the subjects to conclude that (or to be unsure whether) a subjunctive form would have to be produced. Consequently, since the tendency of learners at this stage of development is to avoid the selection of mood -- especially the subjunctive -- it is understandable that the subjects would likewise produce fewer NPSs in the context of *sensory evidence*.

As concluded in Study 2, the likelihood that a NPS will be provided in subjunctive contexts appears to depend largely on the modality of the matrix clause. A chi-square test shows that the frequency of NPSs varied significantly among the five subjunctive modalities ($\chi^2(4)=32.30$; $p<.0001$). Of the 206 NPSs, 31.6% (65/206) had matrix clauses denoting *uncertain belief/doubt*. NPSs whose matrix clause denoted either *volition* or the *report of a directive* comprised 23.8% (49/206) and 22.3% (46/206) of the total, respectively. The proportional imbalance is largely due to the relatively few NPSs produced in the context of *evaluatives*. NPSs whose matrix clause denoted *commentaries* comprised only 12.6% of the total while the remaining 9.7% had matrix clauses implying *reactions*.

Table 4.6 compares the frequency of NPSs between Studies 2 and 3 according to matrix clause modality.

Table 4.6 Comparison of NPSs Provided in Study 2 and Study 3 by Matrix Clause Modality.

Syntactic Structure Type	Study 2 (Oral data) N	%	Study 3 (Written data) N	%	Totals N	%*
Uncertain belief/Doubt	100	34.7	65	31.6	165	33.4
Report: Directive	33	11.5	46	22.3	79	16.0
Volitive	66	22.9	49	23.8	115	23.3
Reaction	36	12.5	20	9.7	56	11.3
Commentary	53	18.4	26	12.6	79	16.0
Totals	**288**		**206**		**494**	

* These proportions were used to determine the expected frequencies.
($\chi^2(4) = 12.61$; p=.0133)

It was reported in Study 2 that, while the participants found it most difficult to produce NPSs when a directive was reported (e.g., **Mamá dice que no hagas eso**), they were most successful in producing NPSs in the context of *volitives*. In Study 3, however, the participants had the same amount of difficulty (or success) in providing NPSs with *reports of directives* as with *volitives* (e.g., **Mamá no quiere que hagas eso**). In Study 2 only 11.5% of all NPSs were produced through *reports of directives* whereas in Study 3 this proportion doubles to 23.8%.

Overall, the decrease in processing burden in Study 3 (i.e., the basis of Study 3 was a written task whereas that of Study 2 was oral) made it only somewhat easier for the participants to produce NPSs. Table 4.7 compares the proportion of NPSs to total responses in Studies 2 and 3.

Table 4.7. Comparison of NPSs to Total Responses in Studies 2 and 3.

	NPSs	Questions	%
Study 2	715	1202	59.5
Study 3	495	717	69.0
$\chi^2(1)=3.93$; p=.0445			

A chi-square analysis suggested that the learners were only slightly more likely to produce NPS in Study 3 than in Study 2.

A comparison of the syntactic performance by mood context suggests a slight effect for greater processing time on the production of NPSs. Tables 4.8 and 4.9 compare the proportions of NPSs to total responses in indicative and subjunctive contexts, respectively.

Table 4.8 Comparison of NPSs to Total Responses in Indicative Contexts in Studies 2 and 3.

	NPSs	Questions	%
Study 2	427	659	64.8
Study 3	289	398	72.6
$\chi^2(1)=1.32$; p=.2490			

Table 4.9 Comparison of NPSs to Total Responses in Subjunctive Contexts in Studies 2 and 3.

	NPSs	Questions	%
Study 2	288	543	53.0
Study 3	206	319	64.6
$\chi^2_{(1)}$ =2.98; p=.0837			

Whereas greater planning has no overall significant effect on the production of NPSs in any of the two mood contexts in either the oral or the written task, the chi-square test indicates that it could make it more likely that NPSs would be produced in the subjunctive contexts..

4.3.1.2 Responses without the Complementiser QUE.

As shown in Table 4.4, complementisers were omitted in Study 3 in only 4.0% of all responses. Complementiser omissions were only slightly more common in subjunctive (58.6%; 17/29) than in indicative contexts (41.4%; 12/29); the difference, however, was not significant (t(74)= 0.84; p=.4084).

In sum, complementiser omissions were infrequent in both studies. The 6.6% proportion of utterances with complementiser omissions in Study 2 is not very different from the 4.0% of Study 3. The major difference observed between the two studies was that, while for both studies complementisers were omitted in

5.3% of all subjunctive contexts, in indicative contexts, Study 3 proportionally had fewer omissions (7.6%) than Study 2 (3.0%).

4.3.1.3 CONJ Responses.

Only 4.0% of the total responses were CONJs in Study 3. All twenty-nine were produced in the context of a single matrix clause that normally requires the subjunctive in NP clauses; namely, *reactions* (e.g., **Me sorprende que no haya venido todavía**). This should not be unexpected since in Study 2 the participants cleared showed that they knew that CONJs can relate *reactions* as well as NPSs.

Nevertheless, the proportion of CONJs produced in subjunctive contexts is moderately smaller in Study 3 than in Study 2. CONJs constituted 14.9% of all responses in subjunctive contexts in Study 2 whereas they formed only 9.1% in Study 3.

4.3.1.4 MAT Responses.

Table 4.4 also shows that only 15.5% of all responses were MATs in Study 3. Although responding with an MAT in Study 2 did not depend on the mood context (i.e., either indicative or subjunctive), the data from Study 3 suggest that the participants infrequently used MATs in subjunctive contexts. All in all, 73.9% (82/111) of MATs were produced in indicative contexts. A t-test comparing the

mean number of MATs provided in indicative (M=2.16; s=1.85; N=38) and subjunctive (M=0.76; s=0.85; N=38) contexts in Study 3 indicates that the difference was significant ($t_{(74)}$=4.24; p=.0002).

A feasible explanation for such reluctance to superordinate the second part of an adjacency pair in subjunctive contexts is that, with the decrease in on-line processing pressures in Study 3, the subjects were better able to monitor the acceptability of their responses even at the discourse level. When their utterances contained indicators of such modalities as *volition* and *uncertain belief/doubt* they may have been more sensitive (or "flagged") to the complex syntactic structures that had almost always accompanied these modalities in their own studying and classroom practice. Furthermore, it must be reiterated that adjacency specifications seem not to be as strong if the mood of a question's response must have an indicative form.

All in all, 82.8% (24/ 29) of the MATs from subjunctive contexts were provided when an evaluation was being requested. *Commentaries* and *reactions* prompted the same number of MATs (12/29; 41.4%). In Study 2 only 35.7% (45/126) of all MATs were produced in the context of *evaluatives*. The frequent use of CONJs in the context of *reactions*, the tendency to use MATs exclusively in the context of *evaluatives*, and the fact that only 36.5% of all evaluative contexts elicited NPSs suggests that the learners were avoiding NPSs as a morphosyntactic construct on which to map *evaluatives*.

4.3.2 Morphological Analysis of Participant Responses.

The data from Study 3 were also examined to determine how well the subjects could select for mood in NP clauses for each of the eleven modality types defined by Palmer (1986), as presented in Table 2.2. Table 4.10 shows the accuracy with which the participants marked for mood in NP clauses. The data is presented according to modality type and the mood context each one creates.

Table 4.10 Accuracy Scores for Marking for Mood in NP Clauses.

Modality of matrix clause	Freq. of correct mood in NP clause	Freq. in matrix clause of NPS	NP clause mood accuracy
Indicative Contexts:			
Inference	51	53	96.2
Evidence: Visual	43	49	87.8
Evidence: Sensory	9	11	81.8
Knowledge	47	59	79.7
Belief	48	62	77.4
Report: Declarative	42	55	76.4
	240	289	83.0
Subjunctive Contexts:			
Commentary	13	26	50.0
Volitive	21	49	42.9
Uncertain Belief/Doubt	23	65	35.4
Report: Directive	14	46	30.4
Reaction	4	20	20.0
	75	206	36.4

As in Study 2, the participants were better able to select the appropriate mood in indicative than in subjunctive contexts. NP clause mood accuracy was 83.0% in indicative contexts but only 36.4% in subjunctive contexts.

Chi-square tests were used to assess the degree to which mood selection was native-like. As in Study 2, the expected frequencies of proper mood selection for each modality type was equated with the number of NPSs provided for each modality type by the participants. Although accuracy was much lower than in Study 2, the subjects still did not provide the indicative in obligatory occasions significantly less than what would be statistically expected of native speakers ($\chi^2_{(5)}$=9.80; p=.0802). A comparison of mood selection accuracy in indicative contexts in Studies 2 and 3 shows that there was no effect for the decrease in processing load according to written versus oral contexts, as shown in Table 4.11.

Table 4.11 Comparison of Mood Selection Accuracy in Indicative Contexts.

	Correct Mood	NPSs	%
Study 2	385	427	90.2
Study 3	240	289	83.0
$\chi^2(1)=0.54$; p=.4700			

In looking at the data from a different point of view, however, more subjunctive forms were provided where indicative forms were necessary in the written task

than in the oral task. Referring back to Table 4.10, few subjunctive forms were provided in the context of *inference* and *visual evidence*. In the context of the other four indicative modalities (i.e., *sensory evidence*, *knowledge*, *belief*, *reports of directives*), almost one-fifth or more of all NPSs produced had a subjunctive form. For example, when a matrix clause modality denoted *knowledge* (e.g., **Sabemos que Carlos es un buen estudiante**), the NP clause had a subjunctive form 20.3% (12/59) of the time. When the modality was a *report of a declarative* (e.g., **Papá me informa que va a llover esta tarde**), a subjunctive form was provided 23.3% (13/55) of the time.

As in Study 2, mood accuracy in subjunctive contexts was less than native-like ($\chi^2_{(4)}$=84.7; p<.0001). Furthermore, a comparison of the accuracy with which mood was selected in subjunctive contexts in Studies 2 and 3 shows that there was no effect for the decrease in processing load in Study 3 according to task and context, as shown in table 4.12.

Table 4.12. Comparison of Mood Selection Accuracy in Subjunctive Contexts.

	Mood	**NPSs**	**%**
Study 2	97	288	33.7
Study 3	75	206	36.4

$\chi^2(1)$=0.19; p=.6674

A comparison of the **coefficient of variation** for indicative and subjunctive accuracy yields results similar to those in Study 2: relative variation between indicative modalities (V=0.10; M=83.2; s=8.3) is much lower than between subjunctive modalities (V=0.36; M=35.7; s=12.9). In other words, even in planned, written discourse, the probability that the subjunctive will be selected still depends largely on the particular modality type of the matrix clause.

The most unexpected finding of Study 3 is the lack of any discernible pattern with which the appropriate mood is selected in subjunctive contexts. In Study 2, a clear pattern was found in the subjects' ability to make mood selection in subjunctive contexts. In Study 2, the subjects produced the subjunctive most often in the context of *directives* (i.e., *volition* and *reports of directives*), less often in the context of *uncertain belief/doubt*, and least often in the context of *evaluatives*. In contrast, the success/failure to produce subjunctive forms in obligatory contexts in Study 3 did not seem follow any such generalizable pattern. Whereas one *evaluative* modality, *commentaries*, shows the strongest association with the subjunctive, the other, *reactions*, shows the weakest. Moreover, although the *directive* modality of *volitives* was second only to *commentaries* in eliciting subjunctive forms, its semantic counterpart, *reports of directives*, had the second lowest ranking.

Concerning morphological accuracy, a comparison of Study 2 and Study 3 reveals that the IL is more systematically stable in unplanned speech than in planned, formal speech. In Study 2 the participants provided oral data and were relatively unable to plan their utterances, nor were they given any time to reformulate responses. In Study 3, however, the subjects produced written data

with ample opportunity for both planning and reformulating. Tarone (1983) has contended that looking at the vernacular (unplanned) style is the best forum for examining the IL development. The IL systematicity revealed in Study 2 suggests that its task provides a good forum for the study of IL development of complex morphosyntactic processes. The planning and reformulating allowed in Study 3 probably allowed knowledge sources other than those particular to the IL to contribute to the production of utterances. Thus, it is not surprising that Study 2 would show greater IL systematicity than Study 3.

Why is this not the case in syntactic performance? The same types of syntactic patterns were found in both Study 2 and Study 3. This discrepancy strongly suggests that, regardless of their level of development, syntactic processes are stable whereas morphological processes are the weakest and least systematic component of the Spanish IL after four semesters of FL instruction.

4.3.3 Discussion of the Data from Study 3.

Study 3 confirmed many of the conclusions drawn from the data in Study 2. Overall, the study confirmed that learners have the "potential" to produce complex utterances and accurately select mood after four semesters of university instruction. A comparison of the results of the written (i.e., Study 3) with the controlled oral task (i.e., Study 2) strongly suggests that learners can only be expected to process all relevant knowledge structures when they have time to plan

utterances (as opposed to when conversational or semi-planned oral speech is produced).

Regarding syntactic development, Study 3 shows that learners at this stage of development are much more likely to produce NPSs when more attention and working memory are available. Including those responses whose only error was either the omission of the **que** complementiser or an inappropriate complementiser (e.g., **para**), almost four-fifths of the subjects' responses in Study 3 appeared to have subordinate clauses. The strongest effect for greater processing time was manifested in the subjects' production of NPSs in subjunctive contexts.

Nevertheless, the subjects were still more likely to avoid producing NPSs when faced with providing subjunctive forms. Many more CONJs were produced instead of NPSs in subjunctive than in indicative contexts. Additionally, in indicative contexts, the subjects were least likely to provide NPSs in the context of *sensory evidence*. It was proposed that *sensory evidence* is not as reliable an indicator of truth value for the native speaker of English as it appears to be for the native speaker of Spanish. Thus, the English view that *sensory evidence* is an unreliable indicator of truth value (modals such as **can** often accompany verbs of *sensory evidence* in English) coupled with the Spanish view that it is indeed reliable (the indicative is invariantly produced in the context of *sensory evidence* in Spanish) may have lead the participants to avoid NPSs since such contradictions between the L1 and the TL would not have to be weighed in the selection of an embedded clause's mood.

Numerous MATs were also produced in Study 3, especially in indicative contexts. It was proposed above that, even for advanced speakers of Spanish,

adjacency violations are less inappropriate when a response needs an indicative form than when it needs a subjunctive form. Thus, the MATs in Study 3 may testify more so to the subjects' non-compliance with task specifications than to processing demands. The appearance of MATs nevertheless indicates that, for these learners, syntax is not an important consideration in the production of utterances.

Concerning morphological accuracy, Study 3 induced less systematic IL behavior than that which was exhibited in Study 2. Although no statistically significant differences in mood selection were observed upon comparison of Study 2 with Study 3, there was a decrease in mood selection accuracy in indicative contexts and in increase in subjunctive contexts. It appears, then, that in the same modality context the IL may use different decision making processes to select mood with varying amounts of time for planning.

Chapter 5: Conclusions

5.0 Introduction.

The purpose of this dissertation has been to measure the ability of Spanish FL learners to select mood accurately in NP clauses after four semesters of university level instruction. To that end, the research questions posed in section 1.4 are addressed. An investigation of the importance of the study of mood selection is followed by several suggestions for improving learners' abilities to process complex morphosyntactic constructs while at the same time making the Spanish curriculum more compatible with communicative approaches to FL instruction. Subsequently, the limitations of the study are described. Finally, the last section poses some questions to be addressed in future.

5.1 Answers to Research Questions.

The research questions will hopefully provide an understanding of the FL learner's mood selection process at the end of the typical two-year university sequence. The first two questions *describe* various aspects of the learners' performance. The last question attempts to account for, or *explain*, their performance. To that end, the data will be discussed from two points of view. First, to understand the learners' developmental status, Givón's "Discourse Hypothesis" will provide the framework in the context of which conclusions will

be offered. Second, to understand what occurs during actual production, we will refer to principles of cognition.

1. **After four semesters of university Spanish instruction, to what extent is the learner able to make mood selection appropriately in NP clauses?**

After two years of university FL study, accuracy of mood selection in NP clauses depends on the mood to be selected. When subjunctive forms are required they are not generally provided whereas indicative forms are. Mood selection accuracy in subjunctive contexts is especially rare in conversational tasks. A general pattern of behavior can be discerned from the data.

Propositions that are not true in the "real world" but rather in "hypothetical worlds" are [+irrealis] (Crystal, 1991). It was in the context of modalities such as *directives* and *uncertain belief/doubt*, which share the semantic feature [+irrealis], that the subjects were most likely to select the subjunctive.[1] These results are not surprising since even native speakers more strongly associate the subjunctive with [+irrealis] than with [-irrealis] propositions. Terrell and Hooper (1974) report that native speakers vary greatly between using the indicative and the subjunctive in evaluative contexts. Another factor that perhaps reinforces the association of the

[1] Events or states that one wants or hopes to see realized, as is the case in *directives*, can only occur in the future and so are not (yet) a part of the real world. Propositions modified by the modality of *uncertain belief/doubt* are viewed as being non-factual and therefore could only have truth value under alternative circumstances. On the other hand, subordinate clause propositions whose matrix clause is an *evaluative* (e.g., **No me gusta/me sorprende que Juan no venga hoy**) are assumed to have truth value in the real world and are, therefore, [+realis].

subjunctive with [+irrealis] is that, in most adverbial clauses, an aspect of mood selection that the subjects studied, the subjunctive is associated with events/states yet to be realized (e.g., **Te llamo cuando *pueda***).

With respect to the indicative, learners accurately provided it in most obligatory contexts. The data suggest, however, that there is a need to be cautious in concluding that these learners knew exactly when to use the indicative. When they had more time to plan utterances (i.e., in writing), performance was at times less accurate than when they had less time as in the controlled oral task; subjunctive forms were more often provided in the place of indicative forms. For example, whereas in the controlled oral task (Study 2) only approximately one-tenth of NP clauses whose matrix clauses denoted *belief* were expressed with the wrong mood (e.g., **Creo que Juan **esté* enfermo**), in the written task (Study 3) almost one-fourth had the wrong mood. Furthermore, many more subjunctive forms were provided in the context of the modality of *knowledge*, an epistemic modality that may express the strongest of affirmations, in Study 3 than in Study 2. Some interpretations to these findings are proposed below in response to the third question addressed by this dissertation.

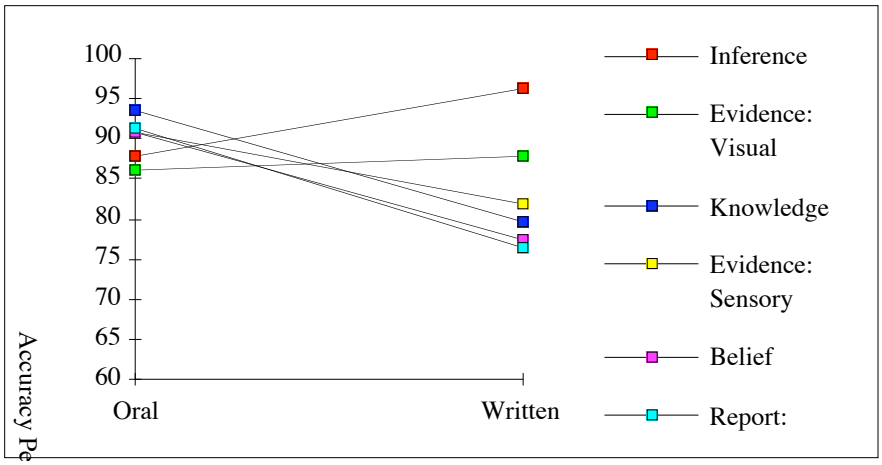
2. **How does the accuracy with which fourth semester students select for mood in NP clauses vary according to the degree to which their utterances are planned?**

As claimed by Givón (1979; 1990), subordinate structures and so the process of mood selection are more common in formal than in informal discourse.

Informal discourse (e.g., conversational speech) is replete with incomplete and single clause utterances. Presumably, this type of performance is greatly affected by the relative lack of time that speakers have to plan their utterances. Formal discourse (e.g., the written language), however, is generally a product of greater planning and contains much more "complex" phrase structure than does informal discourse. Consequently, the ability to distinguish between the functions of the indicative and the subjunctive is more likely to be observed in formal than in informal discourse.

In subjunctive contexts, planning has a positive effect on mood selection accuracy, while in indicative contexts, it has a negative effect. Graph 5 (adapted from Tables 4.3 and 4.10) compares the participants' ability to select the indicative in obligatory contexts between the controlled oral (Study 2) and the written (Study 3) tasks.

Graph 5.1. Mood Selection Accuracy in Indicative Contexts by Matrix Clause Modality and Style.

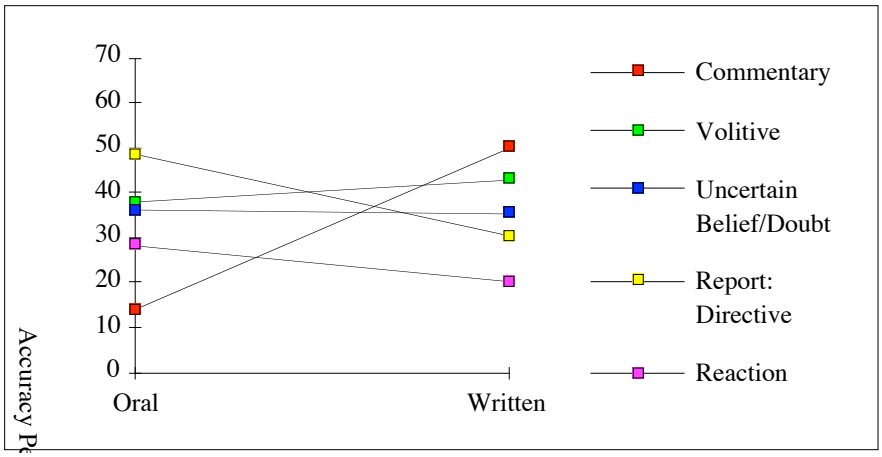


On the whole, mood selection accuracy was lower in indicative contexts in the written (Study 3) than in the oral (Study 2) task.

Mood selection accuracy increased in two of the six indicative modality categories in the written task, however. When the matrix clause denoted either *inference* or *visual evidence*, more indicative forms were provided in the written task than in the oral task.

Graph 5.2 compares mood selection accuracy in subjunctive contexts between Study 2 and Study 3, adapted from Tables 4.3 and 4.10.

Graph 5.2. Mood Selection Accuracy in Subjunctive Contexts by Matrix Clause Modality and Style.



Although the overall accuracy of mood selection was higher in the oral than the written task, the pattern of mood selection was less systematic in the former than in the latter. Mood selection accuracy in subjunctive contexts was found to be quite similar to that found in the speech of learners of Spanish as an L1 who have not achieved full competence (e.g., Gili Gaya, 1972). Overall, the subjunctive in this study was most likely to appear if an embedded clause proposition was [+irrealis]. No such pattern of mood selection could be discerned from the data in Study 3. For instance, in the oral task subjunctive forms were least likely to appear in the contexts of *evaluatives* as a whole, while in the written task the subjects were most likely to provide a subjunctive form in the context of *commentaries* and least likely to provide one in the context of *reactions*. In response to this dissertation's third question, it will be proposed that production, as opposed to developmental, variables can best account for the differences in the results observed between the two tasks.

3. **What developmental and cognitive explanations can be offered for the manner in which fourth semester students produce complex utterances and select mood?**

The data indicate that learners are at a developmental stage that is between the presyntactic and the syntactic stages. Although there is substantial evidence that syntactic stage operations are possible, learners still exhibit pragmatic mode operations due to limitations on what and how much information they can process. Since the so-called "cognitive deficit" (Cook, 1977) may impede the successful production of complex sentences, learners either employ unique techniques to process complex sentences or simplify their task.

In terms of *development*, after two years of university instruction learners have both the declarative and procedural knowledge necessary to operate at the syntactic stage. Both coordinate and embedded structures can be produced. Moreover, the propositional content of utterances is clearly not presyntactic as most have more than one argument (i.e., there is a higher ratio of nouns to verbs). Finally, it is not possible to say that learners at this stage of development make "no use of grammatical morphology," a behavior that Givón (1979:223) claims to be characteristic of presyntactic stage operations. Conversely, it would be an overstatement to propose that the learners participating in this study have fully achieved the syntactic stage. Sustained use of syntactic stage operations is impeded by various *production* factors, resulting in utterances that are syntactically simplistic and morphologically erroneous in various ways. Although verbs are regularly inflected for person and number, there is no sign of "elaborate

use of grammatical morphology," which Givón (1979:223) claims to be characteristic of syntactic stage operations.

What production variables can account for the data? It seems that three different strategies were used by the learners to produce complex syntactic utterances (i.e., with embedded structures):

(1) *Parataxis*: Concatenate the propositions of multiargumental utterances in the form of independent sentences.
(2) *Indicative default strategy*: Use an indicative form for any clause (i.e., matrix or embedded) that needs a finite verb.
(3) *Native-like performance*: Map bipropositional utterances onto matrix clauses containing embedded clauses and inflect verbs according to TL norms.

There are at least two manners in which the learners could have used the first strategy, parataxis, to encode bipropositional utterances. The first involves the placement of one proposition after another, as in (5.1).

(5.1) [**Yo sé**] [**tienes hambre**]

Another more sophisticated approach would be to utilize the **que** complementiser as a conjunction, as in (5.2). The result is a coordinate structure with the surface structure of a complex utterance.

(5.2) [**Yo sé**] **que** [**tienes hambre**]

With this strategy, both propositions are matrix clauses and therefore need indicative forms. If the second proposition (i.e., **tienes hambre**) required the indicative, the result would be acceptable; however, if a subjunctive form were needed, the utterance would be ungrammatical. Possible evidence for this strategy is found in the omissions of **que** complementisers. Furthermore, an analysis of the syntax and morphology of the subjects' *reports of directives* in Study 2 clearly implies the use of paratactic strategies. In such instances, imperatives were usually juxtaposed to matrix clauses, as in (5.3).

(5.3) [$_{S'}$ **El hombre dice**] [$_{S'}$ **dáme eso**]

Research on IL development of complex syntax also supports the hypothesis that learners often use parataxis as a way to produce complex utterances. Furthermore, the use of this strategy seems to be an indication of the status of one's syntactic development since parataxis is most prevalent when the IL is just beginning to produce complex sentences. Sato (1988) reports that when learners initially produce complex utterances, they usually juxtapose independent clauses to matrix clause chunks (e.g., **yocreoque** + **Juan es listo**). Additionally, Givón (1979) claims that paratactic concatenations of monopropositional utterances are common in the extended discourse of pidgin speakers (i.e., when they produce more than two or three propositions in a turn).

The second strategy for the production of complex utterances, the indicative default strategy, assumes that, in contrast to the strategy of parataxis,

bipropositional utterances are indeed related through embedding. With this strategy, the utterance is mapped onto a matrix clause that contains an embedded clause, just as in native-speaker production. The difference, however, is that mood is not selected for the embedded clause, but rather an indicative form is automatically encoded regardless of the matrix clause modality. The use of this strategy bypasses having to process the procedures used to select mood.

Literature on L2 cognitive development predicts that a strategy such as the indicative default strategy is used. According to Anderson (1985) and Ellis (1986), when a L2 learner's goal is to produce meaningful utterances, many production systems responsible for encoding grammatical elements are disregarded depending on their degree of proceduralization. The numerous instances of *inaccurate* mood selection in indicative contexts in Study 3 along with the generalizable pattern of inaccurate mood selection in subjunctive contexts suggest that, even after two years of study, the production systems responsible for such utterances require greater proceduralization. Furthermore, Samuels and Laberge (1983) argue that learners tend to divide into a number of sub-tasks the production of an utterance that has the potential to be too cognitively complex. Accordingly, as complex syntax is still difficult to process, with the indicative default strategy the embedded clause mood can be chosen independently of the matrix clause.

The third strategy, native-like performance, assumes that learners map bipropositional utterances onto the phrase-structure of NPSs. Additionally, with this strategy, learners process the procedures responsible for the selection of mood, as native speakers do.

Therefore, if one assumes that there was alternate usage of the second and third strategies (the indicative default strategy and native-like performance, respectively), the following observations could be explained:

(1) The phrase structure (i.e., syntax) of responses was more sophisticated in the written than in the oral task.

(2) Mostly indicative forms were used in both indicative and subjunctive contexts.

(3) In indicative contexts, morphological accuracy was poorer in the written task than in the controlled oral task.

(4) In subjunctive contexts, morphological accuracy was higher in the written than in the controlled oral task.

(5) In subjunctive contexts, the pattern of mood selection was less systematic in the written than in the controlled oral task.

In the controlled oral production task, it is likely that the learners struggled in the production of the complex syntax necessary for NPSs. Therefore, with their limited cognitive resources, the subjects may not have had time to attend to the production systems used to select mood in embedded clauses. After having struggled with the production of the complex NPS syntax, the indicative default strategy might have been the only means by which a subject could have provided a finite verb form for both the matrix and embedded clauses. This would account for the numerous indicative forms in both indicative and subjunctive contexts.

Since syntactic performance was slightly better in the written task, the production of complex syntax was probably not as arduous as in the other tasks. If so, the probability that the learners actually employ the production systems responsible for embedded clause mood selection is greater. Consequently, the observation that mood selection was more accurate in the written than in the controlled oral task should not be surprising. But how could this set of circumstances account for the poorer mood selection of accuracy in indicative contexts in the written than in the controlled oral task? Assuming that the indicative default strategy was indeed used less in the written than the oral task, one might expect to find more mood selection errors when mood was actually being selected than when the indicative was employed regardless of the modality context, as would be the case with the indicative default strategy. Moreover, if the selection of mood in these indicative contexts was truly being attended to, less than perfect performance would be expected from those who are working with an IL that is not fully developed.

In sum, FL learners of Spanish seem to benefit very little from the exhaustive manner in which the skill of mood selection is incorporated into their syllabus. All of the evidence suggests that, after two years of FL instruction, learners can only be expected to produce single clause utterances and coordinate structures in a spontaneous fashion. Learners still use simplistic morphosyntactic means of encoding utterances when no specifications are placed on the form of their output such as in conversational speech. Even in controlled tasks, many simple utterances are still produced. Moreover, even if complex syntax is

produced, accurate mood selection in subjunctive contexts is the exception and it is unclear whether mood is actually being selected in indicative contexts. In all, mood selection instruction to FL learners who have not completed two years of study seems to be somewhat of a futile endeavor. Learners are not ready to produce the relevant syntactic structures, and therefore nor are they ready to confront relevant morphological complexities.

These conclusions should not be limited to our understanding of complex sentences and instruction as they relate to NP clauses. If embedding in general is arduous for FL learners, then undo emphasis should not placed on the instruction of other constructs such as relative and adverbial clauses. Instructors need to be cautious with the amount of time that they spend on the morphosyntax of indirect speech as well. In short, perhaps Spanish FL instruction should concentrate on the "complexities" of "simple" utterances, such as object and reflexive pronouns, before it attends to the "complexities" of "complex utterances."

5.2 Mood Selection and the Spanish FL Curriculum.

Most pedagogues agree that the goal of FL instruction is to produce learners that are functionally capable in the FL (Medley, 1986; Tarone and Yule, 1990). This goal involves knowledge of how to complete tasks ranging from simple descriptions of oneself to more challenging ones, such as the cohesive narration of a series of events in the past tense. FL instruction must promote the development of communicative competence not only in terms of grammatical

knowledge but also with respect to strategic, discourse, and sociolinguistic knowledge (Canale and Swain, 1980). Pedagogues have noticed, however, that textbook designers still attempt to include most of the same traditionally taught structures even though communicative approaches subsume that fewer structures should be taught in favor of the development of linguistic aspects such as sociolinguistic competence. Moreover, they claim that many of the traditionally taught constructs are not necessary to attain basic levels of proficiency (Rutherford, 1980; Garrett, 1986; Finneman, 1987; Glisan and Drescher, 1993).

> The evidence from [our] study and previous research has clearly shown textbook grammar has not changed to reflect the philosophy of communicative, contextualized language teaching, and that the nature of grammar rules and explanations offered in textbooks is in many respects far removed from the reality of authentic speech. Perhaps it is now time for the profession to re-examine how grammatical structures are presented in texts and taught in the classroom. Are we paying lip service to the claim that we are no longer teaching grammar in isolation? (Glisan and Drescher, 1993:30)

The amount of time spent on mood selection in the Spanish FL curriculum does not appear to be in line with the goals of modern FL instruction either. Most would agree that the Spanish verb system, central to the production of even the simplest of sentences, is one of the most challenging grammatical aspects for

learners. In fact, Bloom (1991) contends that the verb is the core of all sentences and is the major preoccupation of the language learner. Some, however, are concerned that far too much emphasis has been placed on the study of mood selection (Terrell, Baycroft, and Perrone, 1987; Lee, 1987). As mentioned earlier, Terrell, Baycroft, and Perrone estimate that 40% of the first year Spanish FL syllabus is devoted to the study of mood selection. Although no one would say that mood selection should not be studied, some believe that it does not have to be presented exhaustively (Blake, 1985; Stokes, 1985). In a comparison of the structures presented in high school textbooks and those needed to achieve accepted proficiency standards, Goodwyn (1989) even proposes that knowledge of structures such as the subjunctive is not necessary.

Although knowledge of the Spanish verb system is necessary, what functional advantage does mood selection knowledge give the learner? One way to approach this question is to investigate the importance of complex phrase structure and the subjunctive in types of discourse that our students might ultimately emulate. In terms of oral production, Blake (1985) points out that native speakers of Spanish are confronted with mood selection much less than FL textbooks suggest. Furthermore, Givón (1990) presents data suggesting that complex structures -- and so contrasts between the indicative and the subjunctive -- are rarely found in oral speech. He does claim, however, that complex structures are necessary for formal language use, especially the written language. One would expect then that learners' reading assignments, the most formal and planned written discourse to which they are exposed, would contain numerous complex utterances and subjunctive forms and therefore partially account for the amount of

attention they receive in FL textbooks. Unfortunately, there is no available data on the frequency of embedded clauses, coordinate structures, and single clause utterances in written discourse.

To understand the importance of complex utterances and subjunctive forms in learners' models of formal discourse, an analysis of the syntactic and morphological structures used in two intermediate level Spanish FL readers and the complexity therein is presented below. Both readers were used by the students who participated in Studies 2 and 3. Each of the texts contains a different genre of formal discourse. Pasajes: Cultura (Bretz, Dvorak, and Kerschner, 1987a) consists of essays on current Hispanic affairs, characterized by academic/periodical prose. Pasajes: Literatura (Bretz, Dvorak, and Kerschner, 1987c) consists of unedited stories by Peninsular, Latin American, and North American authors (e.g., Pardo Bazán's "El indulto", García Márquez's "La siesta del martes"). Thirty randomly selected pages from each of the two texts were selected for analysis (N=60).

Regarding the syntactic analysis, each sentence was categorized for one of four types: those that contained (1) a single matrix clause, (2) an NP clause, (3) an adverbial clause, or (4) a conjoined (or coordinated) clause. In terms of morphology, each finite verb was classified for mood inflection (i.e., indicative or subjunctive). Table 5.1 shows the type of syntactic structures found in each of the two texts.

Table 5.1 Frequency of Syntactic Structures by Text Type.

Sentence Characteristics	Text Type: Literatura N	Literatura %	Cultura N	Cultura %	Totals N	Totals %
MAT Only	383	43.0	588	49.1	971	46.5
Imperative	43	4.8	71	5.9	114	5.5
Special Subjunctive Use (e.g., o sea)	5	0.6	1	0.1	6	0.3
With Subordinate Clause	306	34.3	374	31.2	680	32.6
With Coordinate Structure	154	17.3	164	13.7	318	15.2
Totals	891		1198		2089	

Complex sentences are no more common than those that have only a single clause. While 46.5% of all utterances contained only a matrix clause, 47.8% had more than a single proposition. Subordinate clauses were found in 32.6% of all utterances while 15.2% had coordinate structures.[2]

An impressionistic analysis suggests that what truly makes the written language complex is the use of elaborate noun phrases. The following demonstrates the constituent structure of two sentences from Bretz, Dvorak, and Kerschner (1987a:200).

> En [$_{NP}$ los Estados Unidos] hay [$_{NP}$ muchos grupos [$_{S'}$ que abogan por [$_{NP}$ una intervención gubernamental y social]]]. Proponen [$_{NP}$ medidas prohibitivas], como, por ejemplo, limitar [$_{NP}$ la venta de

□ [2] A two-way ANOVA was calculated for the interaction of type of syntax and text type. Although the results showed a significant effect for syntactic type complexity ($F(4,4) = 22.53$; $p=.0074$), the effect for text type was not significant ($F(1,4) = 2.63$; $p=.1795$). Thus, text type does not determine syntactic complexity. It is interesting to note that there were only slightly more matrix clauses in the literary than in the cultural text although the difference was not significant ($t=1.52$, $df=58$, $p=.1301$). This is surprising since literary texts contain much more direct discourse (e.g., quotes, dialogue) than that found in the academic/periodical genre.

alcohol] como [$_{NP}$ forma de luchar contra el alcoholismo] y, en [$_{NP}$ el caso de las drogas], [$_{NP}$ una mayor represión de tipo moral y social].

An analysis of multipropositional utterances shows that 32% contained coordinate structures while the remaining 68% had subordinate clauses. These figures are similar to those reported by Givón (1990). He found that 36% of all bipropositional sentences in academic/periodical discourse contain conjoined utterances whereas the remaining 64% had subordinate clauses.

A morphological analysis reveals that students are rarely confronted with utterances containing a subjunctive form. Overall, only 10.7% of all the finite verbs were subjunctive. Table 5.2 shows the distribution of indicative and subjunctive forms found in the texts.

Table 5.2. Overall Frequency of Mood Types by Text Type.

	Text Type					
Mood	**Literatura**		**Cultura**		**Totals**	
Indicative	942	90.1	1208	88.7	2150	89.3
Subjunctive	103	9.9	154	11.3	257	10.7
	1045		1362		2407	

Thus, the subjunctive mood is probably no more frequent in literary than in academic/periodical prose and, most importantly, the subjunctive rarely appears in

the literature that Spanish FL learners read. Table 5.3 shows the proportion of indicative forms to subjunctive forms in subordinate clauses.

Table 5.3 Frequency of Mood Types in Embedded Clauses by Text Type.

	Text Type					
Mood	**Literatura**		**Cultura**		**Totals**	
Indicative	293	78.3	251	82.0	544	80.0
Subjunctive	81	21.7	55	18.0	136	20.0
	374		306		680	

Subjunctive forms were used in only 20% of all embedded clauses.

In summary, this study shows that formal discourse, the type in which Givón predicts that complex utterances are most common, is not as replete with such structures -- and so subjunctive forms -- as Spanish FL textbooks imply. It does not seem reasonable to emphasize a construct if it appears relatively infrequently even in the construct's normal discourse domain. Therefore, to overemphasize the subjunctive in FL texts is to conflate its importance in the Spanish language as a whole. Furthermore, such emphasis may distort students' metalinguistic awareness of the Spanish language. That is, it is likely that if learners concentrate on a particular type of construct, they will assume that it is emphasized because it is highly functional, or useful. The data presented here

suggest that the subjunctive is not as functional as FL textbooks perhaps lead students to conclude.

5.3 Pedagogical Recommendations.

A strong interpretation of the above made conclusions would be that the study of mood selection in the first two years of the Spanish FL curriculum is not beneficial to our students. An alternative reading, however, might be that the manner in which these constructs are presented in the curriculum (e.g., when, how much) should be altered to better take into account what is known about the development of mood selection abilities in interlanguage. There are at least two practical reasons for not abandoning the study of these constructs. First, subordinate clauses and subjunctive forms do appear in both informal and formal language even though these constructs may not emerge as much as the amount of attention that Spanish textbooks apportion them would imply. Second, most FL pedagogues would agree that learners should be able to narrate in the present or the past, in oral and written tasks. Terrell, Baycroft, and Perrone (1987) have already proposed that subjunctive forms may be more frequent in narratives than other types of discourse (e.g., conversations, descriptions). Thus, a total abandonment of mood selection instruction might impede learners from meeting reasonable communicative goals.

Before positing how the study of mood selection should proceed, a clarification is necessary. The primary concern of curriculum designers should be

to foment communicative competence. This entails, although it is not limited to, the study of and opportunities to incorporate into one's competence knowledge of semantic fields (i.e., ranging from survival to specialized, academic topics), and discourse structure (e.g., asking/answering questions, narrating, describing, etc.), as well as grammar. Nevertheless, it is important to keep in mind that grammar study is only one aspect of a communicative agenda. Therefore, the following recommendations, although they relate to the study of grammar, are made under the assumption that they will be used to enhance syllabi promoting *communicative competence*. The details of how to incorporate these proposals into communicative activities will not be addressed, however.

Two principles are proposed here that syllabus designers might use to determine the role of complex utterances and mood selection in a typical four-semester communicative curriculum. One motivation for these principles originates from the concerns of pedagogues about the appropriateness of some grammatical structures studied within communicative syllabi. Another motivation for these principles is the data from the empirical studies presented in this dissertation.

As mentioned in several sections above, researchers such as Terrell, Baycroft, and Perrone (1987) and Stokes (1985) claim that the amount of time spent on mood selection in the Spanish curriculum may be unwarranted. They report that, in spite of having studied the subjunctive's uses in depth, learners' mood selection accuracy is surprisingly low.[3] Furthermore, according to Glisan

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[3] Terrell, Baycroft, and Perrone (1987) report that, with respect to mood selection, learner performance is quite accurate in tasks that only test grammatical knowledge (e.g., **Juan quiere que María _____ (cantar) para nosotros**). In

and Grescher (1993), some constructs that receive little attention in curricula are used quite frequently in conversation in comparison to others that receive a great deal of attention even though they appear relatively infrequently in conversation.[4] Therefore, the following principles might well serve Spanish educators.

Principle 1: During any given semester, the amount of material relating to the selection of mood for which students are responsible should be significantly decreased in favor of constructs that have more functional value.

Presumably, there are constructs deserving of greater emphasis that would better ensure that learners meet targeted proficiency goals. For example, for the sake of developing narrative skills, time devoted to the preterite and the imperfect might well be increased.

The data from this dissertation show that, after four semesters of university study, complex utterances are very difficult for learners to produce in speech. Moreover, learners are not entirely comfortable with complex sentences in writing. For this reason, since mood selection implies that an utterance be mapped onto complex phrase structure, students cannot be expected to have proceduralized mood selection production systems until they have begun to produce complex

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tasks in which communication is the goal, mood selection is quite poor, however. It is not rational to measure the success of a substantial component of a curriculum in a test of grammatical knowledge if instructional goals are to encourage communicative abilities.

[4] Accordining to Glisan and Grescher, demonstratives appear much more often in conversational speech than object pronouns even though the latter comprise a much greater portion of grammatical agendas than the former.

syntax with relative ease. Once students have had ample opportunities and time to develop the cognitive means to produce subordinate clauses, they can then concentrate on the dynamics of mood selection. As such, a second principle should be considered by curriculum designers.

Principle 2: Learners must learn to produce complex phrase structures before attempting to master constructs relevant to mood selection.

Initial semesters of the curriculum need to incorporate various mechanisms that promote the maturation of relevant syntactic abilities. The first initiative should be to encourage the production of monoargumental propositions and then multiargumental propositions. A subsequent phase must emphasize the production of coordinate structures. After these structures can be generated with relative ease, embedded clauses should become the focus of instruction. However, at this point careful attention should be placed on the types of complex utterances students must produce. During the time that learners are acquiring the ability to encode subordinate structures, they must not simultaneously confront mood selection.[5] After learners have had the opportunity to process numerous complex utterances, their attention should be directed towards aspects of mood selection. This last

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[5] This position does not assume that fossilization will occur if learners are allowed to produce utterances with indicative forms in subordinate clauses which, according to target language norms, require a subjunctive inflection (e.g., **No creo que *es buena idea**). There are better reasons to avoid such contexts. For example, teachers may feel compelled to correct such utterances, as in a composition, and thus direct the students attention to morphology rather than to the syntactic structure of their utterances.

stage should not present mood selection in an exhaustive nature, however. Rather, it should be tempered by consideration of the extent to which such constructs meet (a) immediate communicative goals and (b) some long term goals.[6]

Until what point should the curriculum promote the development of complex syntactic abilities? The ACTFL guidelines are commonly used to fashion FL syllabi, which makes it possible to reasonably approach the sequencing of constructs. For example, since the ability to make hypothetical claims is necessary to achieve an Advanced-Plus rating while the ability to narrate a series of events in the past is necessary to achieve an Advanced rating, a curriculum designer might produce a more tenable syllabus if the introduction of the preterite/imperfect preceded conditional sentences, such as **Si fuera presidente, bajaría los impuestos**. Thus, proficiency notions will be used below to propose how a communicatively based Spanish FL curricula should sequence the presentation of materials that can help students develop abilities relevant to complex syntax and mood selection. The following proposal derives from three sources: (1) proficiency based "course goals" for Spanish FL study as outlined in Medley (1986); (2) the ACTFL generic guidelines; and (3) the ACTFL guidelines for Spanish.

In Medley (1986), course objectives are proposed by FL several curriculum designers representing the languages of French, German, and Spanish. The objectives describe the types of behaviors students are to demonstrate at the end of

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[6] Of course, some time will undoubtedly need to be spent on equipping those students who will continue their development beyond the basic two-year sequence with complex structures since they will eventually be dealing with more formal types of discourse.

each course of a hypothetical four-semester sequence. For any course, objectives are proposed for each of the four skills: speaking, writing, listening, and reading. The goal statements for each course appear to imply a particular level of proficiency as prescribed by the ACTFL guidelines (e.g., Intermediate-Low for Semester 1 in speaking, Advanced for Semester 4 in writing).

These goal statements offer the syllabus designer a timetable on which to base expectations of university students. The goal statements alone, however, will not be sufficient to make such a proposal on mood selection since they describe general rather than specific behaviors. Thus, these general statements are insufficient to determine, for example, the point at which the study of syntax could be replaced by the study of mood selection. To illustrate, Medley reports the Semester 1 goals for writing: "The learner will be able to write with some accuracy on familiar topics in Spanish based on previously learned, simple material." While this statement clearly implies that learners should be at the Novice-High level in writing abilities by the end of the first semester, for the lack of precision in wording, it is not as revealing as the guideline statement itself:

> Able to write simple fixed expressions and limited memorized material and some recombinations thereof. Can supply information on simple forms and documents. Can write names, numbers, dates, own nationality, and other simple autobiographical information as well as a some short phrases and simple lists... (Omaggio, 1986:441)

From this statement, one can more readily infer that writing will contain, for example, mostly single clause sentences (i.e., "some short phrases and simple lists").

The generic guidelines are not language specific. Consequently, the Spanish ACTFL guidelines (as presented in Dorwick et al., 1991) will also be used to formulate the proposal presented here since they detail behaviors specific to the *Spanish* FL acquisition experience.

Using the speaking goals as an example, the following charts present the "goal statements" for the first four semesters of Spanish FL instruction with their assumed level of proficiency. Furthermore, they cite the Spanish guidelines with respect to syntactic and morphological abilities.

Figure 5.1 Spanish "Goals Statements" for Speaking from Medley (1986:30-31) and Interpreted Proficiency Level.

Speaking "Goal Statements" from Medley (1986:30-31)	**Corresponding Morphosyntactic Skills from Dorwick et al. (1991:11-23)**	**Probable Proficiency Level**
Semester 1 "The learner will be able to speak the language well enough to respond in a limited capacity within very predictable areas and with a pronunciation that is intelligible to native speakers used to dealing with foreigners."	Morphology: "There is some control of the present tense of regular and some common irregular verbs and of gender, number and subject-verb agreement." Syntax: None described.	Intermediate Low[7]
Semester 2 "The learner will be able to speak Spanish well enough to take an active part in a simple conversation or to communicate in simple sentences based on familiar content."	Morphology: "Some grammatical accuracy in basic constructions, e.g., subject-verb agreement, noun-adjective and gender agreement for familiar vocabulary, present tense of regular and some irregular verbs such as *tener, verbs, ser, estar, ir*. Can express future time by using *ir a* plus infinitive. May have a concept of past time, but can use only isolated past tense forms which have been learned as vocabulary items. " Syntax: " Syntax in most simple declarative sentences is generally correct including placement of most common adjectives. "	Intermediate Mid[8]

[7] According to the generic guidelines, Intermediate-Lows can respond to interlocutors' prompts. Moreover, the guidelines indicate that Intermediate-Lows are comprehensible to those who have experience with FL learners.

[8] Intermediate-Mids can "ask and answer questions and participate in simple conversations on topics beyond immediate needs" (Omaggio, 1986:435). Morphological errors are probably very common although systematicity is evident: "...the speaker struggles to create appropriate language forms" (Omaggio, 1986:435). Syntactic complexity still may not be evident since "utterance length increases slightly"; furthermore, Intermediate-Mids struggle with "even basic conversational strategies" (Omaggio, 1986:435).

Figure 5.1. Continued.

Speaking "Goal Statements"	**Corresponding Morphosyntactic Skills from Dorwick et al. (1991:11-23)**	**Proficiency Level**
Semester 3 "The learner will be able to initiate and sustain general conversation on familiar topics. Can provide some descriptions and recount events in sequence."	Morphology: "Can control the present tense of most regular and the common irregular verbs, and has some control of basic reflexive verbs. May be able to...occasionally use some knowledge of the preterite of some regular and common irregular verbs *(fui, fue, volvió),* but uses them only sporadically. " Syntax: "Extended discourse is largely a series of short, discrete utterances; cannot sustain coherent structures in longer utterances by the use of conjunctions or relative clauses."	Intermediate High[9]
Semester 4 "The learner will be able to speak Spanish well enough to generate and conjoin some longer sentences which narrate and describe and offer brief circumlocution and paraphrases on familiar and some novel topics."	Morphology: "Can narrate, describe, and explain in past, present, and future time...Can usually handle elementary constructions quite accurately such as the present tense of regular and irregular verbs, and preterite and imperfect forms. Can use imperative forms and can occasionally use the subjunctive in direct commands." Syntax: "Can link sentences together in limited discourse by using conjunctions and subordinate clauses.	Advanced[10]

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[9] According to the generic guidelines, Intermediate-Highs "initiate, sustain and close general conversation" (Omaggio, 1986: 435). The Spanish guidelines submit that Intermediate-Highs produce mostly single clause utterances although they "cannot sustain coherent structures in longer sentences by the use of conjunctions or relative clauses." (Dorwick et al., 1991:13).

[10] According to the generic guidelines, Advanced speakers "narrate and describe with some details, linking sentences together smoothly" (Omaggio, 1986: 435-6). They are also adept at circumlocution. Advanced speakers demonstrate good control of the present, preterite and imperfect paradigms. Some facility with the

In order to more easily understand my interpretation of these charts, the recommendations presented below are organized by curriculum year. Suggestions for first year curricula will be outlined followed by those for second year curricula.

By the end of the first semester, since the guidelines make no mention of syntactic sophistication, it seems reasonable to expect learners to produce the simplest of sentences, namely, monoargumental, single-clause utterances (e.g., **Yo canto**, **Carmen estudia hoy**). For the second semester, in order to produce "simple declarative sentences," a sensible goal might be for learners to produce multiargumental single-clause utterances. For instance, students would work towards the production of two or three arguments per proposition (e.g., **Mi *padre* tiene un buen *trabajo***, **(*Yo*) voy al *banco* con *María***). Furthermore, by working towards multiargumental utterances, learners would be primed for the production of subordinate clauses since, for example, nominal clauses usually occupy the position of lexical complements (e.g., **Quiero *una manzana*/*que me llames***).

Regarding morphology, a single principle should be considered in deciding the verbal paradigms to emphasize in the first year: Learners need to have good control of the concept of "conjugating." It is undeniable that a vital task of students of Spanish is to accustom themselves to simultaneously relating such notions such as person, number, tense, mood, and aspect by a single verbal inflection (e.g., **{-as}** means second person singular present indicative).[11]

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subjunctive paradigm is expected here as speech should contain both coordinate and subordinate clauses.

[11] According to cognitive psychologists, this task may be especially laborious for the native speaker of English. Some claim that native speakers of English pay little attention to the processing of verbs when they speak highly synthetic languages such as Spanish since they pay so little atention to the verb during the processing of English utterances (cf. Sharwood Smith, 1991). For example,

Therefore, during the first semester, to automate the mechanisms responsible for the inflection of verbs, learners should concentrate exclusively on the present indicative. This would limit the number of conjugations that learners would need to manipulate and so allow more opportunities for the proceduralization of the most elementary production systems of verbal inflections. To illustrate, by using only the present, learners would only need to attend to *person* and *number* whereas *tense*, *mood*, *and aspect* would remain constant (cf. Terrell and Salgués, 1979). Of course, errors should be expected. It is essential to keep in mind that *mastery of the concept of "conjugating"* is the chief imperative during the first semester and so progress must somehow be measured according to this standard. During the second semester, students should have ample opportunities to master the production of the "present tense of regular and some irregular verbs such as **tener**, **ser**, **estar**, **ir**." In this semester, learners should be introduced to the preterite and the imperfect. Teachers should not, however, expect these newest paradigms to be spontaneously or systematically productive in speech.

During the second year, measures should to be taken to foment syntactic complexity in learners' speech. By the end of the third semester, to produce "longer utterances" with "conjunctions or relative clauses," learners should be able to produce sentences with subordinate structures. Since the production of such utterances will probably be laborious and since a full repertoire of Spanish verbal paradigms (e.g., future, conditional, perfect tenses) will not be at the disposition of the student, however, complex utterances will often lack coherence (e.g., **Carmen**

English-Spanish bilinguals dominant in English are more prone to inflectional errors when speaking Spanish than are those who Spanish dominant when speaking English.

dice que *_va_ al parque where, by contextual variables, the utterance should be **Carmen dice que fue/ha ido al parque**). By the end of the fourth semester, learners should have had enough opportunities to produce biclausal utterances in speech with relative ease.

This last assertion may seem to be implausible in the context of the data presented in this dissertation. It was shown that the production of complex utterances is not likely to be frequent in the production of fourth semester students. It is my estimation, however, that many of the difficulties that FL Spanish learners experience stem from how they are taught to select mood. Since mood-selection instruction generally begins early in the second semester, learners are taught its morphological aspects at the same time that they are doubtlessly struggling with the phrase structure of complex utterances. Moreover, once the concept of mood selection has been introduced, instructional focus remains on the morphological rather than the syntactic aspects of mood selection. If, however, the development of syntactic abilities *vis-à-vis* embedding received specific attention before the development of relevant morphological abilities, the mastery of mood selection might proceed without being detained by the syntactic complexity of utterances.

As regards morphology, the curricular goals of the second year should assume that, for students going into the second year, "conjugating" is a productive phenomenon. Learners should at this point focus on how the verb relates time (i.e., tense) and point of view (i.e., aspect and mood). During the third semester, students should continue to have opportunities to use the present indicative in speech in order to establish a degree of control. It is also during this semester that learners should begin to demonstrate an understanding of the verb's temporal and

aspectual properties, as would be the case if they could display "some knowledge of the preterite" (Dorwick et al., 1991:22). During the fourth semester, since students should have a certain facility with subordination, they would work towards the incorporation of mood selection skills in their speech. The practice of mood selection in speech, however, should be limited to comments on present and future contexts (i.e., choosing between the *present* indicative and subjunctive rather than, for example, the *preterite/imperfect* and the *imperfect* subjunctive). In light of the "goal statements," knowledge of a few paradigms would both prepare students for further study and meet all of the above mentioned speaking objectives.

Of course, at any stage of development writing abilities can be expected to be more sophisticated than speaking abilities. Thus, the following principle might be adopted throughout the curriculum: During any given semester, learners should be able to produce in writing that which they should produce in speech in the subsequent semester. For instance, during the first semester, students should have opportunities to write multiargumental, single-clause utterances since these must be produced orally during the second semester. To further illustrate, by the end of the second semester, there should be mechanisms in the curriculum that force students to write sentences with embedded clauses.

How might curriculum designers coordinate the presentation of materials relevant to speech with those relevant to writing? Of course, pressure should not be placed on students to produce in speech what they can only be expected to produce in writing. Therefore, a clear distinction must be drawn between *constructs for use in speech* and *constructs for use in writing*. That is, for each morphosyntactic item introduced at any point of the curriculum, both teachers and

students should well understand whether the construct is meant for oral or written production tasks.

In sum, assuming that the "goal statements" presented in Medley (1986) are based on principles similar to those discussed above, the first year of instruction should concentrate on developing the learners' syntactic abilities in speech. The development of morphological abilities in speech must also be attended to although the main goal should be the mastery of the concept of "conjugating" and the present tense. Since a full two semesters is then spent on providing students a solid *foundation* of the Spanish morphosyntactic system, the second year teacher might expect oral development to proceed with a little more expediency. During the third semester, subordinate structures should appear in speech although since the subjunctive will not be expected to be a productive oral paradigm, learners should only need to produce complex utterances that require present indicative forms. During the forth semester, both subordinate clauses and limited mood selection abilities should be expected in speech.

Within this framework, the study of mood selection in the typical four-semester sequence cannot be exhaustive. It is reasonable to propose that many aspects currently taught (e.g., conditional clauses -- **Si tuviera más dinero, lo invertiría en la Bolsa**), if they are not taught as "writing skills," should be replaced by perusals of phenomena that might be more pertinent to achieving immediate communicative goals (e.g., those intended for the expansion of lexical or sociolinguistic knowledge). Many of the constructs introduced in first and second year textbooks are most relevant to the development of Superior level skills of writing or speech. For example, in the Spanish guidelines, a Superior speaker

"uses the present subjunctive appropriately most of the time and the imperfect subjunctive correctly about half the time" (Dorwick et al., 1991:13). To understand what is expected of Superior writer, a portion of the Spanish guidelines on Superior writing abilities is presented here:

> In addition to simple tenses, can use compound tenses to show time relationships among events to express ideas clearly and coherently, but errors are sometimes made when using complex structures, such as indefinite, relative, or demonstrative pronouns when a range of tenses is necessary within a relatively short discourse (Dorwick et al., 1991:21).

Clearly, even at the Superior level, native-like mood selection abilities and mastery of all relevant concepts are not implied in this scenario. And if they were required by the guidelines, a curriculum designer would be hard pressed to expect students to achieve a Superior rating by the end of four semesters.

In conclusion, the above discussion has proposed more reasonable expectations of students than those placed on students currently. Adherence to these recommendations might also improve the likelihood that learners will *eventually* be able to process complex utterances and select mood as native speakers do. Furthermore, since these proposed modifications have been fashioned according to an instrument that measures communicative rather than grammatical abilities (i.e., the ACTFL Proficiency Guidelines), it is implied that the overall amount of emphasis given to mood selection in the Spanish curriculum

should be decreased. By making expectations more realistic, there should be more time available for teachers to allow students opportunities for the development of all aspects of communicative competence.

5.4 Limitations of Study.

The limitations of this study are largely methodological in nature and so many of the conclusions on IL development and production in this dissertation must be considered tentative. This seems unavoidable since an examination of learner performance in the face of a task that involves numerous production systems and declarative knowledge structures cannot control for all variables relevant to production.

The conclusions on the developmental status of the IL with respect to complex morphosyntactic structures must be corroborated with additional data collection tasks. First, in order to completely understand how the learner's IL behaves when mood must be selected after four semesters of university instruction, various case studies are needed. It is widely accepted that much of learners' utterances contain formulaic speech. In order to understand how "chunks" function in complex utterances and their effect on mood selection, a number of speech samples would be needed from a smaller set of subjects or from the performance of a set of individuals in a longitudinal study.

The conclusions of this dissertation must also be considered tentative since subjects did not participate in a controlled test of whether they were embedding the

second proposition of a NPS to the first or whether they juxtaposed one to the other. To design such a test seems to be a problematic task in any event. A method for determining the underlying syntactic structure of utterances is needed. The study would need to determine if the **que** complementiser is indeed used as a complementiser or if it is used as a conjunction by learners at this stage of development.

5.5 Implications and Future Research.

This dissertation presents considerations for Givón's (1979, 1990) *Discourse Hypothesis*. As mentioned above, Givón claims that learners exhibit two consecutive stages of acquisition: (1) a *presyntactic stage*, in which syntactic complexity is limited to loose coordination, grammatical morphology is reduced or simplified, and propositions contain only a single argument (e.g., **John leaves**); and (2) a *syntactic stage*, in which subordinate clauses are common, grammatical morphology approximates target language norms, and propositions commonly comprise numerous arguments (e.g., **John gave the ball to Mary**). It is apparent from the conclusions made here that the utility of this model is limited, since it predicts behaviors to be found at two extreme stages of acquisition. The processing of morphosyntactic operations does not develop by means of "sudden jumps" from one stage to the next, but rather by incremental means (Ellis, 1990; Pienemann, Johnston, and Brindley, 1988).

From the data presented above, there appears to be an intermediate stage between the presyntactic and the syntactic stages, which might be termed the *approximate syntactic stage*. This stage is more advanced than the *presyntactic stage* in two ways: (1) the processing of subordinate clauses is possible, although only when working memory is not excessively burdened; and (2) propositions tend to contain numerous arguments. The *approximate syntactic stage* is similar to the *presyntactic stage* in that grammatical morphology is still generally reduced and simplified. Finally, it seems reasonable to investigate at some point in the future the possibility of identifying a number of different stages between the presyntactic and the syntactic stages.

A contrastive analysis of the manifestations of modality in English and Spanish might be very fruitful for both theorists and pedagogues. For instance, in this dissertation it came to light that, whereas *evidential* modalities in Spanish are probably considered reliable in terms of truth value since they are associated with the indicative mood and thus imply commitment to the truth value of propositions that they modify, many evidentials in English appear with the modal **can**. In sentences such as **I can't see it**, the modal seems to denote the subjective status of the proposition **I do not see it**. It may be that Spanish teachers take for granted that learners will associate such concepts as *evidence* and *belief* with [+realis].

The relationship between formal language study and performance also needs to be examined. The subjects in this study consistently mapped *evaluatives* onto coordinate structures even though these types of sentences were almost

always presented in NPSs in their texts and in their classroom practice. The question to be addressed, therefore, is whether learners will consistently use morphosyntactically simpler constructs than those to which they are exposed if the simpler construct can relate meaning as efficiently as the more complex one.

The results of this study suggest that the relationship between the use of the vernacular and the intent to collect data most reflective of the IL's developmental status at a given point of development warrants qualification. In terms of morphosyntactic development, while conversational speech may be best for the examination of relatively simple constructs, this study strongly suggests that researchers must account for the effects of attention and working memory in examinations of the development and production of complex morphosyntactic constructs. By looking at conversational speech (i.e., the vernacular), one could only conclude that the learner cannot produce complex structures after four semesters of study. However, in Study 2 the participants' behavior was quite systematic even though it was a controlled task (i.e., they were forced to produce NPSs) and production pressures were fewer than in Study 1 (i.e. they were given a period of time to respond).

Finally, the effects of the pedagogical recommendations on the study of mood selection in the Spanish curriculum are yet to seen. If the principles proposed here yield positive results, then by a reduction in the number of complex structures that students must study, the Spanish FL curriculum can be more

reflective of current pedagogical mandates. Moreover, if the principles prove fruitful, the study of complex structures will not have to be completely abandoned.

5.6 Final Comments.

It has not been my intent to chastise either FL instructors or pedagogues. Rather, I have taken up this endeavor because of the personal frustration that I have felt as a university instructor of Spanish. Many of my colleagues and I have jokingly dubbed our second and fourth semester Spanish courses as "The Spanish Subjunctive 101" and "The Spanish Subjunctive 102," respectively; a new criterion for mood selection seems to be presented each day during a semester. This is, of course, an exaggeration but the sentiment holds a degree of truth. As one who feels that language learning is a cumulative process, my own impression is that the amount of emphasis placed on the instruction of mood selection in the Spanish classroom creates an environment in which the overall development of proficiency is impeded. This seems to be especially true of the second semester of instruction. During the first semester, learners generally have only to contend with the present indicative and sometimes the preterite. In these courses, learners seem to experiment with the language and truly enjoy themselves. In the second semester, however, so much time seems to be spent on mastering the uses and conjugations of numerous verb paradigms that interest in learning the language fades exponentially through the course of the semester. This is probably attributable to a de-emphasizing of communicative skills in favor of grammatical skills. It is my

hope, therefore, that those who consider the data and claims presented of this dissertation will conclude that the instruction of mood selection should be scaled down significantly and take appropriate action.

Appendix 1: Controlled Oral Production Task

The following is a reproduction of the test materials used for Study 2, the oral elicitation task. Each elicitation was based on a response "context" consisting of a drawing, a written caption written, and a question posed aurally. There were forty-four response contexts, from which fifty-two questions were posed. Thirty-three of the questions were "target questions". That is, they targeted the production of an NPS whose matrix clause modality was to be one of the eleven detailed by Palmer (1986). Thus, the subjects were tested three times on their ability to select mood in the context of each of Palmer's modality types. The remaining nineteen questions were diversionary, intended to deter the participants from discerning the study's target structure.

The fifty-two questions are presented here in the same order in which they were posed during the actual test. Although most contexts aimed only at the production either a target structure or were diversionary, some contexts were used to elicit both a target structure and a diversionary response.

Each context below is presented with a description of the drawing found in the task, a list of the drawing's labeled items/people, the caption in addition to the question that was posed to the subjects based on the context. Moreover, if a question elicited a target structure, a sample answer of one of the subjects is provided.

During the test, the students were regularly reminded to base their answers to the question on the drawing and its accompanying caption. Most importantly, the participants were instructed to use both of the labeled items/persons in their

answers. The labels in conjunction with the context and the question were chosen to allow for both their propositional content (i.e., they had to be bipropositional) and the structure of responses (i.e., they had to contain both a matrix and an NP clause, an NPS).[1]

Context 1. TARGET QUESTION: ***Evidence: Sensory***

Labeled Items/Persons: **El empleado** and **El jefe**

Descrition of Drawing: An employee (**empleado**) stands in front of a group of workers. Off to the side of the workers, the boss (**jefe**) listens with a concerned look on his face.

Caption: No vamos a trabajar aquí más.

Question: ¿Qué escucha el jefe?

SAMPLE ANSWER: Subject A9: El jefe escucha que el empleado no trabaja.

Context 2. TARGET QUESTION: ***Evidence: Visual***

Labeled Items/Persons: **Los pasajeros** and **El director**

Description of Drawing: In a tour bus, a guide (**director**) is standing up in front of the tour's passengers (**pasajeros**), who sit in their seats.

Caption: ¿Por qué todos están aburridos?

Question: ¿Qué observa el director?

SAMPLE ANSWER: Subject B5: El director observa que los

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[1] Cf. Section 3.3.2 in Chapter 3.

pasajeros están aburridos.

Context 3. TARGET QUESTION: ***Report of a directive.***

Labeled Items/Persons: **Tía Rita** and **Luis**

Description of Drawing: A number of people are at a small party in someone's living room. In the foreground, a lady (**Tía Rita**) is talking to a small boy (**Luis**) with her hand on his shoulder.

Caption: ¿Por qué no me traes una bebida, Luis?

Question: ¿Qué pide Tía Rita?

SAMPLE ANSWER: Subject A22: Tía Rita pide que Luís traigo / traiga una bebida para ella.

Context 4. TARGET QUESTION: ***Report of a Declarative.***

Labeled Items/Persons: **La esposa** and **La dependienta**

Description of Drawing: In a department store, a man is looking at number of ties standing next to a clerk (**La dependienta**) in the foreground. In the background a lady (**La esposa**) is walking towards the man and the clerk

Caption: Perdón, señor, pero aquí viene su esposa.

Question: ¿Qué le informa la dependienta al señor?

SAMPLE ANSWER: Subject: B10: La dependienta informa / señor que la esposa viene.

Context 5. TARGET QUESTION: ***Reaction.***

Labeled Items/Persons: **La fruta**

Description of Drawing: In a supermarket, a man and a woman are

standing in front of a number of storage bins containing fruits and vegetables. The woman is holding a melon in her hand and the man some grapes.

Caption: Toda la fruta es horrible.

Question: Para Carlos, ¿qué es sorprendente?

SAMPLE ANSWER: Subject A22: Para Carlos es sor / sorprende que la fruta sea horrible.

Context 6. TARGET QUESTION: *Belief*.

Labeled Items/Persons: **El ladrón "Bugsy"** and **El policía**

Description of Drawing: This has a sequence of three drawings. In the first drawing a hooded man (**El ladrón "Bugsy"**) stands in front of a window with a hammer in his hand. In the second drawing the window is broke. In the last drawing a police officer (**El policía**) stands next to the window examining the area.

Caption: El Policía: "El ladrón es Bugsy"

Question: ¿Qué no duda el policía?

SAMPLE ANSWER: Subject B6: El policía no duda que el ladrón es bugsy.

Context 7. TARGET QUESTION: *Inference*.

Labeled Items/Persons: **El novio** and **María**

Description of Drawing: A young man (**El novio**) stands in front of a car with a guitar and a picnic basket. In the background a young woman (**María**), approaches the car wearing a tennis outfit and carrying a tennis racket. The young man has a surprised look on his face.

Caption: María: ¡No! Vamos a jugar al tenis.

Question:	¿Qué es evidente?
SAMPLE ANSWER:	Subject B20: Es evidente que María no va a jugar al tenis con el novio.

Context 8. TARGET QUESTION: *Knowledge.*

Labeled Items/Persons: **Juan** and **El agente**

Description of Drawing: In a travel agency, an agent (**El agente**) greets two who are approaching his desk. One of the clients (**Juan**) is offering his hand to shake with the agent.

Caption: Juan: Me llamo Juan.

Agente: Yo sé.

Question: ¿Qué sabe el agente?

SAMPLE ANSWER: Subject B18: El agente sabe que / el hombre se llama Juan.

Context 8. DIVERSIONARY

Question: ¿Adónde van Juan y su amigo probablemente?

Context 9. TARGET QUESTION: *Evidence: Sensory*

Labeled Items/Persons: **Clint**

Description of Drawing: There are two men in the drawing. One man (**Clint**) is sitting in a chair while the other is helping the other to put on a boot that seems to be quite small for him.

Caption: Clint: Esa bota no cabe.

Question: ¿Qué puede sentir Clint?

SAMPLE ANSWER: Subject A18: Clint puede sentir que la bota no cabe.

Context 10. DIVERSIONARY

Labeled Items/Persons: **Carlota** and **Los muchachos**

Description of Drawing: This drawing takes place in a baseball field. In the foreground two boys (**Los muchachos**) are running to catch a fly ball. With both of their hands extended toward the sky to catch the ball, evidently they are going to run into each other. In the background a girl (**Carlota**) with a concerned look on her face notices that the two are going to collide.

Caption: Carlota: ¡Dios mío! Van a chocar.

Question: ¿Qué están jugando los muchachos?

Context 10. TARGET QUESTION: ***Evidence: Visual***

Question: ¿Qué ve Carlota?

SAMPLE ANSWER: Subject: A23: Carlota ve que / muchachos van a chocar.

Context 11. TARGET QUESTION: ***Report: Declarative.***

Labeled Items/Persons: **El Sr. Gómez**

Description of Drawing: In a restaurant a man (**El Sr. Gómez**) stands at the cash register showing the cashier that his wallet is empty. The look on his face is one of anguish.

Caption: Pero, no tengo dinero ahora.

Question: ¿Qué le explica el Sr. Gómez?

SAMPLE ANSWER: Subject A11: Sr. Gómez explica que / no tiene dinero ahora.

Context 11. DIVERSIONARY

Question: ¿Cómo va a pagar la cuenta?

Context 12. TARGET QUESTION: *Knowledge*.

Labeled Items/Persons: **Roberto** and **Abuela**

Description of Drawing: A mother is explaining something to a small boy (**Roberto**). He envisions a lady (**Abuela**) entering his house with a look of surprise on her face as the family members present her with a birthday cake.

Caption: Mamá: Mañana hacemos una fiesta para Abuela.

Question: ¿Qué entiende Roberto?

SAMPLE ANSWER: Subject B5: Roberto entiende que mañana tienen una fiesta para su abuela

Context 13. DIVERSIONARY

Labeled Items/Persons: **Lisa** and **Eduardo**

Description of Drawing: In a gas station, a client (**Eduardo**) stands next to his car, which has a flat tire, talking to a mechanic (**Lisa**). He is obviously surprised that the mechanic is female.

Caption: Eduardo: Pero no arreglas carros tú...eres una mujer.

Question: ¿Dónde Trabaja Lisa?

Context 13. TARGET QUESTION: *Uncertain Belief/Doubt.*

Question: ¿Qué duda Eduardo?

SAMPLE ANSWER: Subject B12: Eduardo duda que Lisa arregle carros.

Context 14. TARGET QUESTION: *Report of a Declarative*.

Labeled Items/Persons: **Eduardo** and **El periódico**

Description of Drawing: In the living room of a house, a gentleman is sitting on a coach. His son (**Eduardo**) interrupts him from reading the newspaper (**El periódico**).

Caption: Eduardo: Papá, Tienes ahí el periódico de ayer.

Question: ¿Qué le informa Eduardo?

SAMPLE ANSWER: Subject A17: Eduardo informa su papá que él tiene el periódico de ayer.

Context 15. DIVERSIONARY

Labeled Items/Persons: **Margarita** and **El Sr. López**

Description of Drawing: In a small store a man (**El Sr. López**) is weighing some meat for a lady (**Margarita**) who stands in front of a counter giving instructions.

Caption: ¡Dos kilos por favor!

Question: ¿Qué le pide Margarita al Sr. López?

Context 16. TARGET QUESTION: *Report of a Directive*.

Labeled Items/Persons: **El perro** and **El carnicero**

Description of Drawing: A dog (**El perro**) is running from a man (**El carnicero**) with a piece of meat in his mouth.

Caption: ¡Ven aquí con esa carne!

Question: ¿Qué le grita el carnicero?

SAMPLE ANSWER: Subject: B20: El carnicero grita al perro que [sic] vuelva la carne.

Context 16. DIVERSIONARY

Question: ¿Por qué está corriendo el perro?

Context 17. TARGET QUESTION: *Evidence: Visual*.

Labeled Items/Persons: **Roberto**

Description of Drawing: In the background a number of young soldiers are standing in line to have their hair cut. A barber is shaving the head of one young man bald. In the foreground another young man (**Roberto**) looks with horror in a mirror at his bald head.

Caption: ¡Ay, no tengo más pelo!

Question: ¿Qué ve Roberto en el espejo?

SAMPLE ANSWER: Subject B24: Roberto puede ver / que no tiene más pelo en el espejo.

Context 18. DIVERSIONARY

Labeled Items/Persons: **Mamá** and **Juanito**

Description of Drawing: A mother (**Mamá**) and her son (**Juanito**) are sitting at a dinner table. Apparently annoyed, she points to the child's plate as if to indicate that he cannot leave the table until he has finished his meal. The young boy looks worried.

Caption: Tienes que acabar todo.

Question: ¿Por qué Juan no puede jugar?

Context 19. TARGET QUESTION: *Report of a Directive*.

Labeled Items/Persons: **Las muchachas** and **El Sr. Sánchez**

Description of Drawing: Two apartments are shown from the point of view of outside. The view of the two apartments is from each of their outside windows. In one apartment a number of young girls (**Las muchachas**) are dancing. In the other apartment a lady with her hands covering her ears stands next to her husband (**El Sr. Sánchez**). The husband is dialing a number on the telephone with a look of anger.

Caption: El Sr. Sánchez: Deben bajar esa música.

Question: ¿Qué va a ordenar el señor Sánchez?

SAMPLE ANSWER: Subject A17: El señor Sánchez ordena que las muchachas bajen la música.

Context 20. TARGET QUESTION: *Evidence: Sensory*.

Labeled Items/Persons: **Los García** and **La ventana**

Description of Drawing: In a small apartment, a couple (**Los García**) is sitting on a sofa reading books and looking at an open window (**La ventana**) through which a passing breeze raises the curtains. The couple appear to be getting cold.

Caption: NONE

Question: ¿Qué pueden sentir los García?

SAMPLE ANSWER: Subject B15: Los. García pueden sentir que la ventena está abierto.

Context 21. TARGET QUESTION: *Inference*.

Labeled Items/Persons: **La Ciudad de México** and **Colima**

Description of Drawing: Two drawings are presented. The first drawing, entitled **La Ciudad de México**, depicts a city with a great deal of pollution and smog. The second drawing, entitled **Colima**, is much cleaner and some of its inhabitants are shown cleaning a park.

Caption: NONE

Question: ¿Qué es obvio para ti?

SAMPLE ANSWER: Subject B3: Es obvio que Ciudad de México necesita reciclar.

Context 22. DIVERSIONARY

Labeled Items/Persons: **Antonio**

Description of Drawing: The setting is a bathroom. In the foreground a lady is washing her hair in the sink. In the background a man (**Antonio**) is seen running frantically into the bathroom with a concerned look on his face, which gives the impression that he is in a hurry.

Caption: ¡Ay, estoy tarde!

Question: ¿Qué necesita hacer Antonio?

Context 23. TARGET QUESTION: *Reaction*.

Labeled Items/Persons: **Los padres** and **Carmencita**

Description of Drawing: In the foreground a small child (**Carmencita**) is sitting on a sofa with a man who is probably her grandfather. She is watching television while the grandfather is looking back and speaking to two people (**Los padres**). The mother is pointing to a clock that indicates that it is nine-thirty.

Caption: Mamá: Ella NO debe ver televisión

ahora.

Question: ¿De qué están preocupados los padres?

SAMPLE ANSWER: SUBJECT B6: Los padres están preocupados que Carmencita mire la televisión.

Context 24. TARGET QUESTION: *Volition*.

Labeled Items/Persons: **Carlitos**

Description of Drawing: In a doctor's office a small boy (**Carlitos**) is sitting on a chair and talking to a doctor who is looking at a thermometer. The small boy looks very worried.

Caption: Carlitos: No, no necesito ir al hospital.

Question: ¿Qué no es necesario?

SAMPLE ANSWER: Subject B10: No es necesario que Carlitos / vaya al hospital

Context 25. TARGET QUESTION: *Volition*.

Labeled Items/Persons: **La madre** and **Juanito**

Description of Drawing: A lady (**La madre**) and a young boy (**Juanito**) are talking in the living room of a house.

Caption: Por favor, sólo una galleta, Mamá

Question: ¿Qué espera Juanito?

SAMPLE ANSWER: Subject B16: Juan espera que su madre / dé una / galleta

Context 26. TARGET QUESTION: *Volition*.

Labeled Items/Persons: **El jefe** and **La empleada**

Description of Drawing: A man (**El jefe**) is handing an envelope with money to a lady (**La empleada**) seated at a desk. The boss is imagining the lady despoiting the money in a bank

.

Caption: ¿Puedes mandar esta carta?

Question: ¿Qué quiere el jefe?

SAMPLE ANSWER: Subject B6: El jefe quiere que la empleada mande esta carta.

Context 27. DIVERSIONARY

Labeled Items/Persons: **Toni** and **La silla**

Description of Drawing: A man (**Toni**) is atempting to hold onto a chair (**La silla**) to prevent himself from falling since he has apparently slipped.

Caption: ¡Ay no!

Question: ¿Por qué se cae Toni?

Context 28. TARGET QUESTION: *Inference.*

Labeled Items/Persons: **El sargento** and **Roberto**

Description of Drawing: A man in a sargent's uniform (**El Sargento**) is seen

yelling at a young man and holding a clock that indicates it to be five in the morning. The young man (**Roberto**) seems to be getting out of bed with a tired look on his face.

Caption: El Sargento: Entonces, ¡te gusta dormir mucho! ¿eh?

Question: ¿Qué concluye el sargento?

SAMPLE ANSWER: Subject A12: El sargento concluye que / Roberto / está muy [sic] periozo.

Context 29. DIVERSIONARY

Labeled Items/Persons: **El policía** and **La vieja**

Description of Drawing: A police officer (**El policía**) is talking to an elderly lady (**La vieja**) who sits in her car listening to the officer's advice.

Caption: NO debes manejar tan rápido.

Question: ¿Por qué está enojado el policía?

Context 30. TARGET QUESTION: *Uncertain Belief/Doubt*

Labeled Items/Persons: **Antonio** and **Ana**

Description of Drawing: A man (**Antonio)** is running from the front door of his house to his car with a suit on. His wife (**Ana**) notices that the briefcase he is carrying is open and various papers are falling out as he runs.

Caption: Ana: No va a ser un buen día para Antonio

Question: ¿Qué no cree Ana?

SAMPLE ANSWER: Subject B7: Ana no cree que / Antonio // era / eras / vaya a ser un buen día.

Context 31. DIVERSIONARY

Labeled Items/Persons: **El príncipe** and **La princesa**

Description of Drawing: A prince (**El príncipe**) sits in a throne while a young lady (**La princesa**) kisses him on the cheek.

Caption: NONE

Question: ¿Qué está haciendo la princesa?

Context 32. TARGET QUESTION: ***Commentary***

Labeled Items/Persons: **La familia de Ana**

Description of Drawing: In a living room that is poorly lighted, a lady sits on a sofa with a disgusted look on her face. She watches a young boy sitting in front of a television and a man about her same age in a recliner chair drinking a beer.

Caption: Ana: Mi familia no hace nada interesante.

Question: ¿Qué es triste?

SAMPLE ANSWER: Subject B7: Es triste que la familia de Ana no / no haga nada interesante.

Context 33. DIVERSIONARY

Labeled Items/Persons: **Carla**

Description of Drawing: In a bedroom a young lady (**Carla**) is putting on work clothes. She is wearing a blouse and a skirt.

Caption: Hoy es un día importante para mí

Question: ¿Por qué se viste elegante hoy?

Context 34. TARGET QUESTION: ***Uncertain Belief/Doubt***

Labeled Items/Persons: **El niño**

Description of Drawing: An elderly lady, who is apparently somewhat confused, looks at a baby (**El niño**) in a highchair. On the highchair's tray is a birthday cake with numerous candles.

Caption: ¿*Él* tiene catorce años?

Question: ¿Qué no es cierto?

SAMPLE ANSWER: Subject B5: No es cierto que el niño / tenga 14 años.

Context 35. DIVERSIONARY

Labeled Items/Persons: **El sr. García** and **El ladrón**

Description of Drawing: On a city street, a man (**El sr. García**) is seen being robbed being robbed of a package that he is holding by a tall man (**El ladrón**).

Caption: El sr. García: ¡No hagas eso!

Question: ¿Qué hace el ladrón?

Context 36. DIVERSIONARY

Labeled Items/Persons: **Alfredo**

Description of Drawing: A man (**Alfredo**) is eating soup apparently unaware that there is a fly on his spoon.

Caption: NONE

Question: ¿Qué hay en la sopa?

Context 36. TARGET QUESTION: *Commentary*

Question: ¿Qué no es una buena idea?

SAMPLE ANSWER: Subject B16: No es buena idea que Alfredo coma la sopa.

Context 37. TARGET QUESTION: *Belief*.

Labeled Items/Persons: **El jefe**, **La mujer rica**, **Carlos**, **Greta**, **Alberto**, and **María**

Description of Drawing: This drawing has six different potraits of various men and women. Some of their faces look more suspicious than others.

Caption: Una de estas personas es el criminal.

Question: ¿Qué piensas?

SAMPLE ANSWER: Subject B3: Yo pienso que Carlos es un criminal.

Context 38. DIVERSIONARY

Labeled Items/Persons: **Papá** and **Mamá**

Description of Drawing: In the foreground a couple (**Papá** and **Mamá**) is wading into the ocean. In the background a shark's fin is seen. The animal seems to be coming towards that couple.

Caption: NONE

Question: ¿Qué quieren hacer Mamá y Papá?

Context 38. TARGET QUESTION: *Commentary*

Question: ¿Qué es peligroso?

SAMPLE ANSWER: Subect A1: Es peligroso que naden en el mar.

Context 39. DIVERSIONARY

Labeled Items/Persons: **Carmen** and **Los padres**

Description of Drawing: A young lady (**Carmen**) is sitting at a

dining room table writing a letter and thinking about her parents (**Los padres**). On the table in front of her is an open box that contains a blouse.

Caption: Carmen: ¡Qué regalo más bonito!

Question: ¿Qué está escribiendo Carmen?

Context 40. DIVERSIONARY

Labeled Items/Persons: **Los estudiantes** and **El profesor**

Description of Drawing: A group of students (**Los estudiantes**) sit bored in their chairsin a classroom. In front of the class is a professor (**El profesor**) sitting behind a desk. All of the students are thinking of another class in which the professor is very lively and cheerful.

Caption: El otro profesor es mucho más interesante.

Question: ¿Qué piensan los estudiantes del profesor nuevo?

Context 41. TARGET QUESTION: *Reaction*.

Labeled Items/Persons: **Manolo** and **El brazo**

Description of Drawing: In a locker room, a number of athletes sit exhausted in some benches. One of the athletes (**Manolo**) has his arm (**El brazo**) in a sling.

Caption: ¡Ay! ¿Qué voy a hacer con mi brazo roto?

Question: ¿De qué está triste Manolo?

SAMPLE ANSWER: Subect A16: Es el triste que Manolo no juegue al fútbol porque es brazo es / [sic] limpia.

Context 42. DIVERSIONARY

Labeled Items/Persons: **Antonio**

Description of Drawing: A man (**Antonio**) has just sat up in his bed. With a look of fear on his face, he looks at his clock that indicates that it is eight thirty.

Caption: ¡Dios mío! Voy a llegar tarde otra vez!

Question: ¿Cómo está Antonio?

Context 42. TARGET QUESTION: *Belief*.

Question: ¿Qué cree Antonio?

SAMPLE ANSWER: Subject A18: Antonio cree que va a llegar tarde a su trabajo.

Context 43. TARGET QUESTION: *Knowledge*.

Labeled Items/Persons: **La chica** and **Norman**

Description of Drawing: This drawing consists of three scenes, all based on the Alfred Hitchcock movie Psycho. In the first a young lady (**La chica**) is seen walking into the bathroom. In the next scene a man dressed as a woman (**Norman**) enters the hotel room with a knife in his hand. In the last scene the woman is scene showering in the foreground while behind the shower curtain a shadow of the man is seen with his arm holding the knife raised in the air.

Caption: NONE

Question: ¿Qué no sabe la chica?

SAMPLE ANSWER: Subject B16: La chica no sabe que Norman va a / a su casa.

Context 44. DIVERSIONARY

Labeled Items/Persons: **El Sr. Sánchez**

Description of Drawing: A man (**El Sr. Sánchez**) standing next to his wife looks out their window a window from their living room. He is perplexed as to why their car is not outside.

Caption: NONE

Question: ¿Qué no sabe el Sr. Sánchez?

Appendix 2: Written Task and Sample Answers

The following is a reproduction of the narratives/stories and questions of the written data collection task (i.e., Study 3). For each "Story", there were a set of forty-four questions to which the subjects were to respond with complete sentences. Twenty-four of the questions were diversionary, designed to deter the participants from discerning the type of construction that the task elicited.

Twenty of the questions are "TARGET QUESTIONS". This is to let the reader of this dissertation know which of the questions targeted the production of NPSs, with additional information as to the matrix clause modality type targeted. Of course, the student questionnaire gave no indication that a question was targeting a NPS or a particular matrix clause modality whatsoever. Each of the "TARGET QUESTIONS" is followed by an example of an answer provided by one of the subjects, termed a "SAMPLE ANSWER."

The subjects completed the task with a computer program that provided the stories/narratives and their questions. The program also stored the subjects' answers. Each of the stories/narratives was presented on one or two screens. The questions were presented on distinct screens. Each question allowed the subjects to re-examine the story/narrative only once.

Story 1

piso = floor / **escaleras** = stairs / **subir** = to go up / **dependienta** = store attendant

Andrés está en una tienda buscando un regalo para su novia. Mañana es el cumpleaños de ella. Andrés le pregunta a una dependienta dónde están los suéteres. La dependienta le dice «Están en el segundo piso.» Andrés le dice «Gracias» y pregunta «y ¿Dónde están las escaleras?». La dependienta le dice «Ay no señor, eso no es necesario. Ud. puede usar nuestro elevador.» Andrés le dice «Gracias» otra vez y va para el elevador.

---

1. ¿Dónde está Andrés?

2. TARGET QUESTION: *Report of a declarative*.

   Use in your answer the following phrase(s): **el segundo piso**
   ¿Qué le informa la dependienta a Andrés?

   SAMPLE ANSWER:

   Subject #13 La dependienta informa Andres que los suerteres están en el segundo piso.

3. TARGET QUESTION: *Volitive*

   Use in your answer the following phrase(s): **Andrés** and **escaleras**
   ¿Qué no es necesario?

   SAMPLE ANSWER:

   Subject #10 No es necesario que Andres suba en las escaleras.

4. ¿Cómo va a subir Andrés?

Story 2

Carla y María están hablando en la cafetería de la fábrica donde trabajan; trabajan para «Chrysler». El jefe, el Sr. Gómez, está en otra parte de la cafetería. Desafortunadamente, ellas no lo ven mientras están hablando...

Carla: No me gusta el Sr. Gómez. Es muy antipático.
María: ¿Tú crees?
Carla: Sí, es muy peresozo y siempre hace comentarios sobre mi trabajo. Dice que no soy buena secretaria. Pero, yo hago casi todo su trabajo en la oficina.
María: Sabes que yo soy su sobrina, ¿no?
Carla: Ay, perdón, no sabía. Por favor, María, no puedes decirle nada. ¿Está bien?
María: Está bien. Pero debes pensar antes de hablar de otras personas.

En ese momento, el jefe viene a la mesa...

Jefe: Perdón, Carla. ¡Con que yo soy antipático!"
Carla: Ah, ah, ah....

---

5. ¿Quién es María?

6. TARGET QUESTION: *Report of a directive*.

   Use in your answer the following phrase(s): **María** and **nada**
   ¿Qué le pide Carla?

   SAMPLE ANSWER:

   Subject #4 Carla pide que María no diga nada a su jefe.

7. ¿Está María feliz o enojada?

8. TARGET QUESTION: *Evidence Sensory*

   Use in your answer the following phrase(s): **antipático**
   ¿Qué acaba de oír el jefe?

   SAMPLE ANSWER:

   Subject #14 El jefe acaba de oír que es antipático.

Story 3

Julio y el Restaurante Alemán: Parte 1

Julio está en un restaurante alemán. Le encantan cosas como «sauerkraut» y «bratwurst» y, por supuesto, «cerveza». Pero, este restaurante alemán NO es muy típico. El camarero viene y le pregunta a Julio qué quiere para comenzar.

---

9. ¿Dónde está Julio?

10. TARGET QUESTION: *Knowledge.*

    Use in your answer the following phrase(s): **restaurante típico**
    ¿Qué no sabe Julio?

    SAMPLE ANSWER:

    Subject #21 Julio no sabe que no es un restaurante típico.

Julio y el Restaurante Alemán: Parte 2

Camarero: Buenas tardes, señor.
Julio: Buenas tardes. Me gustaría una cerveza para comenzar.
Camarero: ¿No sabes? Perdón, señor. Pero no servimos cerveza en este

restaurante.
Julio: ¿Qué? Pero eso es absurdo. Quiero hablar con el gerente.

---

11. TARGET QUESTION: *Report of a declarative*.

    Use in your answer the following phrase(s): **cerveza**
    ¿Qué le informa el camarero a Julio?

    SAMPLE ANSWER:

    Subject #12 El camarero informa Julio que no sirven cerveza aquí.

12. TARGET QUESTION: *Uncertain Belief/Doubt*.

    Use in your answer the following phrase(s): **restaurante**
    ¿Qué no cree Julio?

    SAMPLE ANSWER:

    Subject #11 No cree que no sirva cerveza aquí

13. Use in your answer the following phrase(s): **gerente**
    ¿Qué quiere hacer Julio?

Julio y el Restaurante Alemán: Parte 3

pesas = weights

Julio se levanta de su silla y va a la cocina para pedir una cerveza...PERO...En la cocina está una mujer que se llama Petra. Es 6'5" y estaba en el equipo olímpico de pesas cuando vivía en Alemania Oriental. Petra no es una persona típicamente feliz.

---

14. TARGET QUESTION: *Commentary*.

Use in your answer the following phrase(s): **Julio** and **Cocina**
¿Qué es peligroso?

SAMPLE ANSWER:

Subject #2 Es peligroso que Julio vaya a la cocina.

15. ¿Por qué?

Julio y el Restaurante Alemán: Parte 4

mientras tanto = meanwhile / **por dentro** = inside / **sonido** = sound / **gritos** = shouts / **terremoto** = earthquake

Mientras tanto...El camarero todavía está en el comedor. Ve que Roberto va a la cocina.

Camarero: Ese cliente es un idiota.

En un momento, el camarero escucha un sonido terrible que viene de la cocina. Parece que hay una lucha por dentro. También hay muchos gritos de sufrimiento y el restaurante mueve como en un terremoto

Camarero: ¡Ay no! Greta está trabajando hoy.

---

16. TARGET QUESTION: *Evidence: Sensory*.

Use in your answer the following phrase(s): **restaurante**
¿Qué puede sentir el camarero?

SAMPLE ANSWER:

Subject #16 El camarero siente que Greta está trabajando hoy.

Story 4

piso = floor / **vecino** = neighbor / **pelear** = to fight

En un cuarto hay una mujer muerta en el piso. El gran detective Jorge está hablando con un policía en el cuarto.

Policía:	Sí, Jorge. Los vecinos dicen que ella y su novio peleaban todas las noches.
Jorge:	¿Hablaste con el novio?
Policía:	Sí, pero él no está en casa. En realidad, no podemos encontrarlo en ningún lugar
Jorge:	Bueno, es el novio.

---

17. ¿Quién es Jorge?

18. TARGET QUESTION: *Inference*.

    ¿Qué concluye el detective?

    SAMPLE ANSWER:

    Subject #32 Concluye que el novio es el criminal.

Story 5

Manuel, un muchacho de 16 años, está mirando televisión solo en su casa un viernes por la noche. A Manuel le gusta una muchacha en su clase de física que se llama Angela. Pero, pobre Manuel no tiene confianza para llamarla. De repente, suena el teléfono y Manuel lo contesta. Increíblemente, la muchacha Angela está en la linea.

Manuel: Aló.

Angela: ¿Está Manuel?
Manuel: Sí, soy yo.
Angela: Manuel, estoy haciendo mi tarea de física y tengo muchos problemas. Puedes venir a mi casa para estudiar conmigo. Tú eres el muchacho más inteligente de la clase.
Manuel: ¿Qué? ah...Sí, sí, sí...estaré ahí en dos minutos. Adiós.

---

19. TARGET QUESTION: *Reaction*.

    Use in your answer the following phrase(s): **Angela** and **llamar**
    ¿Qué le sorprende a Manuel?

    SAMPLE ANSWER:

    Subject #7 Le sorpende a Manuel que Angela se llame por teléfono.

20. ¿Qué va a hacer Manuel esta noche?

Story 6

dañado = damaged

Elena y Antonio están casados. Elena acaba de regresar de su trabajo y tiene malas noticias para Antonio.

Elena: ¡Ay Antonio! Lo siento mucho.
Antonio: ¿Qué pasó?
Elena: Tuve un accidente con el nuevo Porsche.
Antonio: ¡Ay no! Bueno, ¿estás bien? Eso es lo más importante.
Elena: Sí.

---

21. ¿Dónde están Antonio y Elena?

22. TARGET QUESTION: *Reaction*.

    Use in your answer the following phrase(s): **carro** and **dañado**
    ¿De qué está triste Elena?

    SAMPLE ANSWER:

    Subject #38 Elena está triste de que su carro esté dañado.

23. TARGET QUESTION: *Volitive*

    ¿Qué espera Antonio?

    SAMPLE ANSWER:

    Subject #5 Antonio espera que Elena esté bien.

24. ¿Qué piensas que va a decir Antonio ahora?

Story 7

cabina = cabin

En un 747...

Tres pilotos están en la cabina de un avión cuando de repente entra un pasajero que quiere ver cómo funciona el avión.

Piloto: ¡Oiga! Usted no puede entrar aquí. Necesita salir de aquí ahora mismo.

---

25. Use in your answer the following phrase(s): **avión**
    ¿Quién entra a la cabina?

26. TARGET QUESTION: *Report of a directive*.

¿Qué manda el piloto?

SAMPLE ANSWER:

Subject #20 El piloto ordena que el pasajero salga ahora mismo.

Story 8

En una sala hay dos personas: una madre y su hija de veinte años. La madre es muy bonita y la muchacha también. Están mirando fotos de cuando la hija era joven.

La hija:	En esta foto soy tan pequeña. ¿Cuántos años tenía yo?
Madre:	Tenías aproximadamente tres años.
La hija:	¡Ay! En esta foto soy tan flaca. Se me olvidó que yo era flaca.
Madre:	Todos cambiamos, mi hija.

---

27. ¿Qué miran la madre y la hija?

28. TARGET QUESTION: *Evidence: Visual*.

    Use in your answer the following phrase(s): **flaca**
    ¿Qué ve la hija en la foto?

    SAMPLE ANSWER:

    Subject #4 La hija ve que ella era flaca cuando era niña.

29. TARGET QUESTION: *Inference*.

    Use in your answer the following phrase(s): **la hija**
    ¿Qué es obvio para Ud.?

SAMPLE ANSWER:

Subject #37 Es obvio que ahora la hija no es flaco.

Story 9

obedecer = to obey

Una muchacha está hablando con su papá. La muchacha tiene una historia de causar problemas cuando está con sus amigas. Para ella, es difícil obedecer a su papá.

Muchacha: Quiero ir a la plaza para hablar con mis amigas.
Papá: ¿Hay muchachos en el centro también?
Muchacha: Nunca hay muchachos; sólo muchachas.
Papá: No lo creo.

---

30. ¿Con quién está hablando la muchacha?

31. ¿Adónde quiere ir?

32. TARGET QUESTION: *Uncertain Belief/Doubt*.

    Use in your answer the following phrase(s): **muchachos**
    ¿Qué duda el padre?

    SAMPLE ANSWER:

    Subject #3 Duda que no haya muchachos a la plaza.

33. TARGET QUESTION: *Belief*.

    ¿Qué piensa Ud.?

    SAMPLE ANSWER:

Subject #31 Pienso que el papá es correcto

Story 10

escuela primaria = grade school / **recreo** = recess / **lado** = side

La señorita Hernández es una maestra de la escuela primaria. Ahora mismo, ella está con sus estudiantes en la hora de recreo. Cerca de donde está la señorita Hernández y sus estudiantes, hay una calle. Puede ver que muchos carros están pasando por la calle y sabe que es muy peligroso para los estudiantes.

Srta. Hernández:	Carlitos, ¿adónde vas?
Carlitos:	Voy por mi pelota. Está en el otro lado de la calle.
Srta. Hernández:	¡NO! ¡No hagas eso! Hay muchos carros en la calle. Yo voy al otro lado para buscar tu pelota.
Carlitos:	Está bien. ¡Gracias señorita Hernández!
Srta Hernández:	De nada.

---

34. ¿Quién es la señorita Hernández?

35. Use in your answer the following phrase(s): **recreo**
    ¿Dónde está ella?

36. TARGET QUESTION: *Evidence: Visual*.

    Use in your answer the following phrase(s): **calle**
    ¿Qué ve la señorita Hernández?

    SAMPLE ANSWER:

    Subject #35 Ve que hay muchas coches por la calle.

37. TARGET QUESTION: *Commentary*.

    Use in your answer the following phrase(s): **calle**
    ¿Qué no es una buena idea?

SAMPLE ANSWER:

Subject #30 Es un idea muy mal que el niño corra en la calle.

Story 11

mentira = a lie

Tengo un amigo que se llama Hernesto. Siempre les dice mentiras a sus padres. Las dice porque son muy estrictos. No quieren que él beba cerveza y vaya a fiestas porque él no es adulto. Sólo tiene 17 años y todos sus amigos son como Wayne de Wayne's World.

---

38. Use in your answer the following phrase(s): **padres**
¿Por qué Hernesto dice mentiras?

39. ¿Cuántos años tiene?

40. TARGET QUESTION: *Belief*.

¿Qué creen sus padres?

SAMPLE ANSWER:

Subject #20: Sus padres creen que él es joven y no bebe alcohol.

Story 12

tratar de = to try to

Charles y Anne son estudiantes americanos que pasan un semestre en Chile. No hablan español muy bien porque acaban de llegar al país. ¡Pobrecitos! Su amiga

de Chile, Maricarmen, está tratando de decirles cuáles son los planes para esta tarde.

Maricarmen:	¡Miren! Vamos al supermercado para hacer las compras.
Charles:	¿Qué?
Maricarmen:	Yo dije que vamos al supermercado para hacer las compras.
Charles:	OK, está bien. ¡Vámonos!
Anne:	What did she say?
Charles:	She said we're going to this really exciting market place.
Anne:	What for?
Charles:	¿Por qué?, Maricarmen.
Maricarmen:	Porque necesitamos ir de compras.
Charles:	She said that we need to buy her something. Maybe we've been eating too much of her food.

---

41. ¿De dónde son Charles y Anne?

42. ¿De dónde es Maricarmen?

43. Use in your answer the following phrase(s): **compras**
¿Qué quiere hacer Maricarmen?

44. TARGET QUESTION: *Knowledge*.

Use in your answer the following phrase(s): **comprar**
¿Qué entiende Charles?

SAMPLE ANSWER:

Subject #1 Charles entiende que ellos necesitan comprarle a Lisa más comidas.

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