The Acquisition of Spanish

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The Acquisition of Spanish: Morphosyntactic development in monolingual and bilingual L1 acquisition and adult L2 acquisition
by Silvina A. Montrul

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Preface

This book is about the acquisition of Spanish in a monolingual and in a bilingual situation by children during the years of primary linguistic development, and as a second/foreign language by adults. It focuses on formal or structural aspects of language acquisition, namely morphology, syntax, and some aspects of lexical semantics. In examining these grammatical areas, the Principles and Parameters approach of generative grammar forms the conceptual framework for addressing fundamental issues in theoretical linguistics and language acquisition, such as the nature of linguistic representations and their origins. At the same time, recent original research on the acquisition of Spanish, including my own work, provides the empirical base supporting the overarching thesis that Universal Grammar guides and constrains language acquisition in monolingual, bilingual and L2 contexts. This empirical data is also the testing ground to evaluate current theories of language acquisition within this framework.

Two related concerns of generative linguistics are to determine the nature of the linguistic knowledge of native speakers of a language and how young children come to master the phonological and syntactic properties of their language. For this theory, Universal Grammar is an innate construct that guides and constrains the language acquisition process by monolingual children. Within this conceptual framework, the parametric approach to syntax offers the formal tools to systematically compare child and adult grammatical systems.

Assuming the overall validity of this theoretical and methodological approach to language and language acquisition, I argue throughout this book that Universal Grammar, as the guiding force, constrains *all* instances of language acquisition. I support the hypothesis that there is a fundamental continuity between monolingual, bilingual, child and adult early grammatical systems – i.e., that linguistic representations in first, bilingual and second language acquisition are essentially similar among themselves and similar to adult target grammars. This is the Continuity Hypothesis (Pinker 1989). I maintain that the Continuity Hypothesis is tenable for Spanish because many linguistic properties of this language appear to emerge, or be acquired, earlier in this language than in English and other languages. I argue that, in addition to universal properties, language-particular properties (and input) also play a

significant role in Spanish linguistic development, and in language development in general. While stressing the similarities between first, bilingual and second language acquisition with respect to linguistic representations and processes, I consider important differences between the three acquisition situations as far as the outcome of the process is concerned. Factors like cognitive maturity and the existence of the L1, for example, play a role in L2 acquisition, and may even interfere with continuous access to UG. Although bilingual first language acquisition is typically considered an instance of L1 acquisition, I also argue that simultaneous bilingualism shares some features with adult L2 acquisition, like the role of another language – a feature that may ultimately lead to variable outcomes of the acquisition process in this situation as well.

This is the first book on the acquisition of Spanish written in English that provides a comprehensive overview of the Spanish morphosyntactic development in monolingual and bilingual situations. During the 1970s and 80s, research on linguistics and language acquisition (especially on L1 acquisition) focused exclusively on English, and many theoretical accounts of the acquisition process at the time were formulated on the basis of this language. Today, a large proportion of the world population speaks Spanish, and this population has been increasing significantly, particularly in the United States. Interest in Spanish in the scholarly community over the past decade clearly reflects its sociolinguistic and demographic growth, resulting in a marked increase in comprehensive descriptive and theoretical accounts of the language. In particular, the Principles and Parameters approach to comparative syntax has generated a vast body of research on the morphosyntax of Spanish and other Romance languages. These developments in Hispanic linguistics have, in turn, motivated a wide range of empirical studies on the acquisition of Spanish.

Several recent books and collected volumes published in Spanish and English about the acquisition of aspects of Spanish in different environments attest to the fact that interest in this language remains very strong.[1] Furthermore, recent state of the art empirical work on the acquisition of Spanish in a variety of theoretical frameworks has been increasingly making its way into mainstream English-speaking journals like *Second Language Research, Studies in Second Language Acquisition, The Journal of Child Language,* and *First Language*, among others. Exciting developments like these, all linked to the growing interest in the Spanish language and its acquisition, are the impetus for this book. Because a large body of existing research on the acquisition of

Spanish has been conducted from the perspective of generative linguistics, and because the comparative parametric approach has also dominated language acquisition research in monolingual, bilingual, and L2 situations in the last 20 years, one of the distinctive features of this book is that it describes and explains the first, bilingual, and second language acquisition of Spanish within this common theoretical framework. An outcome of this investigation is that it also makes available to the larger international academic community existing studies published in journals with limited international circulation, and studies conducted as part of doctoral dissertations, some of which are written in Spanish or Catalan.

Despite some of the broader conclusions it draws about the language acquisition process, this book is not an introductory overview of the acquisition of Spanish. Nor is it a textbook. The reader should be familiar with the basic concepts of generative theory, ranging from Government and Binding (Chomsky 1981, 1986) to Minimalism (Chomsky 1993, 1995, 2000, 2001). At the same time, it is not the aim of this book to delve into the technical details behind different formulations of the theory. Assuming that the reader will not necessarily be proficient in Spanish, the intended audience includes researchers and graduate students who already know or have some knowledge of generative syntax, and who are interested in first language acquisition, simultaneous bilingualism in early childhood, or adult second language acquisition. This book should also appeal to researchers who work on some aspect of the acquisition of Spanish from different theoretical perspectives. Although this investigation focuses on the acquisition of one particular language, the approach is cross linguistic, because the acquisition of Spanish is embedded in the larger linguistics context provided by the UG framework, and is frequently compared to the acquisition of English and Romance languages. Researchers working on the acquisition of other languages should also find this book useful.

The content is organized around the major grammatical themes that form the empirical base of research in generative grammar: morphosyntax of the noun phrase and of the verb phrase, subject and object pronouns, complex structures involving movement (topicalizations, questions, relative clauses), and aspects of verb meaning that have consequences for syntax. The presentation aims at being representative, yet as comprehensive as possible within the boundaries of the theoretical framework. For this reason, many of the studies discussed throughout this book assume an earlier version of Minimalism

(Chomsky 1993, 1995) and reflect the current state of knowledge about the acquisition of different grammatical aspects of Spanish conducted within the generative tradition. Selection of the studies discussed for presentation, like the selection of specific results from each study, was based on how well these fit the overall themes of this book. Studies directly relevant to the main theoretical issues addressed, or studies that represent the only available work on a given topic, are discussed in greater detail than others. In many cases, it has been necessary to summarize results presented in the original sources in order to achieve clarity of presentation. Occasionally, non-generative empirical studies relevant to the theoretical issues discussed are also mentioned.

Chapter 1 introduces basic concepts of the theory of Universal Grammar (UG), as well as the leading theoretical issues in first language acquisition, simultaneous bilingualism, and adult L2 acquisition that will be addressed throughout this book. This chapter also presents in greater detail the central argument about the fundamental role of Universal Grammar and continuity in grammatical development that runs through each of the remaining chapters. The rest of the book follows the grammatical organization of the clause structure: morphosyntax of the noun phrase, morphosyntax of the verb phrase, subject and object pronouns, complex structures (topics, questions, movement and embedding), and aspects of lexical semantics. Each chapter opens with a basic description of the grammatical phenomena to be discussed in the context of acquisition. Chapter 2 considers the acquisition of nominal inflection or the determiner phrase (DP). Chapter 3 focuses on the verb phrase or the extended functional projection of the Inflectional Phrase (IP), comprising finiteness, tense, aspect and mood. Chapter 4 examines the parameters regulating the syntactic and pragmatic distribution of subject and object pronouns. Chapter 5 deals with questions, embedding, and topicalizations – all structures regulated by the complementizer projection, or CP. Chapter 6 analyzes verb meaning and lexical parameters. All of these chapters show how the particular morphosyntactic characteristics of Spanish favor the early emergence in monolingual and bilingual acquisition of functional categories and the early parameter setting in this language. Finally, the conclusion summarizes the developmental facts revealed throughout the book in the three acquisition situations, and considers their theoretical significance.

The completion of this project would not have been possible without the help of many people. First and foremost, I would like to thank the editors of the LALD series, Harald Clahsen and Lydia White, as well as Kees Vaes of John

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Champaign, Illinois, July 2004.

Note

1. See López Ornat (1994) and Torrens (2002) for first language acquisition; Pérez Leroux and Glass (1997), Montrul and Bruhn de Garavito (1999), Pérez Leroux and Liceras (2002), Lafford and Salaberry (2003) for second language acquisition; and Deuchar and Quay (2000) and Oller and Eilers (2002) for Spanish-English, Sánchez (2003) for Spanish-Quechua, and Ezeizabarrena (1996) for Basque-Spanish bilingualism.

Chapter 1

Theoretical foundations

1. Language acquisition and linguistic theory

Contemporary linguistic theory frequently emphasizes children's rapid language acquisition process. Regardless of where they are born, how many languages they are exposed to, and who they interact with, by 3 to 4 years of age, normally developing children universally master the basic structure of their native language. Despite being too immature to perform many cognitive and motor-related tasks, children are able to understand quite complex sentences in their language. They also converge on the grammar of other members of the same speech community and are able to engage in conversations with them. This generalization holds for bilingual children as well. If a child is born in a bilingual or multilingual environment and has the opportunity to hear and use these languages, the child will acquire and probably retain the languages of the environment.

The fact that children succeed in rapidly acquiring basic structure and vocabulary of their native language does not mean the road to linguistic success is instantaneous. Nor is language acquisition error free. Indeed, since children do not merely imitate what they hear from adults, they move through systematic developmental stages (with individual variation in rate), and make errors typical of the language development process. Some errors are universally made by all children acquiring any human language, while others are specific to all children acquiring the same language. But considering the number of logical combinatorial possibilities of linguistic elements and the potential use of analogical reasoning, the number of grammatical errors children make is relatively few. In fact, there are many possible logical errors that children never make. Unlike the situation in adult foreign/second language acquisition where errors are very frequent and may last a long time, children recover from developmental errors in due time, typically without explicit instruction or correction.

Given these basic facts, how does language acquisition take place? Efforts to answer this question have engendered a wide variety of theoretical approaches and research paradigms, each with its own set of assumptions and solutions to

the basic problem. Both linguists and psycholinguists of different theoretical traditions agree that human language or *grammar* is unique to humans, that it is an abstract system of knowledge, and is represented in the mind. Language is a cognitive, internalized system of rules that allows human beings to produce and interpret sentences: it consists of a finite set of elements, or lexicon, and a computational system that combines these elements into a potentially infinite number of phrases or sentences. Theoretical approaches differ, however, with respect to how they conceptualize *language* and *the nature of linguistic representations*, and with respect to the factors and mechanisms that drive the language acquisition process.

For the *general* or *cognitive nativism* position (also known as *emergentism*, as in Ellis 2003), general cognition is innate, and language *emerges* from the interaction of cognition with experience. Language is part of cognition because many operations that are typical of language are also manifested in other parts of the cognitive system (O'Grady 1999, 2003).[1] Except for O'Grady (1999, 2003), most general nativists do not consider language a symbolic system and therefore make no reference to linguistic representations. They typically assume a superficial (i.e., non-complex) view of the linguistic architecture, unrelated to a well-developed theory of language.[2] Consequently, general nativists hold that children learn language the way they learn any other complex cognitive skill: namely, by analogy, imitation, sensitivity to statistical frequencies in the input, and social interaction with their caregivers (Elman, Bates, Johnson, Karmiloff-Smith, Parisi and Plunkett 1999; López Ornat 1994; MacWhinney 1987; Snow 1977; Tomasello 1987, 1992, among others).

In contrast to this overall view, other linguists subscribe to *special* or *linguistic nativism* and assume generative grammar as a theory of language (Chomsky 1957, 1965, 1981, 1986, 1995, 2000, 2001). For this position, knowledge of language is very complex, *special*, and independent of cognition, although it interacts with cognition in some respects. In other words, knowledge of language is *linguistic* in nature and not reducible to non-linguistic notions or factors external to the linguistic system (Newmeyer 1998). Generative theory aims to uncover universal properties of the language faculty, as well as systematic variation among languages. From its inception, there have been two fundamental goals: 1) to arrive at a formal characterization of language by positing explanatory abstract principles that make reference to phonological, syntactic and semantic *representations*, and 2) to explain how language is acquired.

The internalized grammar that adults possess and that children must acquire specifies the well-formed sentences of the language and their structures. Thus, not only do children acquire what is possible in their language from the environment, but they also learn about what is not possible (or ungrammatical). For special nativists, this knowledge usually takes the form of abstract principles and constraints on form or interpretation, which cannot be acquired solely by experience, or by merely utilizing general cognitive learning mechanisms (Pinker 1989; Crain and Thornton 1998). In this regard, input overwhelmingly underdetermines the complex and intricate knowledge children end up with. Furthermore, children do not universally rely on negative evidence (i.e., information about what sentences or forms are not grammatical) to learn these rules and constraints. Even when children make errors during the language acquisition process, caregivers do not uniformly correct them. And even if children are corrected, they do not always and unfailingly pay attention to correction (Marcus 1993; Newport, Gleitman and Gleitman 1977; Pinker 1989).[3] Therefore, according to special nativism, children acquire the basic syntax of their language because they are biologically endowed with Universal Grammar (or UG). Universal Grammar is an innate construct that defines the search space for grammar construction and the format for possible grammars. That is, Universal Grammar guides children in the process of attending to, selecting, and processing input. It also guides children in the process of grammar building and restructuring, and in the unlearning of developmental errors.

This book assumes *special nativism* and *generative linguistics* for the analysis of Spanish developing grammars. Due to its cross linguistic focus, the generative framework has inspired most of the available comparative research on the structure and acquisition of many languages, including Spanish. Furthermore, it makes testable predictions about universal and language-particular aspects of language acquisition. Finally, in the last years, this framework has been applied to investigations of language acquisition in a variety of acquisition contexts (first, second, bilingual) and under different circumstances (normal vs. pathological, manual vs. aural mode, etc.), broadening its empirical base considerably. Such comparative approach allows us to discover the similarities underlying all these acquisition environments and modalities as well as to identify differences among them.

Let us start by presenting in more detail what Universal Grammar stands for and how it is involved in the language acquisition process.

2. Universal Grammar

Generative linguists propose that language acquisition is internally driven. Human beings are biologically endowed with a language acquisition device or language faculty called Universal Grammar (UG). In first language acquisition, UG is the initial state of the child (S_0). As shown in Figure 1.1 (adapted from White 2003), UG mediates between the input (or primary linguistic data), the intermediate grammatical systems the child constructs until he reaches the final steady state (adult grammar), and the output (what the child produces).

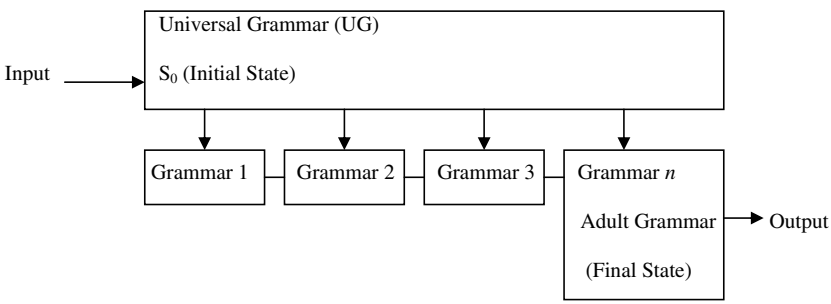


Figure 1.1. Universal Grammar in L1 acquisition

As Herschensohn (2000) puts it, UG provides both the formal apparatus of language ("grammar") and is a *strategy* for language learning. In other words, UG guides the child in 1) selecting the relevant information from the input and, 2) constraining the type of hypotheses about language that the child formulates throughout the process. At the starting point of L1 acquisition, all the elements and grammatical possibilities that are part of UG are, in principle, available to the child. For this reason, the initial state in L1 acquisition is assumed to be UG. By exposure to a language-specific input, the child selects the options of UG that define the language of his or her environment. Thus, a human language is, in a sense, a particular instantiation of Universal Grammar (or a subset of UG). UG guides the L1 acquisition process from the initial state to the adult final state.

Throughout this book, I will support the position that Universal Grammar also constrains bilingual first language acquisition during the age of primary linguistic development and adult second language acquisition, despite the fact

that the final state in these two acquisition contexts might not be the same as that of the adult target grammar in all respects. In bilingual acquisition, schematized in Figure 1.2, the child is exposed to two languages and builds two grammars (GA and GB). Universal Grammar guides the parallel, yet independent, development of the two languages, as articulated in the Language Differentiation Hypothesis (Genesee 1989; Meisel 1994a).

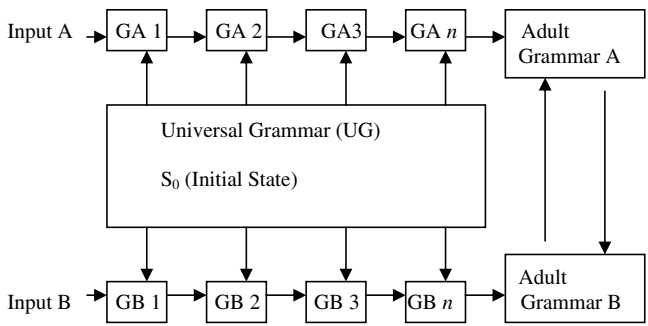


Figure 1.2. Universal Grammar in bilingual acquisition

As we will see, the fact that the two grammatical systems develop independently does not necessarily imply that cross linguistic influence from one grammatical system to the other will not occur throughout development and in a "steady" state (hence the directional arrows from adult grammar A to adult grammar B). In other words, potential cross linguistic influence is not evidence against the Language Differentiation Hypothesis in bilinguals.

With respect to the initial state in adult second language acquisition, different proposals have been made in the past years (for details see White 2003, Chapter 3). Since L2 learners already have a mature linguistic system (their native language or L1), the two logical possibilities that have been entertained are that UG is the initial state (as in L1 and bilingual acquisition), or that the L1 is the initial state. Beyond the initial state, researchers also disagree as to the extent and manner in which Universal Grammar constrains the L2 acquisition process throughout development. L2 learners attain a steady final state which may or may not end up being identical to the grammar of adult monolingual speakers of the L2. The grammatical system that L2 learners construct is usually referred to as "interlanguage" (Selinker 1972). Of all the theoretical

possibilities advanced in the literature to date, I subscribe to the position which maintains that the initial state is the L1, while Universal Grammar remains accessible throughout interlanguage (ILG) development once the L1 can no longer accommodate incoming input and provide a representation (White 1989; Schwartz and Sprouse's 1994, 1996 Full Transfer/Full Access Hypothesis). This is schematized in Figure 1.3 (based on White 2003). As we will see, this hypothesis is also the most compatible with the available empirical evidence from Spanish.

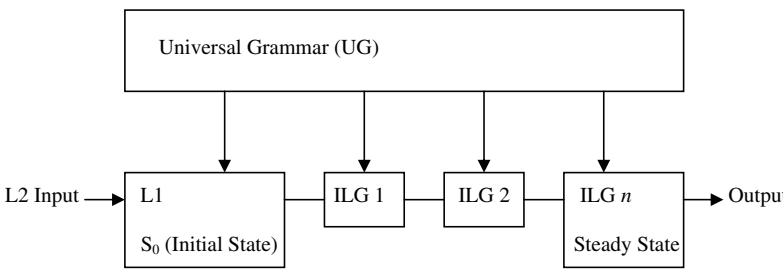


Figure 1.3. Universal Grammar in L2 acquisition (Full Transfer/Full Access Model)

Throughout this book, I argue that Universal Grammar constrains *all* instances of language acquisition, and in the specific ways schematized in Figures 1.1, 1.2 and 1.3 above, but that its operation is perhaps most evident in L1 acquisition than in bilingual and L2 acquisition, simply because there are fewer variables that play a role in this situation. In adult L2 acquisition, for example, factors like cognitive maturity, amount of input and language use, and the existence of another language affect interlanguage development in ways that are not yet very clearly understood and may even interfere with continuous access to UG at some point along the way to the steady, final state, or endpoint of the acquisition process. It is usually assumed that bilingual first language acquisition is an instance of L1 acquisition because the focus has been on the age of primary linguistic development (up to 3 or 4 years of age). Because generative studies of bilingual children have rarely focused on children *beyond* the age of primary linguistic development, it is an open question whether these children, like L2 learners, fully acquire the two languages as adults.

How does Universal Grammar guide the language acquisition process? Universal Grammar constrains the form and functioning of grammar: it

places limits on the inventory of possible phonological, semantic, and syntactic categories (the form), as well as on how these categories are assembled or combined (the functioning of the computational system). It is assumed to contain invariant principles common to all languages and parameters that account for structural differences among languages. Over the years, the precise formulation of principles and parameters has evolved together with the theory, as in Government and Binding Theory (Chomsky 1981, 1986) and Minimalism (Chomsky 1993, 1995, 2000, 2001).

Principles can be general statements, such as "every sentence must have a subject" (as the Extended Projection Principle or EPP states). Principles can also be formulated as general constraints on well-formedness conditions, such as the locality principle that regulates movement of phrases in natural languages. In earlier versions of the theory, universal and language-specific constraints on the movement of phrases (wh-movement, for example) were subsumed under the Subjacency principle (Chomsky 1977). Subjacency specified conditions for movement of phrases on individual and language-particular rules. In Government and Binding (Chomsky 1981, 1986) and Minimalism (Chomsky 1993, 1995, 2000, 2001), the Subjacency principle has been restated as a more general, invariant locality principle on *all* transformations, rather than on individual rules.

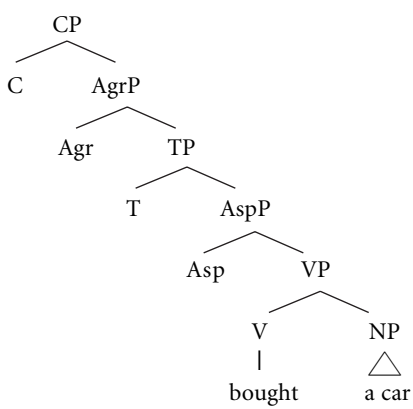
In the 1970s, not only did empirical comparative work on languages typologically different from English lead to the discovery of fundamental underlying similarities across languages, but it also revealed a degree of systematic cross linguistic variation. In Chomsky (1981), cross linguistic variation was reduced to the fixation of parameter values that related (at an abstract level) sets of seemingly unrelated syntactic properties (also known as clustering). With the advent of Minimalism in the 1990s, the conceptualization of parameters changed radically. Parameters are now in the lexicon, which comprises language specific lexical and functional categories.

Lexical categories are what are traditionally called open class or content words, like verb (V), and noun (N), for instance. Lexical categories impart lexical semantic content to the clause (arguments or participants, types of events or states, etc.), and head their own lexical projections: vP (verb phrase) and NP (noun phrase), respectively. Functional categories, on the other hand, have to do with the instantiation of inflectional morphology or closed-class words. The grammatical information for person, number, agreement, case, negation, tense, aspect, etc. is encoded in functional categories such as CP

(complementizers), AgrP (agreement), tense (TP), aspect (AspP), etc.

Lexical and functional categories consist of bundles of formal features. Lexical categories have features such as [+V], [+N], which define the lexical category of a word. Functional categories have inflectional and semantic features (wh, case, number, gender, finiteness, etc.) and related morpho-phonological forms (e.g., *that*, *-ed*, *-s*, *the*, *not* in English). Syntactic structure is projected from the lexicon – that is, lexical and functional categories are drawn from the lexicon and assembled into syntactic representations (by the computational system) with these abstract morphological features. In the clause structure, functional categories dominate lexical categories. As shown in (1) and (2), an NP is dominated by a DP (determiner phrase), and a VP is dominated by all the functional categories above the aspect phrase or AspP. Once lexical items enter the computational system, the operations *merge* and *move* guarantee that features are checked, matched, or valued, and erased for interpretation.

(1)



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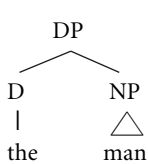

Although the computational system and formal features are universal, the clausal architecture is not and depends on the lexicon. Since morphology is taken to be the main locus of parameterization (Borer 1984; Chomsky 1995; Wexler and Manzini 1987), languages may vary with respect to the realization

of particular functional categories in the clausal structure (Fukui and Speas 1986). For example, on some accounts Chinese lacks tense and therefore does not project TP (Lin 2003), and Japanese does not project AgrSP (Fukui 1988; Kuroda 1988). Languages can also lose or acquire functional categories during the course of diachronic change (Kornfilt 1991)

Languages may also vary with respect to feature values and feature strength of functional categories. In Chomsky (1993), French, and English were assumed to have the functional category AgrSP (subject agreement phrase) and TP (Tense Phrase). AgrSP/TP have strong V features in French, but weak V features in English. This was, and still is, conceptualized as the Verb-movement parameter (Emonds 1978, 1985; Chomsky 1989; Pollock 1989), a parameter that determines the word order possibilities of verbs and other elements in the sentence. Sentences (3), (4) and (5) provide a brief illustration of the parameter. In French, for example, negation is post-verbal with finite verbs, as in (3a), but preverbal in non-finite clauses, as in (4a). Moreover, frequency adverbs can appear between a verb and an object, as shown in (5a). Similar facts obtain for Spanish and Italian.[4] By contrast, negation is preverbal in English, as can be seen in (3b and 4b), and adverbs cannot occur between a verb and its object, as in (5b).

(3) a. Philippe ne visite pas ses parents.
Philippe NEG- visits not his parents

b. 'Philippe does not visit his parents.'

(4) a. Philippe a l'habitude de ne pas visiter ses parents.
b. 'Philipe has the habit of not visiting his parents.'

(5) a. Philippe voit souvent la télévision.
b. '*Philippe watches often television.'

Because agreement is strong in French but weak in English, these differences between English and French are explained by the verb's possibility of moving overtly to the functional category TP (tense) in French but not in English. French has the positive value of the parameter (+ verb movement), and English has the negative value (– verb movement).

To summarize, the basic assumption of generative theory is that there is one human language (or grammar) – the computational system – and a lexicon. The computational system is innate and does not need to be learned, while the lexicon is language-specific. The implications of this theory for acquisition are

that children must learn the lexicon; that is, the words of their native language and their morphology. Because acquisition of morphology entails the acquisition of abstract semantic and syntactic features of functional categories, as well as their associated strength, this is how children set parameters. In Chomsky's words, "Parameters of UG relate, not to the computational system but only to the lexicon. … Language acquisition is in essence a matter of determining lexical idiosyncracies. … If substantive elements (nouns, verbs, etc.) are drawn from a universal vocabulary, then only functional elements will be parameterized" (Chomsky 1995: 131).

As we will see throughout this book, this parametric minimalist approach has had far-reaching implications for language acquisition, and for the acquisition of Spanish in particular. The issue of functional categories as formalized in Chomsky (1993, 1995), for example, has allowed acquisition researchers to revisit and revise the theory behind many observations about the particular emergence of functional morphology made in the 60s and 70s. Researchers have long observed that grammatical morphemes cause problems for language learners of various populations, including first language learners (Brown 1973), second language learners (Dulay and Burt 1973, 1974), and language impaired learners (Steckol and Leonard 1979; Leonard 1998). The centrality of functional categories in the Minimalist Program has generated renewed interest in the study of grammatical morphemes and function words in all these populations, as I explain next in the context of acquisition theories.

3. Theoretical issues in first language acquisition

Theories of language acquisition must explain whether child grammars and adult grammars are alike or not, or, in other words, how children acquire a linguistic system like that of adults. This is called the logical or representational problem. Theories must also account for how and why children's grammatical systems change over time. Children go from a stage in which they produce one word (*mommy, ball* at 12 to 18 months), passing through a two- or three-word stage (e.g., *baby talking* [Hayley 1;8] (Radford 1996), *machine make noise* [Kathryn 1;9] (Bloom 1970)), and finally reach a stage when they produce structurally complex sentences in connected discourse, at around 3 or 4 years of age. Other more complex structures emerge later, and new words are incorporated throughout the lifespan. This is the developmental problem.

The potential solutions to the representational and developmental problems have given rise to different perspectives in the field. In what follows, we will discuss several positions that address these issues. These are broadly classified as the No Continuity and the Continuity accounts.

3.1 No continuity: Child and adult grammars are fundamentally different

General or cognitive nativists (i.e., language acquisition researchers working within a socio-cognitive perspective like Slobin (1973, 1985), Clark (1987), López Ornat (1994, 1997), Tomasello and Bates (1999), Bowerman (1982), among many others) view child and adult grammars as distinct or discontinuous. While adults possess a grammatical, syntactic system of rules and representations, a child's system is pre-grammatical, based on innate semantic-pragmatic notions, and devoid of syntactic and morphological categories. The child has concepts, like object, place, action, event; and classifies words accordingly. Syntactic and morphological categories emerge from these concepts, following prototypical forms. That is, objects are later analyzed as nouns, events as verbs, and properties as adjectives. Thus, initial phrases like *baby talking* or *machine make noise* are semantically, rather than syntactically, based. Later on, from distributional evidence, the child recognizes and analyzes inflectional morphemes. Morphology is acquired one step at a time, in a piecemeal fashion. Finally, syntax emerges (as a process of induction).

Such bottom-up and discontinuous view of the language acquisition process suffers from a number of limitations, as we will see in Chapter 2 in more detail when we discuss the acquisition of the determiner phrase (DP). In the first place, production is assumed to be a faithful image of abstract linguistic representation (although it remains to be clarified how linguistic representations are to be defined in this framework). In other words, because the child does not produce morphemes, the child is not deemed to have the associated functional categories for interpretation either. Even when the child produces, say, a limited number of some contrastive and productive morphologically inflected verbal forms but does not yet produce the full verbal paradigm, the child is deemed not to have the category inflection (or IP). If child and adult grammars are discontinuous, the major challenge for this position is to explain *how* grammar emerges. If the child starts by storing semantic-pragmatic

forms, it is not clear how he or she later extracts formal regularities from the input when there is no *a priori* representation or knowledge of any grammatical structure or structural regularity. In other words, how can a child learn to segment morphemes or distinguish verbs from their tense marker, for example, when he or she does not know *in advance* grammatical categories such as "verb" or "tense"? How does the child learn to recognize the pragmatic/semantic notions of "event" for the syntactic category "verb"? Therefore, while this position addresses the developmental problem by claiming there is first a proto-grammar (or pre-grammar) and later a grammar, as in the adult, it does not offer satisfactory answers for the representational or logical problem, or for the radical cognitive transition between the two stages.

3.2 Continuity: Child and adult grammars are essentially similar

The prevailing view within special nativism is that despite apparent differences, child grammars are essentially like adult grammars. This is the Continuity assumption (Pinker 1984, 1989), and throughout the book I will stress the fundamental validity of this assumption. It holds that the same grammatical principles that apply in adult grammars operate in child grammars. The strongest version of this assumption, also known as the Full Competence Hypothesis, is held by Poeppel and Wexler (1993), Hyams (1994, 1996) and Penner and Weissenborn (1996), who contend that children already have full grammatical competence of the particular language they are exposed to. Even if children's language is not always target-like, the stages children go through are grammatical and consistent with parameter settings allowed by UG. Structurally speaking, child and adult sentences are alike, but differ with respect to phonetic form. That is, certain grammatical morphemes that are overtly realized (pronounced) in adult grammars may have a null realization in child grammars. The theoretical advantage of the Full Competence Hypothesis is that since child and adult grammars are alike, no explanation is needed for the transition between the two systems. On the other hand, it is not clear how null elements (morphemes) are structurally licensed and identified in some cases.

While assuming the same grammar in child and adult language solves the logical or representational problem, a major challenge for the Full Competence Hypothesis is to explain the developmental problem. If child and adult grammars are essentially the same, why do children speak differently at first? Why are functional categories or morphology not produced reliably all the

time? Or why do they appear to be produced gradually and incrementally in some cases? Hyams (1996) maintains that children's grammars are syntactically intact but that the deficit lies in the syntax-pragmatics interface or in phonetic articulation (see also Demuth and Lleó 1999). To explain why children seem to use null subjects with infinitive verbal forms in declarative sentences in English, for example, Hyams claims that the head of the inflectional phrase (I) is underspecified (and not syntactically linked to its antecedent). Therefore, its temporal *here and now* interpretation is assigned pragmatically or deictically. The morphological reflex of this semantic and pragmatic underspecification is the absence of inflectional morphology. A similar pattern seems to hold in the determiner system, since children go through a stage when they use nouns without determiners, and these nouns are underspecified for specificity. Because D (the determiner head) is underspecified, determinerless nouns (or bare NPs) receive a *familiar* interpretation, also assigned deictically or pragmatically. Accordingly, differences between the sentences that children and adults produce are attributed to syntax-external factors (i.e., to developments in domains other than morphosyntactic competence), such as pragmatics, or the interface with phonetic form.

As we will see throughout this book, some Spanish constructions clearly develop earlier than others, and there are identifiable developmental sequences that hold across different individuals, some even across different languages. How then can we explain development if UG is assumed not to change over time? While most research in language acquisition has focused on the logical or representational problem, there is increasing awareness that the developmental facts must also be accounted for – either by explaining them in terms of linguistic theory, or by showing precisely how they follow from other linguistic or non-linguistic factors. Let us now present two major contrasting positions, standing for a weaker form of the Continuity assumption, that attempt to address development – Maturation and Gradual Structure Building.

3.2.1 *Maturation*

According to the Maturation view, UG principles and some of the grammatical categories (or most, depending on the author) are operative when children start to produce sentences, and in this sense there is some continuity between child and adult grammars. However, other aspects of UG are not present initially (suggesting discontinuity), but emerge and become operative in a

specific, maturationally given order. In other words, grammatical changes from one stage to another are triggered by an internal, biologically determined process in all children.

The strongest maturation account within the UG framework claims that functional categories mature in children. For Radford (1990), Guilfoyle and Noonan (1992), and Vainikka (1993/1994), functional categories are initially absent, and children move from a lexical stage to a functional stage. Radford (1990) proposed three stages for the acquisition of functional categories: 1) a pre-categorial stage for one-word utterances (before 20 months); 2) a lexical (telegraphic) stage for the two-word utterances, where lexical categories are combined but no functional morphology is present (around 20 months); and 3) a functional stage emerging around the age of 24 months when children produce multi-word utterances with inflectional morphology. Like the system argued for by the No-Continuity perspective, the pre-categorial stage 1 is pre-grammatical and discontinuous from adult grammars, consisting of pragmatic elements. However, the lexical stage is not purely semantic-pragmatic, but syntactic, containing the syntactic categories V, N and P assembled in phrases. By the functional stage, Radford (1990) claims that functional categories mature more or less simultaneously, while on some other accounts (Vainnika 1993/1994), they emerge gradually and are built from the bottom up (first IP and finally CP). The lexical and functional stages are grammatical in the adult sense and conform to principles of UG.

A weaker form of Maturation is held by Borer and Wexler (1987), who claim that *some* principles of UG mature. For example, they propose a maturation account for the end of the null subject stage in child English. They also contend that the acquisition of passive constructions and unaccusative verbs is delayed in English-speaking children (in comparison to the acquisition of adjectival passives and unergative verbs) because the linguistic mechanism for moving arguments matures at around age 4. As we will see in detail in Chapter 3, Wexler (1994) and (Rizzi 1993/1994, 1994) resort to some form of maturation to account for why children learning many languages optionally omit tense morphology in finite clauses. This phenomenon is called Root Infinitive or Optional Infinitive Stage (Wexler 1994). While Wexler argues that the feature [tense] matures around age 2;5, for Rizzi, it is the root principle – the constraint that requires all root clauses to be headed by CP in adult language – that does not mature in children until the age of 2;5. This is the Truncation Hypothesis, which will be examined in more detail in Chapter 3.

If Universal Grammar is part of the biological endowment, the strong maturation view of development further strengthens the biological basis for language and can, in principle, explain the delay of particular linguistic abilities. However, this account also predicts that linguistic abilities should mature at the same age cross linguistically, irrespective of the language of the environment. Unfortunately, this general prediction does not appear to be supported universally. Despite the fact that the comprehension and production of verbal passives does not happen until quite late in English, German, and Hebrew (ages 4 and 5), Demuth (1989) showed that in Sesotho, a Bantu language, children acquire verbal passives before age 2;8. Similarly, Demuth and Lleó (1999) showed that determiners and determiner phrases (DPs) emerge at different times in Spanish and German, and that a maturation account for the emergence of functional categories cannot be maintained. Although this particular position may appear adequate for English, we will see that it clearly fails to account for the available empirical data from Spanish.

3.2.2 *Gradual structure building via lexical learning*

There are other very similar accounts within the Continuity model that do not rely on maturation to explain development: one is the Structure Building approach (Radford 1995, 1996), and the other is the Lexical Learning approach (Clahsen, Parodi and Penke 1993; Clahsen, Eisenbeiss and Penke 1996). Both accounts maintain a weaker version of the Continuity assumption, and throughout the book I will refer to these two positions as the Structure Building account. For Radford (1995, 1996, 2000), principles of UG determine how syntactic structures are built up, but children's grammars develop gradually through the interaction of abstract grammatical knowledge plus lexical learning. Children respect structural economy (Chomsky 1995), which means that they build the minimal amount of structure on an "as needed" basis. Radford (2000) maintains that a child acquiring a language must determine how to assemble features into lexical items. Lexical learning involves learning lexical and morphological items and their features, and this has consequences for syntactic development. In other words, the functional categories (IP, CP, DP, and so on) are incorporated into the child's phrase structure representation gradually and incrementally, as the child learns their abstract features and the associated language-specific inflectional morphology that heads these phrases, which are not *a priori* specified by UG. For example, when children learn the lexical items and feature specifications for com-

plementizers, they will project a CP. Since parameters are in the lexicon, this view of acquisition is also the one most compatible with the Minimalist Program.

Unlike the Full Competence Hypothesis advocated by Hyams (1996) and others, those who subscribe to a weaker version of Continuity assume a strong morphology-syntax connection in child development, since functional categories are only assumed to be part of the child's representation when the child has acquired the features associated with a projection and *produces* the associated morphology. Clahsen, Eisenbeiss and Penke (1996) rely on the theoretical and typological research demonstrating a close correlation between overt inflectional affixes and syntactic phenomena such as head movement (Holmberg and Platzack 1991; Roberts 1993; Rohrbacher 1999) to claim that children exploit these correlations to project structure. As a consequence of children acquiring regular agreement paradigms which distinguish between 1st and 2nd person, children learn, for example, that their language has a strong V-feature and allows verb movement. However, these claims should be taken with caution. Based on empirical evidence from Germanic languages and Romance dialects, Sprouse (1998) concluded that overt inflectional paradigms do not in general determine the strength of inflectional features. Similarly, Verrips and Weissenborn (1992) showed that the development of verb movement in L1 acquisition proceeds independently from the acquisition of overt subject-verb morphology. The 3 French-speaking children studied exhibited almost error-free placement of verbs *before* they produced the paradigm that, according to Rohrbacher, would give them the clues that the features are strong.

A methodological problem for this view is the set of criteria used to define acquisition and accuracy, since the absence of a morphological form in production, or an error, does not necessarily entail lack of knowledge of other abstract features of a given functional category. It is also not always clear what percentage of suppliance of correct morphology is indication that a functional category has been acquired. Furthermore, it is not clear how agreement features, for example, enter the grammar on the basis of children having learned the morphologically overt form of the agreement paradigm, or how the projections IP and CP are eventually incorporated into the grammar either simultaneously or gradually.

Despite these caveats, this position is conceptually appealing because in maintaining Continuity, it is consistent with the developmental facts and

because it sees a role for the interaction of grammatical knowledge and input in development. If acquisition is triggered by specifics of input, functional categories and other related structures will emerge at different times in children acquiring different languages, depending on the structural characteristics of the language of the environment. For example, Spanish has clitic pronouns which some authors consider to move to a projection high in the tree called FP (Uriagereka 1995). Since English lacks clitic pronouns, it may be argued to have an FP with weak features or to lack the functional projection FP altogether. On Radford's (1996) view, impoverished verbal morphology in English will require that the child only projects a VP to accommodate declarative, negative, and interrogative sentences; whereas Spanish-speaking children will realize much earlier that verbs have rich inflectional morphology and will project an IP and even a CP at the outset. Thus, this position can account for differential development in different languages.

Overall, this book will defend the validity of the Continuity assumption in grammatical development, as opposed to the No Continuity and Maturation views. Deciding between the Full Competence Hypothesis and the Gradual Structure Building Hypothesis is a more challenging task because the interpretation of acquisition facts depends heavily on the assumptions about the relationship between interface levels or linguistic modules (phonology, syntax, morphology, pragmatics, etc.), type of syntactic analysis assumed for a given functional category, and the specific details of the analysis. We will see that very often certain facts of the acquisition of Spanish are consistent with both positions. Therefore, the discussion will be presented as an ongoing debate between these strong and weak versions of the Continuity hypothesis.

4. Theoretical issues in simultaneous bilingual acquisition

As we have seen, any child has the biological, cognitive and linguistic potential to learn more than one language since birth. In fact, according to several statistics, bilingualism seems to be the norm in many parts of the world (Grosjean 1982; Romaine 1995). However, theories of language acquisition have largely been concerned with accounting for monolingual data, perhaps because there are fewer variables involved in this context. As Genesee (2000) and Meisel (2001) have articulated, an adequate theory of language and language acquisition should account for bilingual language development as

well, if one wants to achieve a good understanding of the limits and possibilities of the human language faculty. Because there are political, sociological, linguistic, cognitive and educational dimensions of bilingualism, the issues and questions relevant to this type of language acquisition are quite numerous. Here, I focus on the three issues that have been addressed within the context of generative linguistics: 1) the effects of bilingualism on cognitive and linguistic development, 2) linguistic differentiation, and 3) the contribution of bilingual acquisition to theories of language development.

4.1 Effects of bilingualism on cognitive and linguistic development

Work on bilingualism within predominantly educational and sociological perspectives (Oller and Eilers 2002) has been concerned with how bilingualism and socio-economic class (SES) affect cognitive development, since these factors are pertinent for education and political reasons. In other words, are bilingual children delayed or at a disadvantage in comparison to monolingual children of the same age and social class? Does bilingualism hold children back in their academic progress? Although work within generative grammar has not addressed these questions directly, most studies carried out within this framework include a comparison between groups of monolingual children and bilingual children of the same age, learning the same dialects. We will see in all the subsequent chapters that bilingual and monolingual children's linguistic development during the first years follows very much the same path, and that bilingual children are not cognitively or linguistically delayed when compared to monolingual children. If there are any differences between monolingual and bilingual children, these are relatively small.

4.2 The initial unitary system vs. the language differentiation hypotheses

Perhaps the issue that has generated most research in the generative framework has been the initial state of bilingual development. Earlier work on simultaneous bilingualism suggested that children acquiring two languages had a unitary linguistic system (Volterra and Taeschner 1978) at the age of early syntactic development. Much work during the 80s and 90s was devoted to refuting this claim. Using the tools of linguistic theory, researchers have proven this position incorrect: children have differentiated and autonomous linguistic representations from the outset of syntactic acquisition (Genesee

1989; Meisel 1989, 1990; Paradis and Genesee 1996, 1997). Children learning parametrically different languages set the parameters for each language accordingly, early on. Most of this work has been on morphosyntax, while research on early speech perception and the development of phonological systems is only now emerging. Beyond the age of early syntactic development, researchers are currently investigating the degree of temporary, but systematic, interrelation between the two grammars during development in different areas of linguistic knowledge, like syntax (Döpke 1998; Müller 1998; Müller and Hulk 2001), phonology (Paradis 2001), and morphology (Nicoladis 1999). Although most of the studies incorporated in the discussion in this book focus on the first three years of life, there are many issues in bilingual development that remain to be addressed with older children, such as differential development of the two linguistic systems, transfer from one system to another, and the possibility of language loss or arrested development in one of the languages as a function of input and use.

4.3 Bilingual development and theories of first language acquisition

Bilingual children demonstrate that two languages are acquired by a single brain in two given contexts, and they provide a rich source of data to investigate the susceptibility of the language faculty to language-specific input. In this respect, studies of bilingual children are very important in validating theories of monolingual first language acquisition. For example, under a strong maturation account, bilingual children's acquisition of passives, unaccusatives, or functional categories like Tense are predicted to occur at approximately the same age, independent of language input. The acquisition of functional categories has also been extensively investigated in simultaneous bilingualism to address the issue of separate versus differentiated linguistic systems, and whether functional categories emerge gradually and simultaneously in the two languages.

Meisel (1994a,b), who analyzed the emergence of the functional category IP (comprising AgrSP and TP) in the early grammars of French-German bilingual children, observed that in both languages Subject Agreement emerges before Tense and at roughly the same age. The complementizer phrase (CP) is a later development in the two languages. Similarly, Koehn (1994) and Müller (1994) demonstrated that French-German bilingual children first go through a stage where no nominal inflection is produced (gender agreement and

number), and when inflection appears it does so in the two languages. Paradis and Genesee (1996) reported that in French-English bilingual children the functional categories Agreement and Tense (finiteness) emerge earlier in French than in English. Taken together, these studies show that bilingual children acquire the two languages as independent linguistic systems and do not show evidence of delay or transfer from one language to the other. Moreover, the data are most compatible with the lexical learning view of the Continuity model that takes input into account, and not with a Maturation account. We will see that the available empirical data on Spanish-German, Spanish-Basque and Spanish-English bilingual children analyzed throughout this book is also most compatible with this position.

5. Theoretical issues in adult second language acquisition

5.1 Some differences and similarities between first and second language acquisition

The study of second language acquisition within the generative framework has been concerned with a proper characterization of interlanguage grammars, or the interim grammatical systems that second language learners develop as they learn a second language (see Figure 1.3). The term *interlanguage* (Selinker 1972) refers to a grammatical system that has characteristics of the first and second languages, although this is not to be confused with code-mixing or borrowing (the use of words or phrases from two languages within and across sentences). The term interlanguage and its definition already imply a fundamental difference between children acquiring one or two first languages and second language learners: namely, that L2 learners already possess a mature linguistic system that was completely acquired before acquisition of another language began. Moreover, second language learners who start acquiring a second language around, or well after, puberty are already more cognitively mature than younger children during early syntactic development. Another crucial difference between L1 and L2 acquisition is the fact that full acquisition of the target grammar is not universal or guaranteed in the L2. Although, as we will see, native-like attainment in many linguistic domains is entirely possible, it is not a given, and does not imply that it is equally possible for all other linguistic areas. That is, interlanguage grammars are prone to fossilization or developmental arrest at any point along the developmental path, such that

errors that are typical of intermediate learners may persist at a later stable or steady state (see Long (2003) for a recent overview).

Given the obvious differences between first and second language acquisition (e.g., age, knowledge of another language, degree of success, etc.), there are also some important similarities, and it is precisely these similarities that the central argument in this book seeks to illuminate and examine. For example, L2 learners are also faced with a learnability problem as L1 learners – they have to acquire a complex system from input that is also not sufficient to inform the learners about all the complexities of the target language (White 1989, 2003). In other words, the generative approach to second language acquisition is concerned with a characterization of L2 learners' linguistic competence and how it develops by exposure to explicit (instructed input) and naturalistic input. In addition, L2 learners go through systematic developmental sequences and make errors like those produced by first language learners. These developmental errors often reveal that L2 learners, like L1 learners, have internalized a rule system. Finally, these internalized systems or interlanguages appear to be highly systematic and conform to principles of Universal Grammar.

Because many researchers seek to explain differential outcomes between L1 and L2 acquisition, from the inception of generative studies of L2 acquisition in the early 80s, researchers have been concerned with the basic question of whether adult L2 learners have access to the same innate principles of Universal Grammar as L1 acquirers, or whether interlanguage systems fall within the range of natural language grammars constrained by UG. To date, topics addressed include evidence of access to universal principles, parameter resetting, and the initial state and ultimate attainment, among many others. For ease of exposition, I organize the remainder of this section around the three classic answers to this question – no access, partial access, and full access.

5.2 No access to universal grammar

Due to the fundamental differences between L1 and L2 acquisition outlined, researchers like Clahsen and Muysken (1986) maintain that while UG is involved in monolingual and bilingual first language development, it is not available for adult second language learners. Once Universal Grammar does its job for the acquisition of a native language, it shuts off. For these researchers, L2 learners cannot access universal principles or reset parameters. Second

languages are learned by different cognitive, yet non-linguistic, procedures. The most radical exponent of this view is Meisel (1997), for example, who claims that L2 learners use linear order instead of structure dependence in the acquisition of complex syntax. In short, for Meisel, interlanguage grammars are not natural grammars but are "wild" or "rogue" grammars.

5.3 Partial access to universal grammar

Many others believe that Universal Grammar is partially available in L2 acquisition, although the precise characterization of "partial" availability has taken different forms. For Bley-Vroman (1989, 1990), for example, UG becomes the L1 after all the parameters are set in L1 acquisition. This has been formulated in his influential Fundamental Difference Hypothesis (FDH). In L2 acquisition, L2 learners have access to UG as specifically instantiated in their L1 (including principles, language-particular parameters, and functional categories). Past a critical period, access to principles and parameters not instantiated in the L1 is not possible. Instead, L2 learners use other problem solving skills to emulate linguistic knowledge and give the impression that they have acquired structures that are not part of the L1. Moreover, if L1 acquisition takes place deductively (i.e., via triggering and clustering), L2 acquisition takes place inductively and by analogy, as L2 learners learn constructions as isolated entities rather than as clusters related to underlying abstract properties (i.e., parameters) (Bley-Vroman 1997). While the basic assumptions of the FDH are conceptually motivated, the empirical evidence available does not seem to support this position. Moreover, a remaining challenge is to distinguish between "real UG" and "emulated UG mechanisms" to account for interlanguage stages in areas where L2 learners and native speakers show similar patterns of behavior.

For Hawkins and Chan (1997), principles of Universal Grammar remain accessible in L2 acquisition, but parameter values cannot be reset (see also Smith and Tsimpli (1995), Tsimpli and Roussou (1991), and Liceras, Díaz and Maxwell (1998), for a similar view). With respect to the acquisition of functional categories, this means that L2 learners have only access to the functional categories and feature values available from their mother tongue. (A similar proposal claiming that features of functional categories are permanently impaired in L2 acquisition from initial to final state is Beck (1998), who followed similar claims by Eubank (1994, 1996). This is the Local Impairment Hypoth-

esis.) Hawkins and Chan provided evidence from the acquisition of Wh-movement by intermediate and advanced speakers of Chinese, and claimed that Chinese speakers did not acquire the strong value of the [+wh] feature of English complementizers. However, as we will see in this book, Bruhn de Garavito and White (2002), Montrul and Slabakova (2003), and Valenzuela (2002), among others, have demonstrated that this theoretical position cannot be maintained because very advanced and near-native English-speaking learners show evidence of having acquired features of functional categories in Spanish, for example, that are not instantiated in English.

5.4 Full access to Universal Grammar

One point of agreement among the Full Access views is that they assume L1 and L2 acquisition are fundamentally similar, despite some differences. This is the counterpart to the strong Continuity view in L1 acquisition. In other words, L2 learners have full access to UG from the initial to final state. Many of these theories have emerged to account for the development of functional categories in L2 acquisition, and some of them also make implicit claims about development beyond the initial state and about ultimate attainment. Within this broad theoretical position, however, researchers differ with respect to how they conceptualize the initial state and the role of the L1, and whether they assume there is full access to UG from the start, or that parts of UG become available later on. Despite the fact that convergence on the target grammar is not guaranteed due to grammatical and extra-grammatical factors, the underlying assumption is that full access is possible, in principle, since there is no permanent impairment of features, or impossibility of resetting parameters past a critical period.

Within the Principles and Parameters model, White (1985, 1986, 1989) articulated the position that the L1 constitutes the initial state in L2 acquisition, as illustrated in Figure 1.3 (section 1.3), a position that was later formulated more strongly by Schwartz and Sprouse (1994, 1996) as the Full Transfer/Full Access Hypothesis. Although L2 learners start with the parameter values or functional categories from their L1, parameter resetting at intermediate and advanced stages is possible and likely when L2 learners resort to other UG options. In principle, ultimate attainment is possible because L2 learners have access to UG, but full acquisition of the target language is not guaranteed because learners can fossilize (or cease to develop) at any stage.

Evidence for this hypothesis comes from 1) showing the L2 learners impose the analysis of their L1 as their first approach to the L2, and 2) finding different developmental paths in learners of typologically distinct L1s. I will show throughout this book that several studies appear to support the Full Transfer/ Full Access position.

Other recent theories formulated within the context of the initial state and functional categories have, in some way, set the stage for the most recent debate on morphological variability in L2 acquisition. Unlike Schwartz and Sprouse (1994, 1996), Vainnika and Young-Scholten (1994, 1996a,b) and Eubank (1994, 1996) proposed that only part of the L1 and UG were involved in the initial state in L2 acquisition. Paralelling Radford's current position for L1 acquisition, Vainikka and Young-Scholten proposed an L2 version of structure building, although this is not the name that they give to their position. Hawkins (2001) explicitly proposed such a view for L2 acquisition which he termed "Structure Building " In their studies on the acquisition of phrase structure in German, Vainnika and Young-Scholten found no evidence for IP (auxiliaries, modals, verb raising and agreement) or CP (lack of complementizers and wh-movement) in the earliest data. IP and CP emerged gradually, as L2 learners learned the relevant inflectional morphology and functional lexical items. Similarly, Eubank (1996) claimed that lexical and functional categories, together with headedness, are transferred from the L1, while features of functional categories are not. In common with Vainnikka and Young Scholten, Eubank claimed that feature values and verb-movement are acquired when L2 learners master the inflectional morphology associated with IP. The appeal of Vainnika and Young-Scholten and of Eubank's proposals is that they can account for why some elements are not present initially and develop gradually, even when they are readily available from the learners' L1s. However, there are some conceptual and methodological problems with these approaches. Conceptually, they link overt morphology with abstract syntactic features, and this correlation does not always obtain. As Schwartz and Sprouse (1996) point out, feature strength is an abstract property of grammar and not of inflectional morphology. Methodologically, an error in production of morphology is taken as a direct reflection of lack of knowledge at the abstract syntactic level, and this assumption is not tenable.

Most recently, to account for systematic variability and apparent fossilization, Lardiere (1998a,b, 2000), Haznedar and Schwartz (1997), and Prévost and White (1999, 2000) have demonstrated that morpho-phonology should

not be equated with abstract features. Because inflectional morphology is one of the most fragile areas of linguistic development in which L2 learners display considerable variability, investigations of functional categories with this population have centered on the nature of this deficit and what it means for theories of L2 representation. Recent research has shown that the acquisition of formal abstract syntactic features and their morphophonological forms can be dissociated in interlanguage grammars (Haznedar and Schwartz 1997; Lardiere 1998a,b, 2000; Prévost and White 1999, 2000), as formulated in the Missing Surface Inflection Hypothesis (or MSIH). For example, in a study of an endstate Chinese speaker of English, Lardiere (1998a,b) has shown that this L2 speaker produces barely 30% of overt tense morphology, while also showing systematic and complete knowledge of the abstract syntactic properties of tense, such as finiteness, verb movement, case assignment, as well as semantic implications of tense. The conclusion so far is that L2 learners can have full competence with respect to functional categories and their abstract features, such that they display knowledge of distributional syntactic properties of functional elements, yet they may fail to produce the required overt morphology systematically, due to other deficits, such as the mapping of formal features to morphophonological form or phonological form as revealed by pronunciation. As we will see in Chapter 3, with the acquisition of verbal inflection, L2 learners, like L1 learners, also make systematic errors with tense and agreement morphology, but these appear to have a different source in L2 acquisition. Despite these apparent superficial deficits, overall, the full access view holds that L1 and L2 acquisition are fundamentally similar, and there is Continuity in development.

6. Brief overview of the Spanish language

Assuming a general theory of language and the general debates on language acquisition brought up in the previous section, a primary aim of this book is to offer a descriptive account of the growth and evolution of the Spanish language in L1, bilingual, and L2 acquisition contexts. Another related objective is to evaluate whether and how the different theoretical debates that currently occupy the field of language acquisition account for the acquisition of Spanish as first, bilingual and second language. Since Spanish is a human language, its acquisition should conform to principles of Universal Grammar and should

follow similar development in other languages. At the same time, because Spanish is one language among many others, focusing on a particular language allows us to investigate what aspects of language acquisition are germane to the acquisition of Spanish per se and do not fall out from universal principles. Thus, focus on a single language affords us a unique opportunity to investigate how input and structural characteristics of that language delay or accelerate certain linguistic milestones, as compared to other languages. In short, adopting this perspective reveals how children learn both the human language and a particular language.

Because Spanish is spoken in 16 countries on 3 continents, there are also important phonological and morphosyntactic dialectal differences between different geographical regions, These differences must be acknowledged and understood because they can significantly affect how we examine and interpret acquisition data (López Ornat 1988). Spanish is an Indo-European language from the Italic group. Like other Romance languages, it is a descendant of Latin. Although many dialects were spoken in the Spanish peninsula in the 10th century, present day Peninsular Spanish evolved from the Castilian dialect. Many of the phonological and morphosyntactic features of the Spanish spoken in the Americas come from different dialects of Peninsular Spanish (Andalusian, Canary Islands, etc.).

With respect to its morphosyntactic characteristics, Spanish is a nominative/accusative S-V-O language with rich nominal and verbal inflectional systems. In terms of phrase structure, and as shown in (1) and (2), Spanish is a head-initial language, where the head of the phrase precedes its complement in both lexical and functional categories. Nouns, adjectives, past participles, personal, relative, and interrogative pronouns are inflected for gender and number, but not for case (except for pronouns). In the noun phrase, there must be gender and number agreement among nouns, determiners and adjectives. Personal pronouns are inflected for person, number and gender. Finite verbs are inflected for person, tense (present, past, future, etc.), aspect (preterite, imperfect and progressive tenses), mood (indicative, subjunctive, conditional) and voice. Dialectal variation exists between some South American dialects, Peninsular dialects, and other Latin American dialects with the second person plural and singular personal pronouns and their corresponding verbal inflection.

Spanish is also a null subject language in which subject pronouns can be expressed overtly or not. This feature of the language is usually related to the

fact that Spanish has rich verbal agreement. However, as we will see in Chapter 4, null and overt subjects are not totally optional, but are subject to pragmatic and discourse constraints. In Caribbean dialects, overt pronouns and certain subject-verb-object orders are more frequent than in the other dialects.

Object pronouns come in weak forms, or clitics, and in strong forms. Clitics are pronouns that are phonologically dependent on verbs. Spanish has a polyfunctional clitic *se* (nominative, reflexive, reciprocal, passive, anticausative, aspectual, inherent, etc.), accusative and dative clitics. There is no overt difference between accusative and dative clitics, except for the third person singular and plural.

Clitics are object pronouns attached to verbs, and can be in complementary distribution with NPs. In finite clauses and negative imperatives, clitics precede the verb; in non-finite clauses and positive imperatives, clitics follow the verb. In a sequence of two or three clitics, there is a specific order: in most dialects, the clitic *se* precedes all other clitics, then come dative clitics, and finally accusative clitics. Spanish is a clitic doubling language, especially with dative clitics. That is, clitics and their corresponding NP occur in the same sentence. In some Latin American dialects (River Plate Spanish, Andean Spanish, and others), clitic doubling also occurs with accusative clitics.

These morphological and syntactic features of the language are just a few examples of some dialectal differences that need to be taken into account when analyzing and interpreting acquisition data. For this reason, throughout this book, I will be identifying the particular dialect that children and adults are exposed to when acquiring Spanish and also noting important dialectal differences that are evident in the empirical data of the studies discussed.

Now that we have presented some basic theoretical tools and assumptions, let us begin to uncover in the upcoming chapters how the various aspects of Spanish morphology, syntax, and lexical semantics are acquired by children and adults, and what they mean for theories of acquisition, and for the acquisition of Spanish, in particular. Chapters 2, 3, 4 and 5 are organized in terms of the clause structure and functional categories shown in (1) and (2), where the morphosyntax of the DP, the extended IP, verb-movement parameter, the null subject parameter, and a parameter related to the placement of object clitics with non-finite verbs will be examined. Chapter 5 will also deal with clause structure and word order, as regulated by the CP. Verb meaning and lexical-related parameters, like the Compounding Parameter, are the focus of Chapter 6.