THE ACQUISITION OF ENGLISH ROOT MODALITY BY NON-NATIVE SPEAKERS

BY

DEISE PRINA DUTRA

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

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1998

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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THE ACQUISITION OF ENGLISH ROOT MODALITY BY NON-NATIVE SPEAKERS

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The English modal system encompasses modal verbs (e.g. *should, must, could*), periphrastic modal verbs (e.g. *have to, need to*), and modal expressions (e.g. *it's necessary*). The idea for this research emerged after several observations of misinterpretations caused by inappropriate usage of the forms mentioned by non-native speakers. These speakers do not seem to know the semantic extensions of the various forms that one may use to code root modality.

The most common labels used to describe root modality meanings are *necessity*, *obligation*, and *advisability*. However, these labels are insufficient to give language learners an adequate understanding of root modality. This study suggests breaking down the labels into the elements that compose the vast semantic range of root modality. Both native speakers (the control group) and non-native speakers participated in several data collection procedures: tests of appropriateness, fill-in-the-blank tests, role-plays, debates, and spontaneous conversations. Based on quantitative and qualitative analysis, the elements validated by the control group were *urgency*, *new rule + urgency*, *pre-existing rule* and *speaker's necessity*. Besides these contexts, other factors influenced the choice of the modal device. Power relations and social distance were crucial factors in certain contexts. The results clearly showed that the non-native speakers' form-function mappings diverge from the native usage. These emerging grammars seem to have different starting points depending on learner's first language.

Most textbooks available on the market, with few exceptions, present crude explanations of the usage of root modality devices. One way of broadening students' understanding and usage of root modality devices is to show them how these constructions are used in the real world.

The awareness of the root modal elements tested here may facilitate non-native speakers' learning of root modality. Showing learners which contextual clues native speakers use in their choice of modal devices, may lead these learners to use root modality devices more appropriately.

CHAPTER 1
INTRODUCTION

Purpose and Need for Research

Research on linguistic acquisition strategies that non-native speakers (NNSs) use when learning a second language (L2) are crucial for the improvement of pedagogic procedures for teaching an L2. Getting closer to this practical consequence is the ultimate goal of second language acquisition (SLA) research. The idea that NNSs' L2 systems are studied in their own right (Selinker 1972) has been widely acknowledged for over 30 years. Selinker (1972) refers to the second language learner's (SLL) system as *interlanguage* (IL), it is a system that goes through stages of development as the learner improves her L2. Selinker's theory is illuminating since it focuses on the learners' own language and how this system is recreated (Sharwood Smith 1996). Ellis, commenting on Selinker's theory, states that *interlanguage*:

> … refer[s] to the special mental grammars that learners constructed during the course of their development. Interlanguage theory credited learners with playing an active role in constructing these grammars. It treated their behaviour, including their errors, as rule-governed. The language they produced, therefore, reflected the strategies they used to construct provisional grammatical rules … (1994: 44)

L2 learner language and how it works are still topics of heated discussion in the SLA field[1]. The central goal of this study is to describe the part of the NNSs' mental grammar that is related to modality. Therefore, it concentrates on the acquisition of the English modal system, which includes modal verbs (MVs) (e.g., *should, must, could*), periphrastic modal verbs (PMVs) (e.g., *have to, need to*), and modal expressions (MEs) (e.g., *it's necessary, it's possible*). It focuses on the root[2] meanings (obligation, necessity, and advisability) of modal devices through the observation of participants' perception[3] and production[4] of these related forms. Moreover, the native speakers' (NSs') modal system is also described and the NNSs' modal constructions are compared to the NSs'.

The description of NSs' modal system as a baseline is crucial due to the complexity of the sociocultural rules that regulate the notions and usage of obligation and necessity linguistic devices (Hinkel 1995). Theses rules are socially and culturally embedded and many times difficult to be identified. After analyzing NNSs and NSs essays on topics such as academics, politics, family, friendships, and patriotism, Hinkel concluded that the usage of root modals are culture and context dependent. In order to provide NNSs with appropriate clues on how to use modal devices, researchers have to first test the context and what NSs assume is culturally

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1 Some of these positions are developed in the next section.

2 Modality includes root and epistemic meanings discussed in the section entitled Modality in this chapter.

3 By participants' perception the author means what they feel or believe is appropriate or inappropriate for a certain context. Their perceptions were assessed with a test of appropriateness, which is described in Chapter 2 and whose results are presented in Chapter 3.

4 Participants' production is discussed in the light of results from fill-in-the-blank exercises, role-plays, debates, and spontaneous conversations.

suitable and, then, test the NNSs to determine where the divergence lies and why. Thus, the present study focuses on certain semantic features[5] which are hypothesized to be crucial components of root meanings as they are used by NSs[6]. It takes into consideration the contexts in which the modal devices are used as well as who the interlocutors are. Above all, it considers the impact of NNSs' choices of modality usage in discourse.

The idea for this research emerged after several observations of misinterpretations caused by inappropriate modality usage by NNSs. For instance, a NNS graduate student said in the first meeting with his laboratory group: "I am a new member. You *must* help me. I *need* total cooperation." This NNS's choice of modality sounded like an order for the native speakers and not like a request. After that, the NSs were not willing to help him. This example shows how the usage of modal devices cannot be studied in isolation, that is, dissociated from pragmatics. Besides having to deal with the complexity of the modal system itself, students of English as a second language (ESL) and English as a foreign language (EFL) may have their inappropriateness reinforced by the way ESL/EFL textbooks present modal verbs (Holmes 1988). These books usually do not inform their audiences about the subtle, yet crucial, differences among the MVs and PMVs.

Most ESL/EFL students' first contact with root modals is through presentations that portray their meanings as compartmentalized (Azar 1984, 1989, Steer and Carlisi 1991, Murphy 1993, Fuchs et al. 1994, and Werner et al. 1997). For instance, necessity is presented

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5 In this chapter there is a discussion of the semantics of these labels and also a justification of the features chosen to be tested in this research.

6 See Chapter 2 for a discussion of the group of NS participants.

separately from advisability and suggestion. Rarely are students made aware of the fact that there are semantic connections among these meanings. Some books try to compensate for this separation with pertinent comments. For example, a piece of advice may carry a necessity or obligation tone (Fuchs et al. 1994); "(…) a suggestion is sometimes similar to giving advice" (1994:268); or the difference between suggestion recommendation and advice is one of degree (Steer and Carlisi 1991). One of the most difficult points is to interpret the labels books use, such as necessity, without having enough contextual clues. Sentences are presented mainly in isolation and teachers and learners are left to their own interpretations (Azar 1984, Steer and Carlisi 1991, Murphy 1993, and Werner et al. 1997). Crude generalizations are often presented, for example, *must* and *have to* can be used interchangeably in almost any situation as well as *should* and *ought to* (Azar 1984, 1989, Steer and Carlisi 1991, Murphy 1993, and Werner et al. 1997). None of the textbooks mentioned here make any allusion to the usage of *should* and *ought to.* The choice of using either *should* or *ought to* seems to depend on both who the speaker is and in what context these verbs are being produced. Some textbooks add a little refinement to their explanations about *must* and *have to*, stating that the former is stronger than the latter (Azar 1989 and Werner et al. 1997) and that *must* expresses urgency. Yet, these books rely too much on the semantic labels mentioned above and few contextual clues are given in their explanations.

An exception to this rule is the textbook by Fuchs et al.(1994), which touches on mode (written and spoken) and certain pragmatic differences in modal usage. It indicates that *have to* is the most commonly used among *have to, have got to*, and *must*. It also states that *have got to* is suitable for spoken English and informal writing, and "*must* is used to express

obligation in writing, including official forms, signs, and notices" (Fuchs 1994: 285). It even touches on some crucial context clues: "Americans do not usually use *must* when speaking to or about another adult. Sometimes people use *must* to tell a child there is no choice in a situation" (Fuchs et al. 1994: 285). It also states that *should* and *ought to* are the same, but they offer interesting pragmatic comments:

> It is usually considered impolite to give advice to people of equal or higher status (such as friends or teachers) unless they ask for it. However, it is polite to give advice to these people when they ask for it. (…) When we give unasked-for advice, we often soften it with *maybe, perhaps* or *I think*. (…) Sometimes we use *must* or *have to* to give very strong advice. This kind of advice is similar to talking about necessity or obligation. (Fuchs et al. 1994: 260)

The description of these pragmatic rules should be based not only on the author's observation but also on research results. It is crucial that research focus on which contextual clues lead to the usage of certain modal devices. Only then will students be presented with pragmatic rules that govern conversation. This should be a concern not only to promote more proficient modality use, but also to lead students to more appropriate language learning.

SLA Theories

This section discusses two accounts of SLA based on learner-internal mechanisms: mentalist (mainly Universal Grammar[7] - UG), and cognitive (Ellis 1994)[8]. The term mentalist

[7] The basic principles of Universal Grammar are discussed in the following paragraphs.

[8] Some of Chomskyan work investigates general cognitive notions, such as dependency, adjacency, etc. Therefore, they are also called cognitive (Larsen-Freeman and Long 1991). This present study uses Ellis's (1994) broad cognitive definition and his distinction between the terms mentalist and cognitive.

refers to theories that have at their core the idea that language learning occurs due to our innate knowledge. Their main concern is to describe learners' competence, not actual performance, concentrating on effects of learners' internal factors in SLA. On the other hand, cognitive theories are used here to refer to theories whose major concern is the discovery of SLA processes and strategies. In this point of view, the distinction between competence and performance is not an issue, since usage reflects knowledge (Ellis 1994).

It is important to emphasize that the mentalist and cognitive accounts take a different stand on how language is learned. For UG, linguistic knowledge is different and separate from other types of knowledge. Thus, acquisition is guided by purely linguistic mechanisms. On the other hand, the cognitive account considers that language learning strategies are not specific to language, but the same ones involved in other types of learning. As MacWhinney states:

> Language ... utilizes virtually every major aspect of higher cognition, as well as many aspects of sensory and motor systems. This pervasive utilization of other cognitive structures by the linguistic function makes it all the more likely that language processing should be governed by many of the same basic principles that govern other aspects of cognitive processing and that the acquisition of language can be explained in terms of general learning principles placed at the service of communicative intentions. (1987:250)

Universal Grammar (UG)

According to Chomsky (1981 and elsewhere), language ability comes from a biological endowment called the Language Acquisition Device (LAD). This device carries some kind of innate linguistic structure, called Universal Grammar (UG). UG is formed by general *principles* (highly abstract properties of grammar) which no natural language can violate. Some of these principles vary in restricted ways from one language to another and are *parameterized*. This

means that there is a set of finite options (*parameters*) which languages can utilize. An example of a principle would be *subjacency*[9], and of a parameter would be *pro-drop*[10]. "Parameters like pro-drop are of considerable interest to linguists, and ... also to SLA researchers, because they involve a number of linguistic features" (Ellis 1994). In other words, the absence or presence of a parameter implies that a language follows a set of characteristics. For instance, a pro-drop language does not have expletives ('it' and 'there') (Chomsky 1981). Hyams (1986) asserts that non-pro-drop languages such as English, have a class of modal verbs apart from main verbs[11], while pro-drop languages do not.

If different languages have different parameter settings, what are the implications for SLA? There is a major debate in the field about the availability of UG for SLA. There are four views of how UG is available for SLA: the complete-access view, the partial-access view, the no-access view, and the dual-access view (Ellis 1994, White 1989). The complete-access view assumes that the learning of L2 is just the same as learning L1 (Flynn 1984, 1987). Therefore, L2 learners have access to everything in UG in the same way children do when they are learning their L1. The partial-access hypothesis (Schachter 1988) assumes that adult L2 learners have access to UG principles that restrict them from creating sentences which would violate these principles. The no-access view (Clahsen and Muysken 1986, Meisel 1991) claims that SLA is very different from L1 learning due to the fact that L1 learners use their language

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9 Subjacency restricts how far one phrase can move from deep to surface structure.

10 This parameter restricts whether or not the subject of a clause can be omitted. Portuguese, Spanish and Italian are examples of pro-drop languages, while English is not.

11 This fact may make a difference in how SLL treat modal verbs based on their first language (L1) experience.

faculty, while L2 learners use general learning strategies. Finally, the dual-access view (Felix 1985) claims that L2 learners continue to have access to UG but they also use problem solving strategies. This usage might work against L2 learning because it can create wrong hypotheses about L2.

Cognitive Accounts

The cognitive accounts have given a different importance to the influence of L1 in SLA than UG. One of the cognitive accounts of SLA is the *interlanguage* theory (Selinker 1972). This theory proposes that *interlanguage* may use the first language (L1) system or other tools, for instance, overgeneralized L2 rules, to build an interim L2 grammar or grammars. As Ellis summarizes:

> These mental grammars are perceived as dynamic and subject to rapid change. Thus, the interlanguage continuum consists of a series of overlapping 'grammars'. Each grammar shares some rules with the previously constructed grammar, but also contains some new revised rules. A rule has the status of a 'hypothesis'. (1994: 352)

These hypotheses may lead to native-like forms or deviant linguistic L2 constructions. Language transfer, or what Sharwood Smith (1996) called *crosslinguistic influence* (CLI), may be of different types: positive transfer, which helps SLA; negative transfer, which is the source of errors; avoidance, which consists of the non-usage of a certain form or discourse feature even when this would result in appropriate L2 constructions; over-use of L2 rules or discourse features; and the influence of L2 into L1. Consequently, looking only at SLLs' errors

does not give a complete picture of SLA characteristics[12] (Schachter 1974). Moreover, there may be transfer in L2 learning and in L2 communication (Kasper 1984 and Faerch and Kasper 1986). The use of L1 in both perception and production[13] plays a role in the changing the SLL's mental grammar, as discussed below in Chapter 5. This study analyzes mainly production and perception of root modality through the investigation of results from different types of data such as role-plays, tests and spontaneous conversations (see Chapter 2).

Other cognitive theories, such as the functionalist (Bates and MacWhinney 1987, Tomlin 1990) and variationist (Tarone 1983, 1988 and Ellis 1984, 1985) focus on language in use, as Ellis explains,

> not just … how linguistic knowledge is represented in the mind of the learner, but also … how this knowledge is used in discourse. Also, both types assume that syntax cannot be considered separately from semantics and pragmatics and, as such, are opposed to purely linguistic accounts of L2 acquisition. (1994: 369)

An example of a functionalist theory is Bates and MacWhinney's (1987) Competition Model. It was created for L1 acquisition and extended to L2 acquisition (Sasaki 1991, McDonald and Heiliman 1991), accounting for interesting language learning behavior. For instance, a speaker's mental grammar may have more than one form that is

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[12] A pilot study on the acquisition of modal verbs in ESL was done in the spring term of 1995 with Benjamin Geer. During the analysis of the data, it was also noticed that the understanding of MV acquisition also involved looking at the production of other competing forms (e.g. MEs). Otherwise, the description would be very narrow and would not show how the SLLs may use different linguistic tools to express the same meaning, such as how to ask for permission, how to express necessity.

[13] The comprehensible output hypothesis (Swain 1985) claims that not only comprehensible input but also L2 output aids SLA.

used for the same function. In this way, IL behavior resembles both child and adult L1. Both NSs' and NNSs' language systems are not purely a one-form one-function type of system. Ultimately, the NNSs should learn if such forms with the same function are used in different contexts. Competent NSs, however, know the motivation behind the appropriateness of a certain form[14] in a specific context.

The Competition Model brings together what is available to the learner (the input) and how language processing works. Its central concepts are direct mapping, cue validity and cue strength. Direct mapping is a construct that shows that the functional and the formal levels of presentation are connected in language processing. However, it does not mean that for each form there will be a corresponding function. Cue validity is formed by two ideas: cue availability (how often the information is offered) and cue reliability (how often the information leads to correct conclusion). Cue strength refers to how strong the connection is between a given piece of information and a certain meaning.

An example of the variationist theories comes from Ellis' (1985 and elsewhere) work. His model describes two major types of systematic variability, situational and contextual, and two types of non-systematic variability; one is the result of performance lapses, the second is the result of competing rules in the learner's competence. However, Ellis says that even what seems to be unsystematic is systematic:

> ... learners construct form-function networks in which individual forms are used to perform specific functions. These networks may not be target-like, and they evolve

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[14] For example, the use of *ain't* for negation in very informal contexts can be part of the linguistic forms available to a NS with higher education. However, this speaker would not use this form in formal settings.

> over time. They provide some of the strongest evidence of the 'creativity' of the L2 learning process and indicate the importance of going beyond a target-language-based analysis of learner language. (1994: 154)

Considering the SLA theories briefly presented here, and the objectives of this study, UG is not an appropriate theory for the present analysis. It is only concerned with problems with form and not function and it cannot account for linguistic variation (Bates and MacWhinney 1987). This approach says that once a parameter is set, there is no opportunity for it to be reset. For instance, as White explains, once a child learns English, a head initial language, this parameter[15] "does not have to be reset for the other phrasal categories; the rest follow as an automatic consequence of the head-initial setting of the parameter, and do not have to be triggered or learned individually" (1989:30). The biggest drawback of Chomskyan analysis is that principles and parameters refer only to formal properties. It ignores the functional side of language and its main use as a tool for communication. Besides that, it is unable to explain the variability in IL. Bates and MacWhinney criticize UG's all-or-none model:

> ... the "steady state" reached by adults also contains patterns of statistical variation in the use of grammatical structures that cannot be captured by discrete rules. This kind of cross-linguistic variation is difficult to capture with an all-or-none model. (1987: 158)

Both the functionalist and the variationist theories are pertinent to this study, since they are concerned with the SLLs' mismatches of form-function[16] and how certain forms may have

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15 This parameter is called *head-position* and it has two values: head-initial or head-final (Chomsky 1986, Travis 1984).

16 When the word *form* is used in this study, it means the linguistic structure being used by the participants. *Function* means what the form is able to communicate, for instance, a request.

or be used for different functions. The L2 creativity and construction of form-function networks are crucial for the understanding of SLA. First, we ought to describe the L2 system as a system in itself. Second, we should be able to describe this system in terms of the form-function networks. In the case of the acquisition of modal verbs, an approach along these lines seems to be much more accountable than UG for the facts presented.

SLA Research on the Acquisition of Modal Verbs

The studies in the field of modality acquisition have concentrated mainly on the acquisition of MVs. Some have looked at this area from a purely structural point of view (Haegeman 1988), from a cultural point of view (Hinkel 1995), and from a socio-functional perspective (Robberecht and Peteghem 1982, Altman 1982, 1985). Others have investigated the order of acquisition of root versus epistemic modal verbs: Stephany (1995) on both L1 and L2 acquisition and Gibbs (1990) on children L2 rather than adults. These various approaches to the acquisition of MVs are discussed below.

Haegeman's (1988) analysis of L2 acquisition of English modals uses the parameter setting approach. In her study, she compares the structure of modal verbs in Dutch, French and English, since she seeks to discuss how Dutch speakers and French speakers from Switzerland use the English modals. The modals in these three languages are work in a way that "the impact of the modal is to be seen, for instance, in the interpretation of the object NP [noun phrase]" (Haegeman 1988:259). They belong to categories that behave grammatically differently. The English modals form a distinct group with characteristics that set them apart from main verbs. Yet, both the French and Dutch modals are fully inflected and accept a wider selection of

complements than their English counterparts. Structurally they cannot be differentiated from main (content) verbs. The only difference between the French and the Dutch modals is that the Dutch modals are verbs that trigger verb raising[17] (Haegeman 1988). Haegeman says that since these verbs are parametrically different, French and Dutch speakers need to reset their modal verb parameters to acquire English modals. One could say that she is claiming that L2 learners have access to UG, with the ability to seek other parameters in their LAD and use them.

This structural perspective completely ignores the semantic intricacies of the English modal verb system, thereby focusing only on learners' problems which are related to form. Modality and the meanings it covers have been described, showing that the system to which modal verbs belong is not a simple one, especially semantically. UG assumes that language acquisition is synonymous to acquiring structure, making parameter setting a narrow analysis of linguistic facts.

Hinkel (1995), in a cultural analysis of modal verb usage, compares written essays of Chinese, Japanese, Korean, Indonesian, Vietnamese, and American English speakers. She states that *obligation* and *necessity* are seen differently in Anglo-American, Confucian, Taoist, and Buddhist cultures when they write on topics of family, friendships, and traditions[18]. She claims that pragmatic and sociocultural implications make ESL learners use modal verbs differently from NSs. For instance, a Chinese speaker would say that he *must* help his friend if

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[17] In a verb raising process, two clauses (one with a modal verb and the other with the complement) are reanalyzed as a single-clause.

she is sick since group harmony and loyal friendships are highly valued in Confucian societies (Hinkel 1995). These observations are appropriate to

pinpoint some problems with NNSs' MV usage; however, there are two assumptions in Hinkel's work that have to be discussed. First, Hinkel assumes that NSs use *must* to express obligation. This is based only on traditional linguistic conventions. The results of this present research show, however, the NSs' reluctance to convey this meaning using *must*. Second, Hinkel assumes that NNSs understand the system of obligation and necessity in the same way as NSs do, although they choose to use it differently. Therefore, a careful analysis of specific features that compose the NSs' and NNSs' systems is still necessary.

The socio-functional perspective to the acquisition of modals (Robberecht and Peteghem 1982, Altman 1982 1985) has shown that EFL and ESL students have " 'no feeling' for the various nuances" of modality (Robberecht and Peteghem 1982:164). Robberecht and Peteghem claim that Dutch students underuse epistemic[19] modality when speaking English due to the vast array of epistemic MVs in their language. Altman (1985), focusing on how Japanese students understand and use *had better* and *should*, says that since they inappropriately rank *had better* as less strong than *should*, their giving and taking advice becomes unsuitable. Moreover, Altman suggests that "only by looking at function … could we learn of the importance of *have to* and *need to* as expressions of root/deontic modality, of *maybe* as a proposition-external substitute for the modal

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[18] Hinkel's approach and mine are similar in terms of breaking down the labels. Her categories are culturally motivated while mine are semantically motivated.

[19] The labels *root* and *epistemic* for modal verbs are fully discussed in the next section.

auxiliary *might*…" (1982:7). However, Altman's analysis cannot account for pragmatic differences between the usage of *have to* and *need to* or *maybe* and *might*.

The studies on order of acquisition point to the aspect that root meanings are acquired earlier than the epistemic ones by children. On the other hand, adults who already have the conceptual structure of epistemic meanings but have not yet mastered the modal verbs that express them, tend to use "verbs of thinking and believing or … epistemic adverbs" (Stephany 1995:116)[20]. Only looking at the order of acquisition does not tell us much about what is going on in the learner's grammar. Stephany stresses that:

> In order to trace the gradual acquisition of the complex modal structures languages offer, a detailed analysis of their use in both sentence, speech act and discourse types is necessary. (1995:118)

Modality

Palmer (1986:2) states that " ... modality ... does not relate semantically to the verb alone or primarily, but to the whole sentence. Not surprisingly, therefore, there are languages in which modality is marked elsewhere other than on the verb or within a verbal complex." The modality system of Ngiyambaa, for example, (Donaldson 1980), is so complex that it is formed by verbal inflection categories, which code the imperative, past, present, purposive and irrealis, and also by clitics which code ideas of counterfactuality, modality (belief and knowledge clitics),

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[20] The results from the pilot study with Benjamin Geer support the same idea.

and evidence. In English, alike, there are other modality devices besides MVs and PMVs, such as adverbs (e.g., *maybe, probably, possibly*) and adjectives (e.g., *possible, probable*).

Among several approaches to the study of modality (von Wright 1951, Lyons 1977, Palmer 1990, among others), the functional approach suggests a broad system of sentential modality (Givón 1995, 1993, 1984). It has the advantage of including modal verbs, epistemic (*maybe*, *probably*) and evaluative (*hopefully* and *preferably*) adverbs, the subjunctive mood, future tense, non-implicative verbs, and non-declarative speech-acts as *irrealis*. This approach to modality is broad enough to include such different linguistically coded forms under one meaning categorization. This global analysis, however, loses precision of function as it certainly implies different forces imposed by the speaker on the process. This study aims at capturing the differences between sentences like (1) and (2) through the testing of specific situations[21].

(1) Maybe I will go.

(2) I may go.

Modal Verbs

The term modality is also used as a synonym of modal verbs (Langacker 1991). A closer look at the structural characteristics of modal verbs is necessary here. The English modals form a distinct group with characteristics that set them apart from main verbs. Following Coates (1983), these verbs

(a) take negation directly (can't, mustn't),

(b) take inversion without *do* (can I?, must I?),

(c) 'code' (John can swim and so can Bill),

(d) can be emphasized (Ann *could* solve the problem),

(e) have no -s form for third person singular (*cans[22], *musts),

(f) have no non-finite forms (*to can, *musting),

(g) do not co-occur (*may will).

In other languages these verbs behave differently. In German, for example, semantically similar verbs to English modals are called periphrastic. They are structurally different from their English counterparts because they have infinitival forms (*wollen* 'to want to' and *müssen* 'to have to'), form past participles (*Ich habe es* gemusst 'I have had to do it') and agree in person with the subject (ich darf 'I may', du darfst 'you may') (Langacker 1991). The modals in Romance languages follow the same structural properties as their German counterparts and still have other characteristics that set them even further apart from the English modals. They are, in fact, content verbs. The modals in Romance languages can also co-occur[23] and form a gerund form (in Portuguese, *podendo* *'canning'). They are biclausal structures formed by a modal verb and an infinitival complement. In this study, the L1 influence that might occur in the acquisition of modality is investigated in Chapter 5.

Root and Epistemic

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[21] The definitions of the categories tested are defined later in this chapter.

[22] An asterisk (*) next to a word or sentence means that there is a structural error.

[23] Co-occurrence of modals, or double-modals, are present in some American dialects (see Di Paolo 1989). This fact contradicts several analyses of the English modal verbs, which state that the absence of modal co-occurrence is a characteristic of these kind of verbs.

This study works under the assumption that there is a valid distinction between two modal categories: root and epistemic[24] (Sweetser 1982). It investigates the usage and acquisition of root meanings. Both structural as well as more semantic approaches are based on this distinction. Picallo (1990), who works within the Government and Binding (GB) framework, claims that root and epistemic modals are generated at different syntactic positions: epistemic in INFL and root in the VP[25]. If generated at INFL, the modal verb has scope over the entire clause. Yet, if it is generated in the VP, it is interpreted as a subject-oriented. GB attempts to account for semantic differences using only syntactic rules. The results are not successful since some questions remain without an answer. First, what does it mean to say that a root verb is subject-oriented? For instance, is the subject responsible for reporting a prohibition, or creating it as it is uttered (3)?

(3) You **must not** smoke in this room.

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[24] Some approaches have a different division, for instance, epistemic, deontic and dynamic (Palmer 1990). The deontic sense refers only to social and moral obligation. This reading of deontic sense comes from an extension of modal logic: the logic of obligation and permission (Lyons 1977). In fact, von Wright (1951) presents four modes; alethic (modes of truth), epistemic (modes of knowing), deontic (modes of obligation), and existential (modes of existence). The dynamic modality is presented by von Wright in a footnote and Palmer (1990: 36) uses it when he argues that "dynamic modality is subject-oriented in the sense that it is concerned with the ability or volition of the subject of the sentence, rather than the opinions (epistemic) or attitudes (deontic) of the speaker (and addressee)." One can argue against Palmer's point of view since a broader category, such as root, can encompass all social relations expressed by modals, including *can* ability (Sweetser 1982), the position followed in this study.

[25] An INFL category carries both the markers for tense and agreement of person and number. Although this category is the head of the sentence (Cowper 1992), it depends on the VP (verb phrase) to exist. "Thus, if INFL were to occur without VP, the result would be morphologically ill-formed. There would be an affix with no word to attach itself to" (Cowper 1992: 68). The

Second, how can GB account for the different degrees of epistemic meanings, as in:

(4) He **must** be a good teacher.

(5) He **may** be a good teacher.

The fact that root and epistemic modals may be in different syntactic positions is not enough to justify their semantic differences.

In order to explain the distinction between root and epistemic modals under a semantic perspective, Sweetser (1982) claims that the root sense denotes real-world meaning, such as obligation, permission, or ability, and the epistemic sense denotes necessity, probability or possibility. Therefore, the root sense refers to the domain of social interaction and the epistemic sense to the domain of reasoning. Sweetser argues that root and epistemic verbs are used in different domains, but they are related in every other aspect. "There is strong historical, sociolinguistic, and psycholinguistic evidence for viewing the epistemic use of the modals as an extension of the root meaning" (Sweetser 1982: 485). Sweetser's claim is that "the epistemic world is understood in terms of the sociophysical world" (1982: 492).

Sweetser's root-modal analysis uses Talmy's (1981) idea of looking at modality in terms of *force dynamics*. Talmy explains that this semantic category deals with

> "how entities interact with respect to force. Included here is the exertion of force, resistance of such a force, the overcoming of such a resistance, blockage of the expression of force, removal of such blockage, and the like". (Talmy 1988: 49)

This dynamic interaction reflects in the linguistic treatment of force and barriers. As Sweetser exemplifies, " permitting (e.g., *may*, *let*, and *allow*) is an instance of taking away (or keeping

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VP is formed by a main verb (V) and optionally by a noun phrase (NP) and a prepositional

away) a potentially present barrier" (1990:51). Using these concepts of forces and barriers, Sweetser is able to extend a root interpretation to the epistemic domain:

> John may go.
> "John is not barred by (my or some other) authority from going."
> That may be true.
> "I am not barred by my premises from the conclusion that that is true." (1982: 493)

Sweetser's (1990, 1982) elegant way of stating that the difference between root and epistemic sense is manifested by an abstract force being "driven" either into the social sphere or the domain of reasoning is followed by Langacker (1991). Langacker adds that the root and epistemic forces are different because one is societal (root) and the other is realistic (epistemic).

Semantic Delimitation[26]

This section first presents the most common labels used to describe root modality meanings, discussing how these labels are insufficient to give language learners a good understanding of root modality. Second, there is the justification of breaking down into the elements that constitute root modality, so as to find what motivates speakers' choices of root modal devices.

The root category studied in this work includes how one expresses obligation, necessity, advisability, request, and possibility. These meanings are discussed in two groups: (a) obligation, necessity, and advisability; (b) possibility. The terms of the first group and their

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phrase (PP).

[26] This study adopts the position of functional linguistic models which do not consider the linguistic system as formed by different modules, syntax, morphology, phonology, semantics and

sometimes overlapping meanings was the starting point of this research. The second group emerged from the data collection, and the meaning may also overlap with the ones from the first group. The following definitions are not supposed to be exhaustive. However, they delimit the semantic characteristics taken into consideration in this study.

Obligation, necessity, and advisability

Obligation involves duty and responsibility on the part of the speaker ('I') or interlocutor ('you'), whoever is supposed to do something. A situation that entails obligation does not leave options for the one who has to accomplish the duty. In a case like this, there seems to be an imposition from someone or something, to make the person feel compelled to do whatever is being asked to be done. In terms of Talmy's (1988) work, there is a force which points the subject to the action. The features that compose this force are central to this study. When are obligations expressed in a conversation? Who can make such an imposition? What makes one believe to be obliged to do something? What makes somebody else be the one to force that obligation? Does this force have a moral, legal, or personal basis? The answers to these questions were essential in determining the situations to be tested and, therefore, which features to be chosen. These features are fully discussed in the next section.

The term *obligation* is defined in the *Longman Dictionary of Contemporary English* as "a condition or influence that makes it necessary for someone to do something" (Summers 1991: 714). This definition highlights the fuzziness of these definitions, since there is not a clear dividing line between where an *obligation* ends and a *necessity* begins. However, one cannot

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pragmatics, as Generative Linguistics does. Instead of bringing pragmatics into play when semantics fails, the functional approach conceives semantics and pragmatics as one domain.

say that *necessity* entails *obligation*. Therefore, the same dictionary defines necessity as "the condition of being necessary or unavoidable" (Summer 1991: 694) and necessary as what "must be had, obtained, or done; needed; ESSENTIAL". In both cases, *obligation* and *necessity*, something has to be done. Nevertheless, while *necessity* is purely what is essential in a certain situation (6), *obligation* also involves duty/responsibility, what is morally and or legally right to do (7):

(6) Mom, I'*ve gotta* pee. (It is essential that I go to the bathroom.)

(7) "… the driver and front seat passengers *must* wear seat belts" (*Florida Driver's Handbook* 1992). (It's legally required to wear seat belts.)

In certain cases, due to the fuzziness mentioned above, it is hard to classify a sentence as either *obligation* or *necessity:*

(8) I have a hard test tomorrow. I've gotta stay home and study. (It's essential that I stay home and study. It's my responsibility to stay home and study.)

Therefore, the labels *obligation* or *necessity* are of little help to the understanding of the modal system.

Advisability is another root meaning not as close to *obligation* and *necessity* as these two last terms may be to each other; however, it also shares some aspects with these terms. Giving advice is giving someone guidance to do something. It may range from a simple suggestion to a recommendation or even admonition. Thus, in certain cases, giving advice may be a warning. When the speaker suggests something, she believes that her opinion on that matter is the appropriate one. At least for that person, whatever is being suggested is the right action to be taken. In this sense, advisability resembles obligation as far as what is to be done is

considered correct, at least in the opinion of the one giving the advice. What kind of advice, suggestion or recommendation can be given in certain situations? Who is the one in the position to suggest something? How forceful does the suggestion sound and how much does the speaker insist on that being done?

Possibility

The study of root possibility was not part of the primary plan of this research. Yet, this meaning became important due its usage in making requests and the types of modal devices it yields.

This research takes Sweetser's (1982) position that the separation of modals into root and epistemic is an appropriate one. The root sense refers to the domain of social interaction and the epistemic sense to the domain of reasoning. Therefore, root possibility is part of the domain of social interaction. As previously discussed, linguists categorize modal meanings differently. The approach used diverges, for instance, with Palmer (1986 1990), who has a separate category for root possibility called *dynamic possibility.* What is relevant to the present study is the distinction between root possibility and epistemic possibility. Root possibility sentences, such as (9) and (10)

(9) Can you help me?

(10) Is there any way you could help me?

can be paraphrased as "Is it possible for you to help me?" An answer to a question such as (9) or (10) could include the root possibility meaning as well:

(11) I could look for the box. (It's possible for me to look for the box)

Epistemic possibility sentences, such as (12) and (13)

(12) He might be in the office.

(13) Maybe he is in the office

can be paraphrased as "It's possible that he is in the office."

The root possibility category includes (a) requests, (b) the expression of abilities, and (c) permission. During the analysis of the features tested and of the modal devices chosen by the speakers, the label *request* is often used rather than *root possibility.* The requests became an important category in this study, since the participants had to make requests in their attempt to communicate the features being tested.

Justification of the Features

The semantic categories (obligation, necessity and advisability) do not seem to be distinct enough to be tested separately as far as modal usage is concerned. The elements that constitute a situation that asks for the expression of an obligation, for instance, is what might shed some light on how NSs and NNSs use modal devices. Consequently, the features tested emerged from a careful observation of answers elicited through role-plays and tests.

After running the pilot study on the acquisition of modal verbs[27], both on root and epistemic meanings, it became clear that a more detailed data collection procedure was necessary to describe NNSs' modal grammar. Besides that, the researchers were not sure how to judge the appropriateness of the modal devices in certain circumstances. Therefore, a description of how NSs perform in the same situations was necessary. In the pilot study, role-plays and a debate were used as data collection procedures. The role-plays probed the use of

modals that express permission, ability, request, epistemic, advisability, and necessity/obligation. Since there were so many meanings and only five situations, it was hard to determine what factors actually favored the use of one MV or PMV over another. After the analysis, however, it was clear that there was a need to better understand for what *functions* the MV and PMV are used. The importance of functional studies is emphasized by Halliday:

> Just as the child builds up his linguistic structures in a way which reflects his acquisition of the uses of language, so the structure of language as a whole has been built up in such a way that it reflects the demands that are made on language and the functions it is required to serve. (1970: 323)

Pilot studies with NSs were also conducted. The categories that emerged from both the pilot studies with NNSs and NSs were (a) how to express something urgent (urgency), (b) how to set a new rule (new rule), (c) how to set a new rule when there is some urgency involved (new rule + urgency), (d) how to remind someone of a rule that the addressee should know (pre-existing rule), (e) and how a speaker expresses her own necessity to do something or to have something done (speaker's necessity). These categories, combined with the element of power and social distance, generated twenty different situations used in the role-plays and tests. These categories need to be fully understood since they were one of the sources[28] that probed the use of the forms analyzed.

For each of the above features, there are several situations that test the use of modal devices. The point of view in this study is that once a factor is changed, for instance, social

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27- This was the pilot study was done with Benjamin Geer in the spring of 1995.

28 Data were collected through other procedures: debates and spontaneous conversations (described in Chapter 2).

distance, the situation is different. Therefore, the linguistic choices made by the speakers may be different as well. This study intended to capture which variations affected the linguistic choices.

Before presenting each feature separately, it is important to determine how the terms *power* and *social distance* are used in this study. These notions, vastly used in linguistics, especially sociolinguistics, are used with different meanings by different authors[29]. In this present research, power is used as a synonym of authority (Leichty and Applegate 1991), and of the control that one of the interlocutors may or may not have over the other (Brown and Gilman 1972, Brown and Levinson 1987). Therefore, if one of the interlocutors has power over the other, there is a power relation between them. The term social distance is associated here with intimacy (Brown and Gilman 1989, and Boxer 1993), how well people know each other. Thus, if the level of intimacy varies, the type of relationship between the interlocutors does too. The gradation of intimacy used in this present study has four different levels: (1) intimate (e.g., spouses or parent/child); (2) friends; (3) acquaintances (e.g., coworkers or roommates); and (4) strangers[30].

The justification of the each feature is not an exhaustive one. The features discussed take into consideration some contextual elements and not all the possible ones for these features. Besides that, root modality encompasses other features not justified here and not

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[29] See Spencer-Oatey (1996) for a detailed discussion on these terms.

[30] Spencer-Oatey stresses the fact that "in cross-cultural research, there is also the danger that people from different cultures may differ significantly in their prototypical conceptions of role relations" (1996:6). Therefore, this should be taken into consideration in the interpretation of the results.

tested by this research, such as how to express emergency or how to try to convince someone to do something (e.g., " You *must* read this book. It's the best book I've ever read").

Urgency

An urgent situation requires that action be taken immediately. What usually calls for urgency involves some unexpected event that makes the situation intolerable for the speaker. Therefore, an action has to be taken.

Four of the role-play situations created concerned the sending of an important shipment to another country. The urgency is kept throughout all the situations, with power and social distance being the variables.

In the role-plays where the context involves the sending of the shipment, the problem arises because the speaker forgot to include some critical items in the package. The package was brought to Federal Express (FedEx) a couple hours beforehand and it is urgent that it be sent to its destination overnight. Therefore, the speaker has to go to the local collection warehouse for FedEx to ask the FedEx employee to find the box in order to put the forgotten items in. The problem is aggravated by two factors: the speaker needs the package to be complete (the items cannot arrive at the destination separately, and they have to be there the next day); and FedEx has a policy that their employees cannot leave the desk to go to the back of the warehouse.

Since this study attempted to test how modal device usage is affected by context change, different situations were created modifying the relationship between the interlocutors. There were four situations in the shipment context, where the interlocutors were (a) strangers--no power relation between interlocutors; (b) acquaintances--speaker has power over

addressee; (c) friends--no power relation between interlocutors; and (d) acquaintances--no power relation between interlocutors. Another context was created to accommodate the testing of a conversation between intimates (spouses) involving urgency. This situation is urgent since the computer crashed and erased all the payroll files. Payday is the next day and the speaker has a dinner with an out-of-town client for that night. The speaker has to ask a coworker, who is also her spouse, to take care of the paychecks.

New Rule

The other meaning tested is how a speaker tells the addressee that a new rule has to be set. Something is disturbing the status quo, and the speaker believes a solution will come if the listener, or both the speaker and the listener, do things differently from what she/they have been doing. The speaker may be in a position of power in relation to the addressee; therefore, the setting of this new rule becomes imperative. If the relationship between the interlocutors involves no power, then, the setting of the new rule may involve suggestions of how to make their lives run better.

Following the idea that any change in the relationship between the interlocutors (power or social distance) creates different situations, there are contexts in which a new rule has to be set and the variables are either power or social distance. The interlocutors were (a) intimates--speaker with power over the addressee; (b) intimate--no power relation between speaker and addressee; and (c) acquaintances--no power relation between speaker and addressee. No situations were designed in which the speaker has no power (authority) over the addressee, since the speaker would not be in a position of setting new rules for the addressee to follow. At

least in American society in most situations, it would be inappropriate for a speaker with no power over the addressee to tell her what to do.

New Rule + Urgency

The setting up of a new rule can be aggravated if the situation is urgent. The speaker is led by the circumstances to tell the addressee how things should be changed so that the addressee's life would get to a better state. The fact that power and social distance may interfere in the choice of modal devices is again a concern here. A conversation between a doctor telling his patient what she should do in order to avoid a heart attack may be really different from a similar conversation between spouses or friends. Three of the new rule + urgency role-plays involve the same health problem setting. The situations varied as power and social status did: (a) doctor to patient--speaker has authority over the addressee; (b) friends--no power relation between interlocutors; (c) spouses--no power relation between interlocutors. In order to capture any difference in modality choice in a situation in which the speaker has power/authority over the addressee and they are intimate, another context was created. A parent has to set new rules so that the child will pass and graduate from high school. The necessity arose to create a different context in which interlocutors are intimates and at the same time the speaker has power over the addressee, because the health problem context was not natural for these characteristics. As is discussed in the analysis, the combination of intimacy and power makes a difference in the choice of modal devices.

Pre-Existing Rules

Situations that involve the expressing of rules known to both the speaker and the addressee were also created. They are called throughout this study as *pre-existing rules*. The reminding of a norm becomes necessary when one of the interlocutors displays an attitude that goes against what is normally acceptable for that situation. This pre-established norm can be one morally accepted by society (e.g., to return to the owner something that one finds) or it can be a norm that has been established in the group that the interlocutors belong to (e.g., the parents have established a curfew and their children are aware of it).

Four different situations were designed, to capture the differences in the usage of modal devices to express a pre-existing rule. Power and social distance between the interlocutors varied: (a) speaker has power over the addressee but they are intimates; (b) no power relation between the interlocutors and they are friends; (c) no power relation between the interlocutors and they are intimates; and (d) no power relation between the interlocutors, but they are strangers.

Speaker's Necessity

Another feature tested was that of internal necessity. Four different situations were designed so as to capture how necessity is expressed if it comes from the speaker herself and not from any external need. In these situations the addressee is called to help the speaker and has no advantages a priori in helping the speaker. The speaker has to express how much she needs to do something or how much she needs it to be done. Due to the internal source of the necessity, the situations testing this meaning are referred to as *speaker's necessity* in this study.

There are three different contexts to test speaker's necessity. In one of the contexts, the speaker wants to buy tickets to go to a concert but she has classes at the time they are going to start to be sold. This context has two variations; (a) no power relation between the interlocutors and they are friends and (b) no power relation between the interlocutors and they are intimates. In another context, the speaker is waiting in line to buy football tickets as she gets a message on her beeper. She asks the person behind her to save her place. There is no power relations between the interlocutors and they are complete strangers. The other context involves a student asking a professor to write a letter of recommendation. The addressee has power over the speaker and they are acquaintances.

Conclusion on Justification of Features

By testing five different features/elements of root modality, this study aims to capture which ones influence modal device usage. The separation into labels such as obligation, necessity and advisability, does not help the description of usage of root modal devices. Therefore, this breaking down into root modality elements is an attempt to contribute to a better understanding of the acquisition of root constructions.

Study's Hypotheses and Chapter Organization

This present research, therefore, focuses on the acquisition aspects of root modality related to context and discourse. This study's hypotheses are:

1. NSs and NNSs have different modality systems/grammars

2. the NNSs' grammar approximates the NSs' as the NNSs improve their language abilities

3. even more proficient learners (advanced group) have problems with modality in terms of usage

4. the NNSs' grammar differ from the NSs' in terms of both MV/PMV and ME usage

5. in the same context, NNSs' and NSs' discourse differs with respect to the choices of modal devices

6. part of the linguistic coding used to convey modal meanings is connected to NNSs' L1

7. learners from different L1 backgrounds use different strategies in their learning process

The rest of this study is presented in five additional chapters. Chapter Two addresses data collection and analysis procedures. Chapter Three presents an analysis of the NSs' and NNSs' grammar as far as root modal and periphrastic modal verbs are concerned. Chapter Four elaborates on speakers' choices of modal devices and how they affect the discourse development. Chapter Five presents an analysis on the influence of L1 in the use of modal devices in role-plays and spontaneous conversations. Chapter Six concludes by putting together both quantitative and qualitative results and discussing the implications of such results to L2 teaching and acquisition theory.

CHAPTER 2
METHODOLOGY

This chapter has three major sections: (a) data collection methodology; (b) justification of features tested; and (c) analysis methodology. This study uses several methods of data collection[1] and analysis to ensure an adequate description of the phenomena studied as well as reliable data results. It includes a qualitative technique (spontaneous speech) and four different types of experimental design for data collection: debates, role-plays, fill-in-the-blanks, and tests of appropriateness.

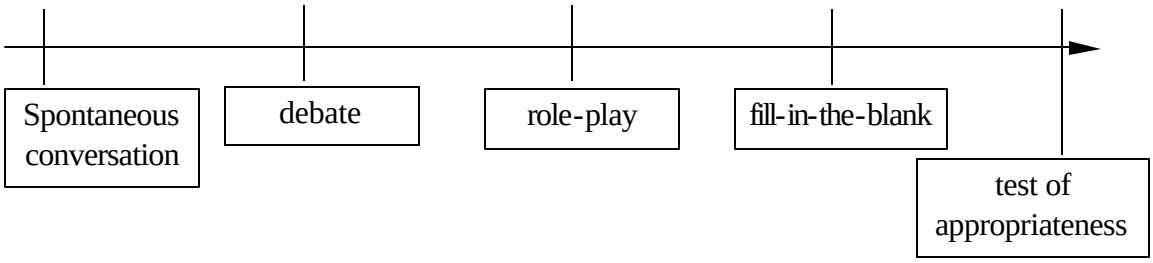

Figure 2-1. Range of data collection procedures

[1] Both in the fields of language assessment and speech act analysis, there is an emphasis on the use of multi-method research approach (Beebe and Cummings 1996, Cohen 1996, Cohen and Olshtain 1994). Thus, some scholars have even suggested an ideal cycle of data collection techniques to ensure good results when working with speech act data (see Olshtain and Blum-Kulka 1985).

The techniques used a spectrum from *not controlled* (spontaneous conversations) to *very controlled* (test of appropriateness). Therefore, in the above figure, the more to the right the collection procedure is, the more the researcher determined the context considered by the participant, and the fewer possibilities there were for answers to vary.

The test of appropriateness is the only procedure that tests the participants' **perceptive grammar**. This test captures what they **understand** as appropriate or inappropriate for a specific context. The spontaneous conversations, role-plays and fill-in-the-blank tests elicit the participants' **productive grammar**. The researcher can access what learners **conceive** to be appropriate and then compare with what they **use** in role-plays, fill-in-the-blanks and spontaneous conversations.

Data Collection Methodology

Participants

The participants were all volunteers[2] and are students at the University of Florida, Gainesville. The NSs were undergraduate students (the control group) who were taking an introductory linguistics course[3] at the time of the data collection. The NNSs were students at the English Language Institute (ELI) from three distinct levels: beginning, intermediate and advanced. They were placed in these levels according to their scores on the Comprehensive

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[2] There should be caution on how to interpret and generalize the results when volunteers are used. The volunteers may not be the most typical of their groups (Hatch and Lazaraton 1991). However, since all the groups have volunteers, including the control group, and they all participated exactly in the same activities, this effect should be neutralized in this study.

[3] Their majors varied considerably. Some of them were in accounting, biology, and English.

English Language Test (CELT). Consequently, these groups are considered intact groups. This means that the researcher had no control over which students were assigned to which group, since the distribution is determined by the school. There was, then, no random selection. Yet, this should not be a major concern since this study does not aim at making causal claims between variables but rather describe how the participants build their modal system.

Comparisons are made between the NS and NNS modality usage. The NS group is defined as a group of college students whose ages range from 18 to 25. This group is not homogenous, since they come from different parts of the United States and may belong to distinct social classes. The comparison between the NS and NNS seems to be pertinent since the NNS group will have to interact with college students of this age when they are accepted to a college or university. Most NNSs are between 18 and 25; however, a few were between 35 and 45 years of age at the time of the data collection.

The data collection was mainly cross-sectional, and the NNSs were always from the three different levels already mentioned above. Twenty NSs and thirty two NNSs took the tests. Thirty NNSs were paired with thirty NSs to perform role plays. Twenty NSs were paired and also performed the same role-plays. A total of twenty NNSs divided into three groups participated in a debate. Two groups of NSs, total sixteen, also debated the same topic. The NNSs speak different first languages (Spanish, Portuguese, French, Arabic, Japanese, Chinese, Korean, and Turkish).

In addition, spontaneous conversations of three different pairs were recorded. These pairs were formed by an NNS and an NS participating in the ELI conversation partner program at that time. The NNSs were from Venezuela, Saudi Arabia, and Brazil. Respectively, their

L1s are Spanish, Arabic, and Portuguese. They started recording their conversation when the NNSs were beginning students, and this was done for two consecutive terms[4].

All the volunteers were told the study was about SLA, but none of them was told that the focus of the research was on the modal system.

Oral Production Data

There are several data collection procedures in the field to assess oral production. According to Crookes, they may

> range from those placing little restriction on the individuals producing the speech to be described, using relatively unconstrained, free speech samples, to those limiting production to imitation of given models (elicited imitation, EI), or completion of partial phrases (utterance completion, UC). (1991: 121)

Those used in this study are: role-plays, debates, and spontaneous conversations. These procedures are fully discussed in the following sections. Collecting oral data was chosen over other techniques such as Discourse Completion Tests (DCTs)[5] and questionnaires. This choice was made since oral data are more representative of what

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[4] Each term corresponds to about 4 months.

[5] DCTs are written questionnaires in which the situation is described and following it there is room for the participant to write what she thinks is the best sentence to respond to that situation. Hinkel (1997) shows that both DCT and multiple choice (MC) designs have several shortcomings, so their results are not reliable for the study of L2 speech acts. She concludes by saying that either very controlled data or spontaneous conversation data (especially the latter) should be more appropriate procedures. Manes and Wolfson (1981), Wolfson (1986, 1989) and Holmes (1990) advocated the collection of spontaneous speech in natural settings. Beebe and Cummings (1996), however, support the use of DCTs. Although DCT results do not accurately reflect natural speech in terms of the exact wording and "range of formulas and

happens when people speak spontaneously than the answers participants write on tests or questionnaires. Above all, this study intends to capture the exact linguistic choices speakers make and DCTs seem not to allow that.

Role-plays

Closed and open role-plays are used in the L1 and SLA fields (Kasper and Dahl 1991, Houck and Gass 1996). In closed role-plays, participants are presented with a situation and respond to it. There is a prompting sentence (a statement or a question) and the participant responds to it. In open role-plays, participants receive a situation as well, but they are supposed to construct a dialogue based on the facts presented. They are not limited by any previously prepared sentence to which they have to respond.

The advantage of open role-plays is that they "are the closest to what we might expect to reflect naturally occurring speech events. (…) making possible the close analysis of long interaction sequences of comparable data." (Houck and Gass 1996: 47). Open role-plays have been chosen as one of the data collection procedures here for several reasons. First, it provides data in the oral mode and this research is concerned with oral communication (more appropriate than DCTs). Second, the researcher can set up situations according to the meanings she wants to elicit (saves time as compared to collection of spontaneous data). Third, it is the closest one can get to spontaneous speech, using a data elicitation method (Houck and Gass 1996), having the advantage of allowing the "examination of speech act behavior in its full discourse context" (Kasper and Dahl 1991: 228). Fourth, it allows comparison of data

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strategies used" (Beebe and Cummings 1996:80) and other aspects, they are able "to give a good idea of the stereotypical shape of the speech act - at least in this case of refusals" (80-81).

collected in exactly the same context. These four factors led the researcher to choose open role-plays as one of the data collection procedures.

The limitations of role-plays, however, are several. First, they are not spontaneous conversations, and thus might not allow for completely natural interactions. Second, since the interaction is being recorded, the interlocutors may be more tolerant with each other. In other words, NSs might excuse inappropriate NNSs' exchanges because they know the NNS may not have full command of the English language. Yet, the use of role-plays is useful for the present study since they help describe NSs' and NNSs' modality use in controlled contexts. This is an important factor which makes comparison between the groups easier.

There were twenty open role-plays (see Appendix A) randomly assigned to each pair of participants. Each NNS and NS pair did four role-plays and the NS pairs did eight role-plays. A computer program distributed the role-plays in random order, and thus each group was assigned their role-plays. All of the role plays were either video or audio taped. The video-tapes are able to capture body language and gestures which are part of any conversation. Although they were not analyzed in this study, they helped the researcher understand what the interlocutors meant in certain situations. The disadvantage of video-taping is that participants are more aware of the presence of a video camera than of a tape recorder. A video camera may inhibit the participants; however, most participants told the researcher that they forgot the video camera was in the room once they started the role-plays. Tape recorders are less noticeable but there are no visual signs to facilitate the researcher's transcribing job. Tape recorders were used only when there was no video camera access to the room being used.

Each situation tests different features with the hypothesis that this may affect the usage of modal devices. How these features were chosen, what they represent, and how they shaped the role-plays is discussed in Chapter 1 (See section Justification of the Features). In this chapter, see section Role-Play and Test Description, there is a description of the features and their corresponding role-plays and tests.

Debates

The debates are an attempt to elicit language comparable to ordinary spoken interaction. However, it is not totally spontaneous since the informants are given a topic and have to follow the rules of a debate. For instance, each group has an allotted time to present its point of view, and each group can defend only one position. Debates are somewhat more spontaneous than the role-plays, since the informants do not have to assume a new identity. In this study the participants could choose their side.

Debate is not a very common elicitation procedure; however, the choice to use it came after the observation of video-taped ELI English Interaction groups[6]. These groups have the objective of creating opportunities for the students to speak as spontaneously as possible, and the debate watched by the researcher showed that the students used a great deal of MVs and PMVs when defending one idea or another.

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[6] These groups differ from ordinary classes in several aspects. They are run by two NS university students about the same age as the students. These NSs usually have no teaching experience and their role is to have a peer to peer relationship with the NNSs, so that they feel more comfortable speaking English. The activities done in these group meetings are various, for instance, games, show-and-tell, and field trips.

The topic was the *death penalty* for all NS and NNS groups. The participants were allowed to choose if they wanted to be in the pro or con group. Each group had seven minutes to discuss the issue and decide which arguments they wanted to present during the debate. At the beginning of every debate, the groups were told that each group had three-minute allotted turns to present their arguments and the time could be extended. As the debates went on, the groups exceeded the time or were interrupted by the other group. Towards the end of every debate, it seemed that the participants were involved in a heated discussion rather than in a formal debate. This attitude was not reproached by the researcher since it made the debates resemble naturally occurring speech. This lack of control of time for the groups occurred in all the debate recordings. The researcher felt that it was more important to keep it close to a real conversation than to impose limited time on the groups.

Spontaneous conversations

The informal conversations were not controlled at all, since the NNSs record conversations with their conversation partners. These conversations were informal and not previously prepared. The researcher was never present during these conversations and the NNS and NS had total freedom during these sessions. This was an extra ELI activity and the students made their own meeting arrangements once the pair had been introduced.

Conversation partners meet at least once a week and talk half of the time in English and half of the time in the NNSs first language. The researcher followed their progress during two consecutive terms, collecting four one-hour tapes from each pair. One of the researcher's concerns was to start collecting these tapes only after the NS and the NNS had developed some empathy/friendship. This was an important factor to ensure the spontaneity of the

conversations. The NNSs of the three pairs recorded spoke Portuguese, Spanish and Arabic as their first language. In fact, data was collected with three other pairs. The other NNSs were from Korea, Taiwan, and Saudi Arabia, but problems with getting them new conversation partners once the term was over and early departure did not allow for their continuation in this research. They were, therefore, discarded.

Tests

The written tests (see Appendix B) were designed to check students' perception (test of appropriateness) and production (fill-in-the-blank) of MVs and PMVs. The fill-in-the-blank exercises are much more controlled than the other production procedures. The whole situation is presented, and the participant has to provide the answer she would use in such a circumstance. The test of appropriateness is even more controlled, since the informants are given alternatives to choose from and the situation is very well defined by the context presented.

There are five tests of appropriateness and five dialogues with one or two blanks to be completed. Each test and each dialogue investigates one of the five major features that are the object of study in this research (e.g., how to express urgency).

The test of appropriateness uses a 5-point Likert scale. The participants are to choose how appropriate that sentence is for that particular situation. A wide range scale with odd number of points was chosen to encourage participants to make distinguishing judgments (Hatch and Lazaraton 1991). It is important to emphasize that the intervals between the points are not equal intervals. For instance, the distance between (1) (very appropriate for this situation) and (2) (appropriate for this situation) is different from (3) (somewhat appropriate for this situation)

and (4) (a little appropriate for this situation). This is a factor that can be accounted for statistically (see Quantitative analysis - Test of Appropriateness).

The fill-in-the-blank test was designed to give the participants a chance to produce an answer in a very controlled environment, yet, with the freedom to choose whatever they felt was the best MV or PMV for that blank. The dialogues used in this part of the test were excerpts from the role-plays performed by the NSs during the pilot study. In this way, they were as realistic as possible in setting up the linguistic environment for the use of modal devices.

Both types of tests described above were preferred over grammaticality judgment tests because they are able to maintain context clues essential for this research. Grammaticality judgment has been vastly used in both L1 and L2 research; however, it uses single sentences completely out of context, making questionable[7] assumptions about language.

Role-play and Test Description

Chapter 1 discussed the idea that the use of labels such as necessity, obligation and advisability are not sufficient to account for the semantic nuances of modality usage. Therefore,

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[7] Cook believes that this procedure of data collection is very questionable, especially for SLA:

> ... grammaticality judgments seem to be neither stable nor reliable. The use of grammaticality judgments in SLA research brings unique problems. Much SLA research has shown that L2 users are either better at metalinguistic judgments than monolinguals or more advanced developmentally... (1993: 239)

The use of grammaticality judgment tasks can lead to some problems. First, informants may answer that all sentences are right, showing no discrimination among them and they may use criteria (for instance, semantic or syntactic) that was not the focus of the researcher (Birdsong 1989). Second, Birdsong (1989) also says that the informants may not be prepared, in terms of metalanguage knowledge to judge the sentences (if informants are illiterate or semi-literate). Third, the results may show too much variability in how learners choose their answers

this study tests some elements of root modality that might influence the choice of modal devices. Role-plays and tests were designed in order to test the features *urgency*, *new rule*, *new rule + urgency*, *pre-existing rule*, and *speaker's necessity.* Each feature was also tested as far as power and social distance may affect the linguistic choices in oral production (role-plays). This section contains a description of the situations tested.

Urgency

There were five role-plays to test *urgency*. Role plays 1-4 (Appendix A) are about sending an important shipment to another country. Role-play 5 (Appendix A) is about the urgency of getting paychecks ready, since the computer has broken down. The speaker has an important meeting to attend and needs help from the addressee. The urgency meaning was also tested with the test of appropriateness (question 1 - Appendix B) and fill-in-the-blank (dialogue 1 - Appendix B).

The shipment problem arises because the speaker forgot to include some critical items in a package sent early that morning. It is urgent that it be sent to its destination overnight. Therefore, someone has to go to the local collection warehouse for Federal Express to ask the FedEx employee to find the box in order to put the forgotten items in. The problem is exacerbated by the fact that the speaker needs the package to be complete (the items cannot arrive at the destination separately and have to be there the next day); and that FedEx has a policy that their employees cannot leave the desk to go to the back of the warehouse. Role-

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(Ellis 1991). Fourth, informants may be influenced by what they believe to be a socially acceptable answer (Cook 1993), or they may want to please the researcher.

play 1 is done between two strangers: the one who needs the package and the Federal Express employee. Keeping the same setting but changing the social distance and power of the speaker and listener, another situation was created (role-play 3): the Federal Express employee and speaker are best friends; therefore, there is no power relation between the interlocutors. The setting is changed slightly in another situation, when the conversation takes place between a boss and her employee (role-play 2). The boss wants the employee to go to Federal Express and fix the problem she created when she forgot to include important items in the package. In this case, the boss has authority/power over the addressee. The same setting as the one just mentioned is kept in another situation in which the speaker and addressee are coworkers (role-play 4). In this situation, there is no power relation between the speaker and the addressee, so there should not be much pressure on the addressee. The speaker asks the addressee to go to Federal Express to include the missing item in the box. The urgency is kept throughout all the situations and power and social distance are the variables modified. In order to capture possible different linguistic choices due to a social distance difference, another role-play was designed in which the conversation takes place between spouses (very high degree of intimacy) who are also coworkers. In this role-play, the speaker is responsible for the payroll files and the computer has crashed. This same person has an important meeting to attend with an out-of-town client, and so asks the spouse to take care of the payroll (payday is the next day). Again the urgency was kept, and only the social distance varied. Once one element of a situation changes (social distance, for instance) the approach to the situation might be different, and thus the use of modal devices. This is one of the characteristics this research attempts to capture:

both how NSs treat these differences and how the NNSs manage to learn to use the most appropriate modal devices to communicate that an urgent action has to be taken.

Table 2-1. Urgency role-plays

Meaning tested - role-play #	power - social distance
Urgency (1-5)	1- no power relation - strangers 2- power relation - acquaintances 3- no power relation - friends 4- no power relation - acquaintances 5- no power relation - spouses

New Rule

The new rule situations test the use of root modality to express how things should be changed to restore balance to the world in which the interlocutors live. There is either no power relation between the interlocutors or the speaker has authority over the addressee (Table 2-2).

Table 2-2. New rule role-plays

Meaning tested - Role-play #	power - social distance
New rule (10-12)	10- power relation - intimates 11- no power relation - intimates 12- no power relation - acquaintances

In all the new rule role-plays, the speaker and addressee are either status equal or the speaker is of higher status. During the designing of the role-plays, it was discussed that a speaker who has no power over the addressee would not be in a position to set a new rule. In most situations in American society, it would be unsuitable for a speaker to tell the addressee what to do if the latter is in a position of authority over the speaker.

The tests that involve the establishing of new rules follow the assumptions just mentioned (see test 3 and fill-in-the blank dialogue 3). One of the role-plays consisted of a conversation between a parent and her daughter/son (role-play 10). The latter has not been doing well at school, and the parent has always been pretty liberal about letting her child set her own hours and make her own friends. It is now time for the parent to lay down some stricter rules. The speaker has authority over the addressee. If things do not change, the teenager may jeopardize her GPA or even fail to pass to the next grade. The last comments were not mentioned in the role-play setting given to the participants, but there is an implicit plan between parents and children that the latter have to succeed in school. It is based on breaking of this implicit agreement between the interlocutors that new rules become necessary. The new rules should help the speaker's expectation to be met.

There are different settings for the new rules situations: (a) speaker has power over addressee and they are intimate (role-play 10); (b) no power relation between the interlocutors and they are intimate (role-play 11); (c) no power relation between the interlocutors and they are acquaintances. In the two last cases, there are more chances of some kind of negotiation occurring between the interlocutors. On the other hand, an imposition most likely will come from the speaker in the role-play 10, since she is in the position to dictate changes. These differences may be reflected in the way modal devices are used.

New Rule + Urgency

New rule + urgency situations involve an action or actions that need to be taken immediately that correspond to the establishing of some new rules. The role-plays that test the

use of modal devices in these situations are 13 through 16; and the tests are multiple choice 4 and fill-in-the-blank dialogue 4.

One of the role-plays is between a doctor and a patient (role-play 13). The doctor has just received the results of some tests on the patient. She is heading to a heart attack unless she drastically changes her lifestyle. The patient is a heavy smoker, does not like to exercise, and has a poor diet. This situation calls for fast changes in the life of the patient: new rules for a better way of living are essential for the patient to get better. Thus, there is some urgency for these new procedures to be taken. The recommendations come from someone with authority, the doctor. Therefore, the imposition is great. In other role-plays in which there is no power relation between the interlocutors, the conversations about the new rules to be set sound more like suggestions (role-plays 14 and 15) rather than impositions (role-plays 13 and 16) (see Table 2-3).

Table 2-3. New rule + urgency role-plays

Meaning tested - Role-play #	power - social distance
New rules + urgency (13-16)	13- power relation - acquaintances 14- no power relation - friends 15- no power relation - intimates 16- power relation - intimates

Pre-existing Rule

The pre-existing rule situations involves reminding the addressee of a rule both the speaker and the addressee know. This reminding becomes necessary, as the addressee seems to have forgotten what is expected in certain circumstances.

Test 2 and fill-in-the-blank dialogue 2 checked the participants' recognition and controlled production of *pre-existing rules*; and role-plays 6-9 tested the participants' oral production. In role-play 6, a teenager asks her father or mother to let her spend the night out to attend a concert. The house rules are that midnight is the latest the children can get home on weekend nights. The parent, thus, has to remind her child of the curfew. The parent clearly has power over the addressee, and in this relationship she has to make sure rules are followed. Role-play 7 is a conversation between spouses, and may induce a more cooperative interaction than role-play 6. One of the spouses has a farewell dinner party to attend on the same day the father-in-law is celebrating his 70th birthday. The birthday party is being organized by the other spouse. In American society spouses take part in family events together[8]. Thus, when one of the spouses brings up the fact that she might not go to the birthday party, the other one has to remind her what is expected from her. The way that one chooses to remind the other about a norm already known to both may change if the social distance between the interlocutors is different. Therefore, there are two other role-plays (8 and 9 see Table 2-4) which keeps the power relationship the same and only varies the social distance.

Table 2-4. Pre-existing rule role-plays

Meaning tested - Role-play #	power - social distance
Pre-established rule (6-9)	6 - power relation - intimates 7 - no power relation - intimates

[8] There may be other societies in which this is not an expected behavior. Besides that, there may be societies in which one of the spouses, for instance, the husband, has a choice to take part in such events and the other spouse does not. A difference in behavior was not noticed in role-play 7 due to cultural differences during the actual role-play performance. Cultural differences that may yield different linguistic behavior are discussed in the other chapters when pertinent.

	8 - no power relation - friends 9 - no power relation - strangers

In role-plays 8 and 9, one person has found a wallet and wants to keep it while the other one has to remind him of what society expects in such situation. All these differences in power relationship and social distance may lead to distinct modal device choices.

Speaker's Necessity

The situations that tested speaker's necessity are concerned with how the speaker expresses a purely internal need. In these cases, there are no other forces making the speaker need something except her own desire.

Test 5 and fill-in-the-blank dialogue 5 checked the participants' recognition and controlled production of *speaker's necessity*; and role-plays 17-20 tested their oral production. Both role-plays 17 and 19 are about someone who wants to get tickets to go to a concert but has classes at the time the tickets are going to be sold. In role-play 17, the interlocutors are friends while in 19 they are boyfriend/girlfriend. Role-play 18 is about someone who is waiting in a long line to buy tickets to a football game. The speaker realizes that she has to make a phone call and asks the person in line behind her to hold her place for a few minutes. This conversation takes place between strangers, so the imposition may not be as strong as in the other role-plays. The addressee has nothing to lose if she does not help the speaker. Role-play 20 occurs between a student and a teacher. The student needs a letter of recommendation to apply for a job; however, the deadline is in about five days. Theoretically, also under the scope of *speaker's necessity* meaning, once the social distance factor and

power relationship vary, there may be variation in the usage of modal devices. For the role-plays that test speaker's necessity, varying power and social distance, see Table 2-5.

Table 2-5. Speaker's necessity role-plays

Meaning tested - Role-play #	Power - social distance
Speaker's necessity (17-20)	17- no power relation - friends 18- no power relation - strangers 19- no power relation - intimates 20- power relation - acquaintances

Methodology of Analysis

This research uses several different methodologies of analysis for two reasons. First, the analysis depends on the nature of the data collected. For example, a statistical test cannot be applied to compare the spontaneous conversations performed by the three pairs, since there was no control of the time, and topic of conversation, and no random sampling of the participants. Yet, a statistical analysis is appropriate for comparing the beginning, intermediate, and advanced NNSs' and NSs' choices for the 5-point Likert scale test. Second, the analysis also varies according to the hypotheses the study aims to support. For instance, the hypotheses that the groups perceive the MVs and PMVs differently, if they belong to different groups, can be tested through the application of statistical procedures. On the other hand, the hypotheses that the groups may use MVs or PMVs and MEs differently in the development of their discourse can be investigated using qualitative analysis of the discourse. Therefore, the analyses done in this research are a combination of quantitative and qualitative approaches.

Quantitative Analysis

This section is divided in two parts: quantification with and without statistical procedures/analysis. The reasons for using one or the other is more fully developed below. Before explaining the statistical procedures used in the research, it is essential to discuss some terminology.

One can use both descriptive statistics (ways of summarizing the data using graphical and numerical techniques that can be easily understood by the observer) and inferential statistics (procedures for making generalizations about the results analyzed). This research has the goal to describe what goes on in the modal system of NNSs and the NSs (control group). Therefore, the design is called *post hoc:* "it lets us describe some data and see how the values vary across groups of subjects, across tasks, and so forth" (Hatch and Lazaraton 1991:100). The point here is that no effect of teaching method is being investigated. As a result, no causal claim is made. Nevertheless, the type and strength of the relationship between the variables are discussed.

Issues about the random sample and random assignment are discussed in the data collection methodology section. It is important to remember that all pairs that took part in the role-plays were randomly assigned the situations they had to perform.

Test of appropriateness

The tests of appropriateness investigate how the groups perceive/recognize the use of certain MVs or PMVs for a specific situation that involves one of the features discussed above (*urgency, pre-existing, new rule, new rule + urgency,* and *speaker's necessity*).

The choice of the most suitable statistical procedures came after considering the data characteristics. The first characteristic to consider is if there is normal distribution. There are two ways of obtaining normal distribution: (a) random selection; or (b) having a large number of participants who are randomly assigned groups (Hatch and Lazaraton 1991). The data in this study cannot meet the basic assumptions of normality. First of all, there was no random selection of the participants from the population of NNSs that attend the ELI. Second, the design of this study intended to compare the participants' usage of modality according to the proficiency levels (beginning, intermediate, and advanced). This would not be a problem if there was a large enough number of ELI students in each level that could be randomly distributed to the various groups. In fact, all the participants were volunteers. Therefore, the type of statistical test used in this study has to be nonparametric rather than parametric[9]. The second characteristic to take into account is the type of measurement used for the dependent variable[10]. In this study, the measurement is done on a 5-point Likert-scale, which is an ordinal categorical scale with the following categories:

1. very appropriate for this situation

2. appropriate for this situation

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9 Parametric tests are more powerful than nonparametric tests. This means that parametric tests use most information and require normal distribution whose attributes are known. As a result, parametric tests are less likely to let you say your claims are wrong when they are, actually, correct. However, when the assumptions of normal distribution, large or random sample, and independence of observations cannot be met, nonparametric tests are a better choice.

10 "A *dependent variable* is the variable which is of most interest in a study; it is measured or observed primarily to determine which effect, if any, other variables have on it (...) an

3. somewhat appropriate for this situation

4. a little appropriate for this situation

5. not appropriate for this situation

Third, another important design attribute concerns whether the observations are independent. In this part of the study each participant rated all the alternatives. In other words, each participant gave one rating to each MV or PMV for that specific situation. In this case, there is a repeated-measure design, since repeated ratings come from the same participants (Hatch and Lazaraton 1991). Due to the fact that normal distribution cannot be assumed for this data, and the measurements are ordinal and repeated, this study has to use nonparametric tests. The tests chosen were the Friedman test, a nonparametric test which parallels the repeated-measures ANOVA (a parametric test), and Nemenyi's test.

My null hypothesis (H_o) is that there was no difference in how each group perceives the appropriateness of each alternative (MV or PMV) for that situation (e.g., how to express new rule + urgency). In other words, the alternative hypothesis (H_a) is that the groups perceived the MVs or PMVs more or less appropriate due to the context of the situation. The significance level (α-level) used in this study is .05, unless noted otherwise. "The **a -level** is a number such that H_o is rejected if the *P*-value is less than its value" (Agresti and Finlay 1986:147). Moreover, "the *P*-value is the probability, when H_o is true, of getting a test statistic value at least as favorable to H_a as the value actually observed" (Agresti and Finlay 1986:124). Consequently, in order to reject my H_o and accept my H_a, the test statistic value should be <

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independent variable is a variable that has been chosen by the researcher to determine its effect on the dependent variable" (Brown 1992: 630-1).

.05. The dependent variables are the MVs and PMVs and the independent variable is the situation feature (e.g., pre-existing rule).

When the H_o is rejected, it means that the group feels the alternatives have different levels of appropriateness for that specific situation. The Friedman test, however, does not tell us which alternatives (MVs or PMVs) are perceived differently. Consequently, another test has to be used to indicate where the differences are. Nemenyi's test has been used for this post hoc comparison, following Hatch and Lazaraton (1991). The computer package used for the calculations is NCSS (Number Crunching Statistic System).

Each test answered by each group was treated separately, first, with the Friedman's test, then with Nemenyi's test. Since each test has several alternatives whose appropriateness for that situation the participants have to judge, the participants' responses of each group for each alternative were added. Thus, the behavior of each group in relation to the feature tested, for instance, *new rule*, and the alternatives (MVs and PMVs) gives us the grammar of each group for that feature. In other words, it shows which features favor which MV or PMV in each group.

Fill-in-the-blanks

As described above, each dialogue tested one feature (e.g., pre-existing rules, urgency). Since there were many alternatives given by a small number of participants, no statistical procedures can be used. All the answers given by each group for each blank were tallied, and a frequency count was done of the MVs and PMVs for each blank. The relative frequency of each MV or PMV for each blank was calculated. This means that the data has been transformed into percentages. For instance, the blank that corresponds to *urgency* has 30% of

have to, 30% of *need to*, 20% of *must*, 10% of *ought to*, and 10% of *be supposed to* as the intermediate group answers. Although these results cannot be tested statistically, the behavior of the groups can be compared and these results can also be compared to the other type of data collection procedure results.

Role-plays and debates

The occurrences of MVs, PMVs, MEs, and even the omission of a modal device when one was called for were counted in each role-play and debate. The modal devices may be categorized in three ways: (a) appropriate form and used for the right function as based in the NS participant answers, (b) error in the form used, although it is in the right context (right function) (e.g., **must to*), (c) error in terms of function (e.g., ***must* in a situations that NS did not use it at all). This coding is used throughout the analysis of all the oral data (role-plays, debates, and spontaneous conversations). The relative frequency of each modal was calculated based on the total occurrences produced by the group itself. Therefore, even if the beginning group talked less in the debate than the advanced group, it is possible to compare the relative frequency of certain MVs produced by each group.

No statistical procedure can be applied in these cases since each participant may, or very likely has produced the same modal device more than once. Yet, the results from these data collection procedures can be compared to the statistical results from the test of appropriateness. Thus, it can be determined if their perceptive grammar is similar to their productive grammar. Moreover, the features tested in the role-plays were also tested in the tests and fill-in-the-blanks.

Qualitative Analysis

Some scholars have suggested that the use of both quantitative and qualitative methodologies may lead to substantial research results. Chaudron (1986: 714), discussing second language classroom research, suggests "qualitative refinement of the relevant categories and quantitative analysis of the *extent* of relevance."

Reichardt and Cook (1979) state that some terms are usually related to qualitative research: use of qualitative methods (e.g., ethnographic interview, case study), naturalistic and uncontrolled observation, the insider perspective, process-oriented, and ungeneralizable results. In the case of the present research, the spontaneous conversation data is a naturalistic uncontrolled observation whose objective is to detect the processes/strategies used by the NNSs to express root modality. Although the role-plays were set up in a experimental manner, they also permit a qualitative analysis. The role-plays do not allow generalizable results and cannot be treated statistically. A careful qualitative analysis of the forms used in the role-plays will certainly help our understanding of modal devices usage and acquisition.

There is a detailed analysis of the linguistic forms used in the role-plays (see Chapter 4) based on Brown and Levinson's (1987) politeness theory. In Chapter 5 the analysis is also qualitative, taking into account the role of L1 in the acquisition of root modality.

Brown and Levinson's theory states that there are three sociological factors in determining the level of politeness between a speaker and an addressee: (a) the relative power of the addressee over speaker, (b) the social distance between the speaker and addressee, and (c) the type of pressure or onus involved in doing the face-threatening act (FTA). The notion of

face is very abstract. It refers to the public self-image that interlocutors want to keep and "consists of two specific kinds of desires ('face-wants') attributed by interactants to one another: the desire to be unimpeded in one's actions (negative face), and the desire (in some respects) to be approved of (positive face)" (Brown and Levinson 1987: 13). Thus, an FTA threatens the speaker's or addressee's image they believe to have. In order not to lose face or not to make the addressee lose face, the speaker may use certain strategies. First, the speaker has the choice of doing or not doing the FTA. Second, if she chooses to do it, it can be indirectly (*off record*) or directly (*on record*). An example of an *off record* FTA, is the sentence 'It's so hot in here' with the illocutionary force of a request for the addressee to do something, for instance, open the window. An *off record* FTA avoids imposing the addressee to do anything. Third, an *on record* FTA can the done with or without redressive action. An FTA without redressive action, baldly, could be a request with an imperative form, an order (e.g., Do your homework now). An FTA with redressive action

> attempts to counteract the potential face damage of the FTA by doing it in such a way, or with such modifications or additions, that indicate clearly that no such face threat is intended or desired, and that S [the speaker] in general recognizes H's [the hearer's] face wants and himself wants them to be achieved." (Brown and Levinson 1987:70-1)

Such redressive action may emphasize positive or negative face. In other words, it may be to get the addressee's approval (positive face) or to save the addressee's freedom to act (negative face). An example of an FTA with redressive action is the sentence 'May I take a message' uttered by someone who answers the phone and offers to take a message for the person who is not present or is unable to answer the phone.

The FTAs that are of interest for this present research are the ones that expect some act of the addressee and because of that it imposes some pressure on her. According to Brown and Levinson, they are:

> (a) orders and requests (S [the speaker] indicates that he wants H [the hearer] to do, or refrain from doing, some act A)
> (b) suggestions, advice (S indicates that he thinks H ought to (perhaps) do some act A)
> (c) remindings (S indicates that H should remember to do some A)
> (d) threats, warnings, dares (S indicates that he - or someone, or something - will instigate sanctions against H unless he does A) (1987:66)

In conclusion, this study uses several methods of data collection and analysis to allow a good description of root modality devices as well as reliable data results. It includes a qualitative technique (spontaneous conversation) and four different types of experimental designs of data collection: debates, role-plays, fill-in-the-blanks, and tests of appropriateness. Moreover, it uses both quantitative (Chapter 3) and qualitative (Chapters 4 and 5) analyses methodologies to supplement each other and better describe the phenomena of root modality usage and acquisition.

CHAPTER 3
MODAL VERBS AND PERIPHRASTIC MODAL VERBS IN ROOT MODALITY

Introduction

This chapter describes the NNSs' and NSs' root modal grammars, concentrating on MVs and PMVs. Before discussing the linguistic choice of these two groups, it is important to recall what root modality is and what features were tested. In addition, a discussion of form and function mapping is also called for. Finally, the meaning of the linguistic choices made by the different groups is discussed in terms of usage and acquisition.

Root Modality

Root modality is a conceptual category which denotes real-world meaning (Sweetser 1982). Thus, it is a category that reflects the domain of social interaction as opposed to the epistemic category which reflects the realm of reasoning. As discussed in Chapter 1, the use of root labels, such as *necessity, obligation,* and *advisability* does not help us to figure out the rules governing the use of root modality devices. Therefore, this research has proposed to test five root semantic features to check their effect on modal device choice. These features are *speaker's necessity, urgency, new rule, new rule + urgency, pre-existing rule*. These root modality elements consist of the following characteristics: speaker's necessity is concerned with how the speaker expresses an internal need. Urgency situations are the ones in which a quick action has to be taken because something has gone wrong. New rule situations refer to the

context in which the speaker believes some rules have to be set because life is not going well the way it is. The setting up of new rules can be more urgent if the context involves some kind of urgency (e.g., teenager may not graduate if she does not start studying seriously). The fifth context tested was how to remind someone of a societal or group rule that the addressee seems to have forgotten. All these features refer to usage of modality in the domain of social interaction. They are more specific than the common labels used and therefore can yield a better understanding of the modal devices used. Recall that details on these features were discussed in Chapter 1. Justification of features and a description of the role-plays and tests were done in Chapter 2.

Types of root modal devices

In this section the types of modal devices used are described. Grammatical and functional appropriateness are exemplified.

There were several types of root modal devices used by all groups to express the root modal meanings mentioned. Figure 3-1 below shows the percentage of occurrences against the type of modal device used by each group. The occurrences of MVs, PMVs, MEs, imperatives, want-constructions, and the omission of a modal device when one was called for were counted in each role-play. The modal devices were classified in three ways: appropriate form used for the right function as based in the NS participant answers[1]; error in the form used, although it is

[1] In Figure 3-1, these columns have only the acronym (e.g., MV/PM)

in the right context[2]; error in terms of function[3]. The relative frequency of each modal was calculated based on the total occurrences produced by the group itself.

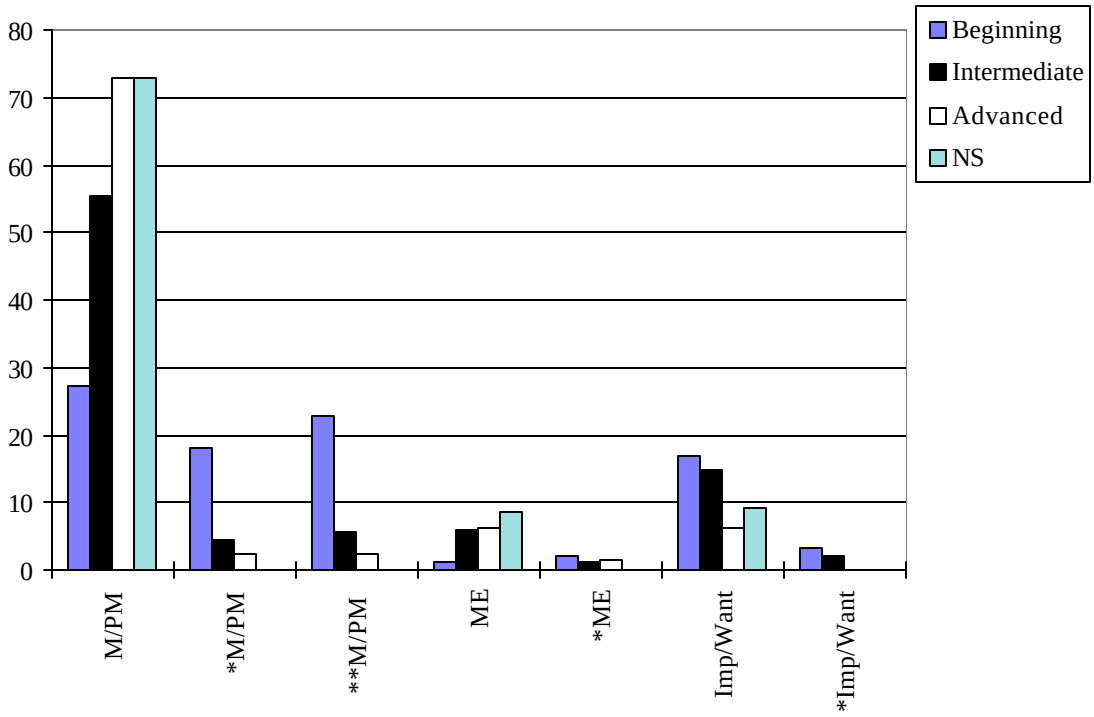

Figure 3-1 - Root modality distribution in the role-plays - Percentage of occurrences versus type of modal device used

The following examples show appropriate root forms used by the NS group:

MV: … you *should* try a chewing gum or something like that.

PMV: The smoking, you'll *have to* do on your own.

ME: So, if you could *possibly* do it in that time, it'd be great.

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[2] This column in Figure 3-1 is followed by a star (e.g., *MV/PM - **had better to*).

Imperative (includes also *you-imperative*): *Forget* about her. / *You go* for about an hour with your friend …

Want-construction: I *want you to* get down to the Fedex office and and get it shipped off sometime today …

All the one-star (*) columns in Figure 3-1 correspond to grammatical errors NNSs made when using root modal forms. Grammatical errors are the structures NNSs used that diverge from the structures used by the NSs. Recall also from Chapter 1 (see section Modal Verbs) that there are some rules that govern how the modal verbs should behave structurally. For instance, MVs are not followed by an infinitival complement (*I *can to go* there).

The two-star (**) columns in Figure 3-1 correspond to the forms used with the wrong function. The forms considered inappropriate for each situation were the ones that diverged from the NS usage. The researcher had no preconceived appropriate MV, PMV or ME for each situation. These functional errors occur since the NNSs have a different picture from the NSs of from the semantic extension of root modal forms. For instance, while NSs preferred to use *should* to remind someone of a *pre-existing* rule, the beginning group mostly used *must* and the intermediate one mostly used *have to*. What is claimed in this study is that these modal forms carry different forces and are, consequently, understood differently. Since the NNSs often do not know the semantic extensions of these verbs, their usage can be inappropriate. These problems are extensively discussed in this chapter (section Functional Analysis) both in terms of the features tested and the MVs and PMVs used.

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3 This type of error is indicated by **. An example would be to use *can* when NSs only used *have to* and *need to*.

Grammatical errors

As would be expected, the beginning group is the one that made the most grammatical errors in the role-plays. The quantity of errors decreases as the groups' general English proficiency increases. Table 3-1 below shows the type of errors they made. The beginning and intermediate groups shared some of the same formal problems.

Table 3-1. Types of errors by group

Type of error	Example	Group
omission of main verb	**Can** this space for me?	Beginning
no infinitive particle	Oh, yes. You **need stop** the the smoke. I **need you put** the the the disk in Federal Express now because is very important.	Beginning / Intermediate Beginning
insertion of 'that-clause'	I **need that you help** me because I need a job I need a job and I need a letter for recommendation.	Beginning / Intermediate
wrong infinitive verb position	I think we **need something to try** to solve this problem.	Intermediate
extra auxiliary verb	I talked to your teacher today and he told me that you **must to** have an A in your final exam history because if you don't have this grade you **can't be graduate**.	Intermediate
extra infinitive particle	You **had better better to try** quit quit smoking.	Intermediate
pre-posed auxiliary verb	I **I'm have to call** my my parents.	Advanced
negation	So, you **should don't** smoke too much.	Advanced

Variability in terms of grammatical/ungrammatical forms is noticed in the participants' IL (Ellis 1985). Ellis suggests that the learners' IL is formed by systematic and arbitrary rules. When competing forms are used arbitrarily, there is free variation. This variation means that the same speaker uses a grammatical and an ungrammatical form within the same data collection period. The following dialogue (1) is a role-play in which IL variability is seen.

1. (Speaker A (a beginner) needs B (NS) to do something for him. They are co-workers)

1 B: Hi.
2 A: Hi, Shakira. How are you ?
3 B: I'm fine. Thanks.
4 A: Can I help you, Shakira? I have a big big problem.
5 B: OK. What happened?
6 A: In this morning the the In this morning I forget
7 to put the the disk in the Federal Express and now I have many many
8 work. And I don't go. Ah Could Would you like to Could you could
9 you Can Can you go to the Federal Express for me?
10 B: Yeah. What do you need me to do?
11 A: Yes. **You need you need to put** in disk in the same box.
12 B: OK.
13 A: The number box is 199. **Is very important because**
14 **the the disk need need go together**
15 B: OK.
16 A: **with the other disk.**
17 B: OK. So, it's the same box?
18 A: The same box. The number the box 199.
19 B: Do I have to do it today?
20 A: Yes, today. Can you help me?
21 B: Yes, I can help you.
22 A: Thank you, Shakira.
23 B: No problem.

The same type of variation is seen in the production of intermediate group participants. Dialogue 2 shows how the IL of the participant (B) is still testing two structures for the use of *had better*.

2. (A husband is telling his wife about his recent visit to the doctor)

A: This afternoon I met a doctor and he said ah I need I have heart problems.
B: Oh, yeah. I think **you had better stop** smoking. You you are a very very heavy smoker.
A: I only Do you think so?
B: Yeah.
A: I only smoke like 2 packs a day or something. That's not too much. Some people smoke more and they're healthy.
B: Yeah, but you don't try to exercise and you don't eat well.

A: I mean, I eat well sometimes. I mean some days sometimes I miss lunch but I can have a burger here and there. It's not a big deal.
B: Are sure you're health healthy? I'm just scared about your health in the future. These days you're OK I think
A: I feel good most days, you know. Some days a few a little weak but most of the time I feel pretty good. I don't know what the doctor's really talking about. If he says so, I I might try to eat a little better, you know.
B: What did he say to you?
A: He said ah that my heart's pretty bad and if
B: Pretty bad?
A: Yeah, and if I don't watch my myself, I might, you know, run into some heart problems in the future.
B: In the future.
A: Yeah. I don't know.
B: So, what are you doing from now on?
A: Uh
B: For your health.
A: I might try, you know, I'm saying cut down smoke a little less. I'll see what happens, though. But I'll try what he says. I mean, he's a doctor so. I'll try.
B: You **had better better to try** quit quit smoking. And I think you more exercise. How about jogging or about any other exercise?
A: I think I might take some kinda sport. Jogging is kinda boring. Tennis or something.
B: Oh, yeah. It's good, I think.

Dialogues 1 and 2 above show that at a certain time there may be two[4] competing forms as part of a learner's mental grammar. At this point of the learner's IL, a grammatical and an ungrammatical form co-exist; however, as language tends not to keep two forms for the same function, one should prevail and the IL will be systematized (Ellis 1994).

As grammatical errors are made, some of which are in free variation with the appropriate form, it is important to predict the source of these problems. Celce-Murcia and Larsen-Freeman (1983) claim that three factors cause NNSs to have problems with MVs. First, after students learn that the third person singular present tense has inflection, the nontensed

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[4] Learners may even have more than two competing forms in their heads at the same time.

MVs seem odd. Second, MVs (except for *ought*) are not followed by an infinitive form, and students have learned "the rule in English which calls for an infinitive to precede the second verb in certain two-verb sequences" (Celce- Murcia and Larsen-Freeman 1983: 81). Third, learners' L1 can create problems since modals in English are considered auxiliary verbs, while these verbs may belong to the category of main verbs in other languages. The first type of problem mentioned by Celce- Murcia and Larsen-Freeman never came up in my data, both in the pilot study and this study. The second type is supported by my data both for beginning and intermediate participants (see Table 3-1). The third factor may be responsible for the errors of insertion of 'that-clause', extra auxiliary verb, pre-posed auxiliary verb, and negation. Learners seem to use their L1 system to code the L2, producing ungrammatical forms. For example, the insertion of 'that-clause' was made by Portuguese speakers. This may very likely be an interference of their L1, since Portuguese allows 'that-clause'[5] after the verb *necessitar*, a cognate of *need*. The role of L1 in the acquisition of root modality is discussed in Chapter 5.

There are slightly more functional errors than grammatical ones made by both the beginning and intermediate groups, while the advanced group produced the same percent of both kinds of errors as Figure 3-1 shows. Instead of focusing more on the structural errors learners make, the focus of this chapter is to thoroughly investigate the non-correspondence of form and function that occur in IL and discuss the participants' mental grammars. This focus is based on the communicate impact that the mismatch of form and function causes. NSs tend to excuse structural errors easily but are not able to understand a message that carries a functional

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[5] This 'that-clause' is followed by a subjunctive: *Eu necessito que voce vá logo* 'I need that you go soon'/ 'I need you to go soon'.

error. NSs tend not to excuse pragmatic inappropriateness (Thomas 1983, Wolfson 1989) because that affects the meaning of the message, making it harder to understand the real intention of the NNS.

Functional Analysis

The findings on MV and PMV root modals discussed in this section are based on tests of appropriateness, fill-in-the-blank tests, and role-plays. These data collection procedures test the features mentioned through several situations. In these procedures, the contexts are the same and very well defined. Thus, it is reasonable to make comparisons of the results. A statistical analysis of the test of appropriateness results is the basis for the discussion of the participants' perceptive[6] grammar, leading to a discussion of how these perceptions reflect on their production.

This section is divided in the following way:

1. based on control group (NS) results, this subsection presents which feature clues NSs used to chose their root modal devices. By doing that, the status of the features (e.g., *speaker's necessity*, *urgency*) tested are discussed. Comparing the results from the three data procedures, some features are validated as essential elements of root modality. In addition, NSs also used specific situation clues, such as social distance and interlocutor power relations when choosing which MV or PMV to use. This analysis of the NS root modal grammar points

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[6] Recall from Chapter 2 that perceptive grammar means what participants understand as appropriate for a given situation tested through the test of appropriateness. Their productive

to a possible classification of two categories of MVs and PMVs: (a) neutral or default; (b) and specific context verbs.

2. based on the NNS answers, this subsection draws a picture of their root modal IL. First, their mental grammar is described, considering the general feature clues. Second, their choices are discussed to see if they used specific situations clues, such as social distance. Third, conclusions are drawn about their sense of the semantic extension of the MVs and PMVs, which many times diverge from the NS sense of appropriateness. Fourth, the notion that IL as a system is discussed.

One example of the form-function mismatch to be discussed in this chapter is the inappropriate use of *must* by the NNSs in circumstances when the NSs preferred to use other modal devices, such as *have to, have got to, need* and *should* (Table 3-2).

Table 3-2. Groups and their different modal choices

Group	**Examples**
Beginners	I *must* send this today. (best friends)
Intermediate	These thing *must* go in the package and don't put it. (best friends)
Advanced	And I know but I you *must* eat better and vegetable, grains, legumes. (spouses)
Native speaker	You *got to* help me. I Fedex a box out today and I forgot like some really important things in it. Can you please help me? It *has to* be there like tomorrow. I *need* it overnight. (best friends)

The examples above illustrate some aspects of the data. First, they show that the NSs' and NNSs' choices of modal devices diverge in similar contexts. Second, they show that MVs allow speakers to deal with the target of the urgency force differently. The beginners' choice to

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grammar, however, is what they chose to use in role-plays, fill-in-the-blanks or spontaneous

use the first person pronoun, *I*, shows that the source of urgency comes from the speaker/subject herself. The subject is the performer of the modal complement process. The advanced group example is similar to the beginning example since the subject is also the performer. Yet, in the advanced example, the speaker is not the subject but is the one that pragmatically is understood by the NNS (the speaker) as having power over the addressee (subject). Therefore, the NNS uses the second person pronoun, *you*, and the MV *must*. The intermediate group example is fairly different since the subject (*thing*) has a patient role, although the relation highlighted by the modal concedes the subject as the one that carries on the process (Achard 1996). This construction allows the focus of the urgency to be taken away from both the speaker and addressee, since the one who will actually carry on the process is not mentioned. It is important to emphasize that the NNSs comfortably use *must*, while the NSs prefer other verbs. This usage reflects their IL and is extensively discussed in this chapter.

NSs

Speaker's necessity

Test of appropriateness. The NSs had a very clear choice of the verbs for the situation that involves pure *speaker's necessity* (Appendix A) when they took the test of appropriateness. A statistically significant difference was found between the following variables tested: *must*, *'ve got to, have to, need*, and *'d better*, by Friedman test (Chi-square = 43.61,

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conversations.

df = 4 and Prob (x > 43.61) = 0.00). The posthoc Nemenyi's test[7] (Table 3-3) shows that the significant differences are between *must – have to, must - need, must - 've got to* and *'d better - have to, 'd better - need, 'd better - 've got to*. In the tables that report the Nemenyi's test results, an asterisk (*) next to a number means that the difference between the mean sum ranks of the two variables (row versus column) is statistically significant.

Table 3-3. *Speaker's necessity* NSs' Nemenyi's test (* = >1.57 Critical value for the data)

	$X_{\text{have to}}$	X_{need}	$X_{\text{'ve got to}}$	X_{must}	$X_{\text{'d better}}$
$X_{\text{have to}}$	-	0.27	0.48	2.29*	2.56*
X_{need}		-	0.21	1.97*	2.29*
$X_{\text{'ve got}}$			-	1.76*	2.08*
X_{must}				-	0.32
$X_{\text{'d better}}$					-

This means that, according to the context proposed, the NSs' system divides the variables (verbs) into two groups. In this case, the context is such that the speaker wants to convey that she needs to do something. One verb group encompasses *have to, need,* and *'ve got to* as appropriate alternatives to express the *speaker's necessity* while the other has *must* and *'d better* as not appropriate alternatives.

The significant differences above can also be interpreted as: *have to, need,* and *'ve got to* are interchangeable for the context of speaker's necessity. The NSs' grammar, thus, rejects

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[7] The rationale behind running the Friedman and Nemenyi's tests is discussed in Chapter 2. In order to run the Nemenyi's test, the mean sum of ranks for each variable was computed. Each X next to a subscript the MV or PMV represents this mean for that variable (e.g., $X_{\text{'ve got to}}$). The numbers included in the Nemenyi's test tables are the difference between the mean sum rank of row variables and column variables.

the use of *must* and *'d better* for this same context. The NSs' grammar to express speaker's necessity is the following (Figure 3-2):

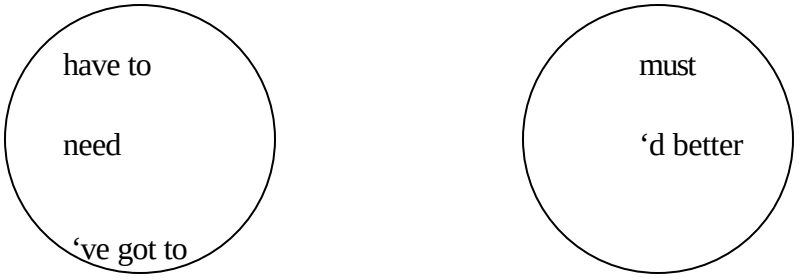

Figure 3-2. *Speaker's necessity* NSs' test of appropriateness

Fill-in-the-blanks. When the NSs had the choice to choose any MV or PMV to fill-in-the-blank, the verbs they had chosen as inappropriate when answering the test of appropriateness did not come up as answers. Therefore, their answers (Table 3-4) followed the system captured by the test of appropriateness (see Figure 3-2).

Table 3-4. *Speaker's necessity* NS's fill-in-the-blank percentage

	have to	need to	've got to
NSs	30	65	5

Role-plays. The NSs' choices in the speaker's necessity role-plays confirm the system detected in both the test of appropriateness and the fill-in-the-blank. The appropriate PMVs are have to, need, and 've got to. In these situations (Appendix A, role-plays 17-20), the only variation according to the social distance and power relation was the usage of 've got to. This

PMV was not used in the situation which the speaker had power over the addressee and they were acquaintances (role-play 20). Requests were done in these situations and the root modal structures used to express them are discussed in Chapter 4.

In conclusion, these results validate the feature speaker's necessity. They show consistency in how the NS system works when faced with situations in which internal speaker's need has to be expressed. As far as social distance and power are concerned in this context, *have to* and *need* are acceptable in any of the situations. Yet, *'ve got to* is limited to circumstances where there is no power involved in the relationship between interlocutors and these interlocutors are either friends, intimates, or strangers. The semantic extension of *'ve got to* tends to informality; therefore, it is not appropriate to be used by the speaker when addressing someone who has power over her.

Urgency

Test of appropriateness. For the situation which involves *urgency*, the NSs test of appropriateness (see Appendix B) answers showed a very clear choice of the verbs. Significant differences were found between the following variables tested: *must, 've got to, need, 'd better, have to* the Friedman test (Chi-square = 41.47, *df* = 4 and Prob (x > 41.47) = 0.0). The posthoc Nemenyi's test (Table 3-5) shows that the significant differences are between *must – have to, must - 've got to, must - need, 'd better - have to, 'd better -'ve got to,* and *'d better - need* (Table 3-5).

Table 3-5 *Urgency* NSs' Nemenyi's test (* = > 1.549 critical value for the data)

X_{have}	$X_{'ve\ got\ to}$	X_{need}	X_{must}	$X_{'d\ better}$

X_{have}	-	0.025	0.4	2.05*	2.45*
$X_{'ve\ got\ to}$		-	0.175	1.82*	2.22*
X_{need}			-	1.65*	2.05*
X_{must}				-	0.4
$X_{'d\ better}$					-

The NSs separated the verbs tested in two groups. One group includes *'ve got to, have to,* and *need to* as appropriate alternatives to express *urgency*, and the other has *must* and *'d better* are inappropriate choices (Figure 3-3).

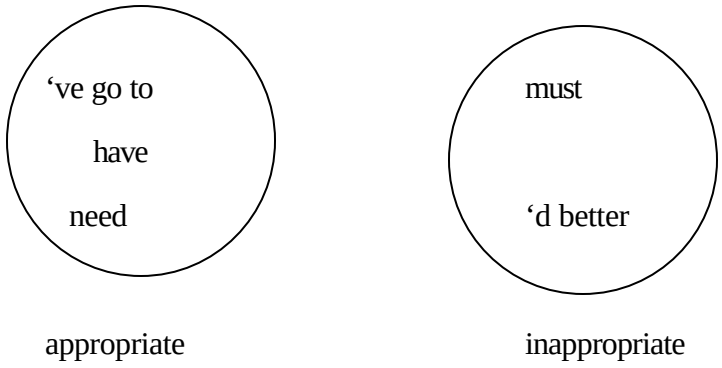

Figure 3-3. *Urgency* NSs' test of appropriateness

Fill-in-the-blanks. The *urgency* fill-in the-blank (Appendix B) has two blanks. The answers for the first one are as follows:

Table 3-6 *Urgency* fill-in-the-blank percentage - 1st blank

	can	have to	need	've got to
NSs	5	15	70	10

The answers for the first blank confirm the NS system in Figure 3-2. The difference is that *need* is the most preferred answer for the 1st blank while it was the 3rd most chosen in the

test of appropriateness. This means that the test of appropriateness is able to describe a possible system but usage preference of one suitable verb over another may vary.

The NS answers for the second blank have a distribution which is less definite than for the first blank (Table 3-7).

Table 3-7 *Urgency* fill-in-the-blank percentage - 2nd blank

	have to	need	must	've got to
NSs	45	20	20	15

The NS percentages are much closer to each other than for the first blank. Besides that, there is also the presence of *must* as a possible alternative. The inclusion of this second blank to be filled in the same dialogue may have given the participants the idea that some tension was building up. This second blank may have created the impression that the linguistic environment favored insistence. As a result, *must* was chosen by 20 % of the NS participants, while it was not a choice in the first blank.

Role-plays. The results of the urgency role-plays confirm the results from test of appropriateness and the first fill-in-the-blank. Urgency situations call for the usage of *have to, need to,* and *'ve got to.* The only variation in the usage of these PMVs is the connection of *´ve got to* to specific situation features such as power relation and social distance. This PMV was used only in the situations that the interlocutors had not power over each other, and they were either spouses, best friends or coworkers.

In conclusion, the feature urgency has elicited from the NSs a consistent system, in which *have to, need to,* and *'ve got to* are appropriate. The semantic extension of *'ve got to*

makes it more appropriate in informal situations in which there is no power relation between the interlocutors. This characteristic was also noticed in the results of speaker's necessity situations.

New rules

Test of appropriateness. When the participants were tested on how to introduce a *new rule* (Appendix B), only the NS's perceptions of the verbs showed a statistically significant difference (Friedman test chi-square = 10.01, *df* = 4, Prob (x > 10.01) = 0.04). The variables tested were *must, 'd got to, need, 'd better,* and *should*. Figure 3-4 corresponds to the NS system when asked to judge their perception of the appropriateness of the variables mentioned for the context in which a new rule had to be established.

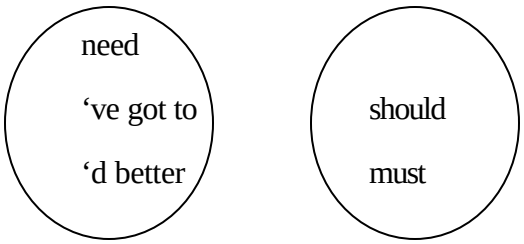

Figure 3-4. *New rule* NSs' test of appropriateness

Fill-in-the-blanks. There were two fill-in-the-blanks to test *new rule*, and the NS results are as follows:

Table 3-8 *New rule* NSs' fill-in-blank percentage

	need to	have to	should	could	've got	ought to
1st blank	25	-	35	20	10	10
2nd blank	30	20	40	5	5	-

The above results do not match with the one from the test of appropriateness, except for the choices of *need to* and *'ve got to.* While *'d better* is appropriate in Figure 3-4, it does not even come up as a possible answer in the fill-in-the-blanks. Moreover, *should* received the highest percentages in the fill-in-the-blank, whereas it was classified as inappropriate in the test of appropriateness.

Role-plays. The PMVs used in the *new rule* situations (Appendix A role-plays 10-12) are mainly *need to* and *have to*. Only in role-play 10 did the speakers use *should*.

The NS tests and role-plays show divergent results. First of all, the result of the test of appropriateness (see Figure 3-4), indicates that *need, 've got to*, and *'d better* are suitable for the *new rule* context while *should* and *must* are not. In the fill-in-the-blank exercises *need, 've got to,* and *have to* were used as in the role-plays. The biggest divergence is the use of *should.* This MV emerged with the highest percentage in the fill-in-the-blank and it was used in the role-plays. However, it was judged unsuitable by the same group in the test of appropriateness.

In summary, these discrepant results make it difficult to draw a conclusion about the NSs' grammar system for the *new rule* context. The indefinite results for the *new rule* context may be due to a design flaw in the situations. It may even be the case that this feature by itself is not is not relevant. In other words, this feature is not able to elicit a coherent system from the NS group.

New rule + urgency

Test of appropriateness. In the test about how to express a *new rule* when the situation also calls for *urgency* (see Appendix B), the NSs' system is different as compared to only *new*

rules or only *urgency*. There are statistically significant differences on how this group perceives the verbs tested (*must, 've got to, have to, need, 'd better, should*) (Friedman test – chi square = 35.33, *df* = 5, Prob (x > 35.33) = 0.0). The posthoc Nemenyi's test shows that the significant differences are between '*d better – need, have to, must* and *'ve got to*.

Table 3-9. *New rule + urgency* NSs' Nemenyi's test (* = > 2.018 critical value for the data)

	X_{need}	X_{have}	X_{must}	$X_{'ve\ got}$	X_{should}	$X_{'d\ better}$
X_{need}	-	0.29	0.56	0.82	1.66	3.00*
X_{have}		-	0.27	0.53	1.37	2.71*
X_{must}			-	0.26	1.1	2.44*
$X_{'ve\ got\ to}$				-	0.89	2.18*
X_{should}					-	1.34
$X_{'d\ better}$						-

The NSs' system to express a *new rule* when the situation calls for *urgency* has 2 groups and the verbs are distributed as follows:

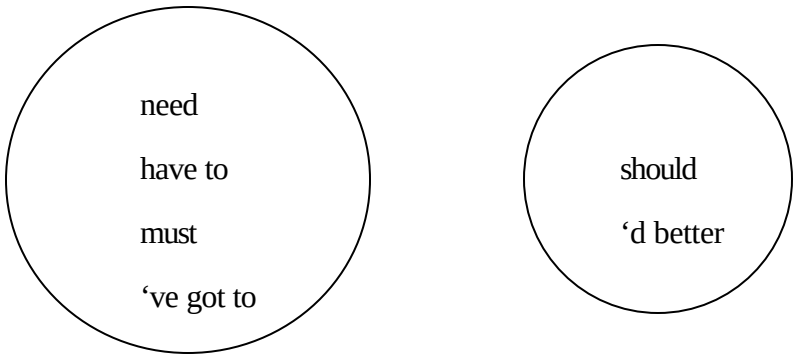

Figure 3-5. *New rule + urgency* NSs' test of appropriateness

The PMVs *need*, *have to*, and *'ve got to* are appropriate alternatives as in the other contexts. *Must* in this context is in the most appropriate group. This MV contrasts with *'d better* with which *must* has shared semantic features in other situations (*speaker's necessity* and only *urgency*). This fact points to the specificity of the form/function mapping. This means that when the speaker has to express the necessity to do something or even when there is some urgency to do something the most neutral/common[8] root modal verbs are able to do this job. However, when the situation is more complex and in addition to the *urgency* there is also the need to establish a *new rule*, an MV (*must*) is also suitable. *Must* has a limited scope of usage. The semantic delimitations imposed by the situation that involves a *new rule + urgency* seems to capture one of the specific situations in which this verb is suitable. It is important to notice that the feature *new rule + urgency* creates a whole different context from only *urgency* or only *new rule*.

Fill-in-the blanks. The NSs' choices for *new rule + urgency* blanks confirm the system in Figure 3-5. *Have to* and *need to* are the most preferred verbs, and *must* is the third one with 15%. This shows that *must* is really a choice for the NSs for this situation, but that it is not the most common verb in this context.

Table 3-10. *New rule + urgency* NSs' fill-in-the-blank percentage

	have to	need to	must	had better	will	going to
NSs	40	20	15	5	10	10

[8] The idea that there are two categories of root modal MVs and PMVs is discussed at the end of the NS section. The claim is that one group works as default verbs and the others are used in specific situations.

Role-plays. The NS participants used *have to, need to* and *must* in the *new rule + urgency* role-plays (Appendix A - role-plays 13 to 16). These participants captured the fact that power relation and social distance allow the use of *must* in this context. This MV was used when the speaker (parent) had some power over the addressee (daughter or son) and the interlocutors were intimate.

Expressing a new rule in the context that involves urgency can be very face-threatening for the hearer: the speaker may sound as if she wants to dictate the best way to proceed. According to Wolfson's Bulge theory (1988), there is less negotiation in a conversation between strangers or intimates rather than between friends or acquaintances. Boxer's (1991) study on indirect complaints reveals different behavior: There is more agreeability / negotiation between strangers rather than intimates. My results corroborate Boxer's, since the most distinct MV (*must*) used by the NSs occurred only in the situation which the interlocutors were very intimate (parent - son or daughter). Only in this situation did the NSs feel that the hearer's face did not have to be saved. On the other hand, in the situation where the speaker was a doctor (interlocutors were acquaintances - role-play 13), less face-threatening verbs, such as *have to* and *need to* were used.

In summary, the results that *have to* and *need to* are used in *new rule + urgency* and that *must* is also appropriate confirm the test of appropriateness and the fill-in-the-blank results. This validates the feature *new rule + urgency* as a relevant one for the understanding of root modality.

Pre-existing rule

Test of appropriateness. The results of the test about how to remind someone of a *pre-existing* rule (see Appendix B), show that this NS system is different from all the other NS systems, except for *new-rule + urgency*. The PMV *'d better* and the MV *must* are part of the appropriate verb group for this feature involving a *pre-existing* rule (Figure 3-6). The PMV *'d better* is not part of the appropriate group for the other features (*speaker's necessity, urgency, new rule* and *new rule + urgency*), while *must* is appropriate for *new rule + urgency*.

According to this test, the NS system to express a *pre-existing rule* is the following:

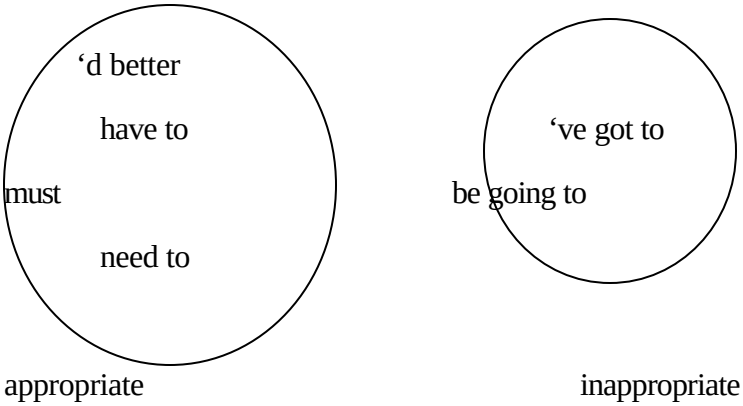

Figure 3-6. *Pre-existing rule* NSs' test of appropriateness

The system above (Figure 3-6) is an interpretation of the statistical results that follow (Table 3-11).

Table 3-11. *Pre-existing rule* NSs' Nemenyi's test (* = > 2.018 critical value for the data)

	$X_{'d\ better}$	X_{have}	X_{must}	X_{need}	$X_{'ve\ got}$	$X_{be\ going\ to}$

$X_{'d\ better}$	-	0.44	1.21	1.34	1.71	2.60*
X_{have}		-	0.77	0.9	1.27	2.16*
X_{must}			-	0.13	0.5	1.39
X_{need}				-	0.37	1.26
$X_{'ve\ got}$					-	0.89
$X_{'be\ going\ to}$						-

Significant differences were found among the variables *'d better, have to, must, need, 've got to,* and *be going to* (Friedman test, chi-square = 22.35, *df* = 5, Prob(x > 22.35) = 0.0005). The posthoc Nemenyi's test showed that the significant differences are between *be going to – have to* and *be going to - 'd better*.

The above results and Figure 3-6 show that the need to communicate a *pre-existing rule* makes it suitable to use verbs that have a much more restricted use, such as *'d better* and *must*. Actually, *'d better* was considered the most appropriate PMV for this situation and *must* somewhat appropriate. The results may have been somewhat skewed, since the variable *be going to* was included. It seems that the participants rated the verbs opposing many of them against *be going to*. Thus, it may be the case that if *be going to*[9] were not one of the variables, *must* would have received a different rating. Another interpretation of the results is that the feature *pre-existing rule* calls for less common PMVs and MVs, such as *'d better* and *must*.

Fill-in-the- blanks. There were two blanks to be filled involving *pre-existing rule*. The NS answers show a great difference between the two blanks. The distribution is as follows:

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9 The variables were chosen after a survey with NSs in which they filled in the blanks with every modal device they would use for that specific situation. Although, *be going to* was suggested by the NSs, it was the least suggested modal device.

Table 3-12. *Pre-existing rule* NSs' fill-in-the-blank percentage

	have to	should/not	've got	had better	need to	must	ought to	might	can't	could
1st blank[δ]	-	15	-	-	-	-	-	5	70	5
2nd blank	30	20	15	15	10	5	5	-	-	-

[δ] The percentage does not add to 100 since one participant did not fill in the 1st blank

The difference between the answers for blank one and two are due to the fact that the first blank required a negative verb while the second one called for an affirmative verb. Therefore, it is reasonable to take the second blank as a more representative one than the first blank. Above all, the situations in the other data collection procedure called for verbs in the affirmative form.

Their choices for the second blank confirm the results from the test of appropriateness. Besides, *'d better*, *have to*, *must*, and *need to* (appropriate group in the other test) *should* received a high percentage of choices. Since this MV was not a variable in the test of appropriateness, one cannot say the results diverge. The point may be that an important variable was left out of the test.

Role-plays. The NSs used *need*, *should*, *'ve got to*, *be supposed to*, and *can't* in the role-plays that tested the feature *pre-existing rule*. The use of the negative MV *can't* occurred under the same circumstance as the first blank mentioned above (Table 3-12). This negative MV is suitable to remind someone of a pre-existing rule. This usage occurs in a situation where the speaker has power over the addressee and the interlocutors are very intimate.

The preferred MV used by the NSs in the *pre-existing rule* role-plays was *should*, which was not a variable tested in the test of appropriateness. The fill-in-the-blank second blank (Table 3-12), however, shows that this MV is the second most suitable for the NSs.

As in other contexts, the use of *'ve got to* occurred when there was no power relation between the interlocutors. The informal characteristic of this PMV has been confirmed.

In summary, the feature *pre-existing rule* was validated by the results of the fill-in-the-blanks and role-plays. The most common MV in this context is *should*. Unfortunately, this MV was not a variable in the test of appropriateness which limits the comparison. The variables used in the test do not seem to be the most important ones for the context. Similarly to *must*, *should* seems to be used in specific contexts which contrast to the semantic extension of *have to* and *need*.

The picture drawn from the results is that based on the features tested, root modal MVs and PMVs could be divided in two groups: (a) neutral or default; and (b) specific. The neutral and default ones (*have to* and *need*) were appropriate in all contexts, while *must*, *should*, *can't*, *'ve got to* are not. *Must* is appropriate in the context of *new rule +urgency* when the speaker has power over the addressee and the interlocutors are intimate. *Should* is suitable in the *pre-existing rule* context and so is *can't*. Yet, *can't* is appropriate when the speaker has power over the addressee and the interlocutors are intimate. *Should* is used when there is no power relation between the interlocutors and they are intimate, friends or strangers. The PMV *'ve got to* appeared in different contexts, and the situational clue to use it is informality (there is not power relation between the interlocutors and they may be intimates or not). Finally, out of the five features tested, only *new rule* by itself has not been validated as a key element in the choices of MVs and PMVs by the NSs.

<u>NNSs</u>

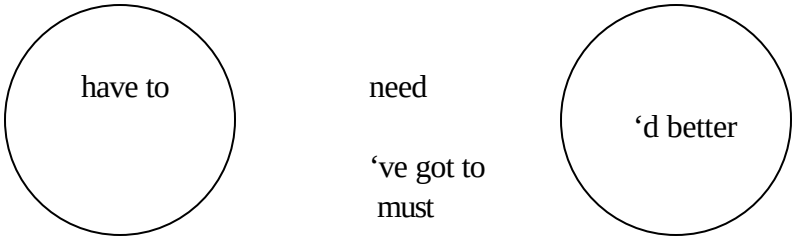
<u>Speaker's necessity</u>

Beginning group. The beginners' choice of the verbs shows that there is a significant difference in how they perceive the appropriateness of the variables *must*, *'ve got to, have to, need*, and *'d better*, for the *speaker's necessity* situation (Friedman test chi-square = 11.14, *df* = 4, Prob (x > 11.14) = 0.0250). The posthoc Nemenyi's test (Table 3-13) shows that the significant difference is between *have to* and *'d better*.

Table 3-13. *Speaker's necessity* beginner's Nemenyi's test (* = > 2.076 Critical value for the data)

	X_{have}	X_{need}	$X_{'ve\ got\ to}$	X_{must}	$X_{'d\ better}$
X_{have}	-	0.77	1.00	0.05	2.41*
X_{need}		-	0.23	0.27	1.66
$X_{'ve\ got}$			-	0.05	1.41
X_{must}				-	1.36
$X_{'d\ better}$					-

The beginners' system is very different from the NSs' one. *Need, 've got to* and *must* are not statistically different from the other ones and could as well be appropriate or inappropriate for this situation. The only statistically significant difference is between *have to* and *'d better*. These results means that *have to* would be the only modal definitely used by the majority of the group. The verbs in the middle, however, (see Figure 3-7) are accepted as suitable for this context by some participants but not enough to make their choice significantly different from *'d better*. This last PMV is considered unsuitable by this group. It may be because they have not yet learned this PMV.



appropriate inappropriate

Figure 3-7. *Speaker's necessity* beginner's test of appropriateness

Intermediate group. In the test of appropriateness, the intermediate group choice of the verbs show that there is a significant difference in how they perceive the suitability of the verbs for the *speaker's necessity* (Friedman test chi-square = 14.74, *df* = 4, Prob (x > 14.74) = 0.0053). The posthoc Nemenyi's test (Table 3-14) shows that the significant difference is between *have to* and *'d better*.

Table 3-14. *Speaker's necessity* intermediate group's Nemenyi's test (* = > 2.18 Critical value for the data)

	X_{have}	X_{need}	X_{must}	$X_{'ve\ got\ to}$	$X_{'d\ better}$
X_{have}	-	0.95	1.15	1.95	2.70*
X_{need}		-	0.20	1.00	1.75
X_{must}			-	0.80	1.55
$X_{'ve\ got\ to}$				-	0.75
$X_{'d\ better}$					-

The significant difference is, like the beginning group, between *have to* and *'d better*. However, the mean ranks of the verbs show a different grouping from the beginner's answers. The intermediate participants consider *have to, need* and *must* appropriate and *'ve got to* and *'d better* inappropriate verbs. Therefore, the intermediate group's grammar is different from the beginning group. They approximate more closely to the NSs' grammar since there are only two groups (compare Figures 3-4 and 3-8).

Their modal system is not native-like since *must* is part of the appropriate verb group for this context. It could be the case that the PMVs *'ve go to* and *'d better* were not chosen by many participants since they are not as familiar with these verbs as they are with *have to, need to*, and *must*.

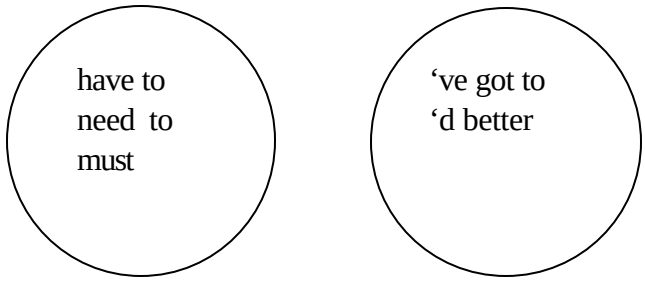


Figure 3-8. *Speaker's necessity* intermediate group's test of appropriateness

Advanced group. There was no significant difference in how the advanced students perceived the appropriateness of the verbs for the situation involving *speaker's necessity.* This result shows that as a group, the participants do no have a cohesive perception of the context and the appropriateness of the verbs tested. This result could be due to the fact that the participants are very familiar with all the variables. They have been exposed to all these PMVs and MVs throughout their studies; however, they have not been taught how their semantic extensions vary. For instance, they are not able to detect that *have to* carries a different force from *'d better*.

Fill-in-the-blanks. The beginners' answers for the *speaker's necessity* blank confirm the test of appropriateness results (Table 3-15). Their answers encompass a larger array of answers than the NSs, which shows that their system is quite different from the NS system.

The beginners chose *need to* as the most preferred answer as did the NSs. The crucial difference is that *must* and *have to* are perceived as the same by the beginners, while *must* was not even a choice for the NSs. Comparing the test of appropriateness and the fill-in-the-blank answers, one can say that the group of verbs that are in the middle of

Figure 3-7, neither appropriate nor inappropriate, are really part of he beginning participants' **productive** grammar. The vagueness of their perceptive modal system is reflected on their productive system. These inappropriate choices occur because these learners do not know the semantic extension of these MVs and PMVs. Also, these participants' proficiency level is not enough to let them understand all the context clues. These clues come from the feature *speaker's necessity*, which have determined in the situations that the necessity to have something done is purely speaker internal.

Table 3-15. *Speaker's necessity* fill-in-the-blank percentage by group

	have to	need to	may	must	ought to	should	've got to	will	going to
Beginners	16.6	50	8.3	16.7	-	-	8.3	-	-
Intermediate	36.4	18.2	-	-	9.09	9.09	9.09	9.09	9.09
Advanced	30	50	-	-	-	10	-	-	10
NSs	30	65	-	-	-	-	5	-	-

The system that emerged in the intermediate group test of appropriateness answers is also confirmed by the fill-in-the-blank exercises. This group also presents a vast array of answers for speaker's necessity (Table 3-15). The intermediate group's preference for *have to* and *need to* also confirms the test of appropriateness results (see Figure 3-8). Although there was no significant difference among the variables for the advanced students, their fill-in-the-blank answers (Table 3-15) show their resemblance to the NSs' grammar answers (Figure 3-2). These advanced participants used a smaller array of answers than the other NNS groups, which approximate the distribution to the NSs' system. Therefore, even though this result is not always consistent, the higher the proficiency the closer the system is to the NSs'. The results from the intermediate and advanced groups show that they also lack the knowledge about the

semantic extension of MVs and PMVs, which was a source of the beginning participants' problem.

Role-plays. *Must* was not present in the NSs' and NNSs' role-plays. All the groups used mainly *have to* and *need*. This shows that since these situations present a case of internal necessity, the participants have chosen to use *have to* and *need*. For the NNSs groups this seems to be a contradiction to their perceptive appropriate system, which also included *must*. Another reason for them to have used these PMVs is that these are the most commonly used, and thus the learners feel more familiar with them. As for the test results, '*ve got to* and *must* are not in the same category for all the groups. *'ve got to* is in the appropriate group for the NSs, and they use this PMV in these type of role-plays. The NNSs do not use this PMV in their role plays, and in the test of appropriateness it is not definite where it stands (see Figures 3-7 and 3-8). While the modal verb *must* is clearly inappropriate for the NSs in both tests, it is in a limbo category for the NNSs. The Nemenyi's test numbers show that there are no significant differences between *must* and several other verbs for the NNSs. Thus, *must* may be considered an appropriate alternative for the NNS groups. This may occur since several textbooks are not able to point out the semantic differences among these root modal MVs and PMVs, as was discussed in Chapter 1.

Summary - speaker's necessity. *Have to* and *need to* were mostly chosen in the role plays, even by the NNSs. The reason why NSs and NNSs used the same verbs may be quite different. One cannot categorically affirm that the NNSs know how to use the appropriate verbs in this context, since these learners may be just using an easy strategy: to use very common PMVs. On the other hand, the NSs know the neutrality or default characteristic of

have to and *need to* as root PMVs. In other words, they are appropriate in many different contexts and are less face-threatening for the addressee than other MVs and PMVs. This is especially true in the context being discussed, since it involves the speaker's internal needs.

Urgency

No significant differences were found in how any of the NNS groups perceived the verbs *must, 've got to, have to, need,* and *'d better* for the *urgency* situation. This means that the NNSs were either not able to understand the urgency cues given by the situation, or even after understanding these cues were not able to match the **context** with the most appropriate MVs or PMVs. The cues given showed that there was a situation in which the speaker needed to have something done on that day, otherwise there would be a huge problem in her business. The addressee was asked to help solve the problem, but that would require her doing something she was not supposed to do in her work. For the NNSs, these details did not make any difference in their choices of MVs and PMVs. The NNSs participants do not have a clear grammar system for the expression of *urgency*, while the NSs do as the statistical results showed (Table 3-5 and Figure 3-3).

Fill-in-the-blanks. The *urgency* fill-in the-blank (Appendix B) percentage of answers are as follows:

Table 3-16. *Urgency* fill-in-the-blank percentage by group- 1st blank

	can	have to	need	should	must	had better	may	'd rather	've got to	could
Beginners	8.3	16.7	33.3	16.7	-	0	16.7	-	-	8.3
Intermediate	-	27.3	18.2	-	18.2	9.1	9.1	9.1	9.1	-
Advanced	-	30	40	10	20	-	-	-	-	-
NSs	5	15	70	-	-	-	-	-	10	-

The first noticeable difference between the NNS and NS (Table 3-16) fill-in-the-blank answers is that the former groups used several MVs and PMVs without preference for any of them (see the large number of verbs chosen - table above). Second, none of he NNS groups clearly preferred one verb over another, while *need* was clearly chosen by 70% of the NSs. Third, several other verbs that the NSs did not choose appeared as possible answers for the NNSs: *should, must, 'd better, may, would rather, could. Must* is the verb that received a high percentage by the NNSs (the intermediate and advanced groups), while the NSs did not choose this verb at all. This confirms that the NNSs do not know the native-like semantic extension of certain MVs and PMVs. Therefore, the NNSs lack a well determined modal system for the *urgency* context.

As was previously discussed, this second blank to be filled in the same dialogue gave the participants the idea that some tension was building up. The linguistic environment seems to encourage insistence. As a result, *must* was chosen by 20 % of the NS participants and by all NNS groups.

While for the NSs and advanced group *must* was one of the second most chosen MVs for this blank, it was the one most chosen by the beginning and intermediate groups (Table 3-17).

Table 3-17 *Urgency* fill-in-the-blank percentage by group - 2nd blank

	can	have to	need	should	must	had better	've got to	be supposed to
Beginners	16.7	8.3	33.3	8.3	33.3	-	-	-
Intermediate	9.1	27.3	9.1	9.1	27.3	9.1	-	9.1
Advanced	-	30	20	20	20	10	-	-

Once again, the fact that there is more than one verb that receives the highest percentage from the beginning and intermediate groups, shows that their productive modal system does not capture the semantic difference of these verbs.

Role-plays. In the correspondent *urgency* role-plays (Appendix A), *need to* was the preferred verb by the beginners (most of the students from this group are Spanish and Portuguese speakers whose languages have a very similar verb[10]) and the other groups used both *need to* and *have to*. As discussed in the above section about the role-plays involving *speaker's necessity*, the NNSs have a notion of usage that in the case of expressing *urgency* is actually very close to native-like, but their reasons for their choices are very likely different. The NNSs tend to use *need to* and *have to* because they are more familiar with them, while the NSs choose them due to their neutrality characteristic.

Summary - urgency. The striking difference between the role-plays and tests is that the NNSs present a divergent system for the three data collection procedures. On the other hand, the only divergent NS answers come from the second blank in the fill-in-the-blank exercise. This difference is probably due to the change in the linguistic environment, since the second blank gives the idea that there is room for demand or insistence. The NNSs' role-play usage, which was close to native-like, may be more due to the commonality of *have to* and *need to* rather than showing a real understanding of the context and the semantic extension of these MVs and PMVs. This lack of understanding is reflected on their tests. No significant difference was found among the variables, and the fill-in-the-blank answers are distributed among various verbs (Table 3-17).

New rule + urgency

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[10] The use of *need* is discussed in Chapter 5, which focuses on the role of L1 in the acquisition of root modals.

Test of appropriateness. No significant difference was found in how any of the NNS groups perceive these verbs in the *new rule + urgency* situation. Once again the NNSs are not able to capture the subtle differences of usage in this context.

Fill-in-the-blanks. For both the beginning and the advanced groups *must* is the most chosen verb, and it is the second verb for the intermediate group (Table 3-18).

Table 3-18. *New rule + urgency* fill-in-the-blank percentage by group

	have to	need to	can	must	had better	should	've got to	will	going to
Beginners[δ]	16.7	8.3	8.3	33.3	8.3	16.7	-	-	-
Intermediate	54.5	-	-	36.7	-	9.1	-	-	-
Advanced	-	20	-	60	10	-	10	-	-
NSs	40	20	-	15	5	-	-	10	10

[δ] One of the beginning participants did not fill this blank; thus, the total percentage does not add to 100.

As has been observed in the other situations, the beginning and intermediate groups both present a vast array of choices, showing that their system is not well established. Yet, the intermediate group is the one that is closer to the NSs in their first choice: NSs - *have to* 40%, and intermediate - *have to* 54.5%. On the other hand, all the percentages for *must* are much higher for the NNSs than for the NSs. This verb works as a default verb in various contexts. It is interesting to notice the very high percentage (60%) for *must* by the advanced group. This could be due to first language transfer or inappropriate information from textbooks (more details on types of transfer in Chapter 5).

Role-plays. In the role plays (Appendix A - Situations 13-16) all groups used *must* and other PMVs, such as *have to* and *need to*. The differences among the groups are that, especially the beginning students and to a certain extent the advanced participants (see Table 3-19), do not take into consideration the power relation and the degree of intimacy between the interlocutors. They are not able to incorporate these factors as part of the social situation and

capture the fact that even just one element (e.g., power) may change the whole situation. The beginning participants do not distinguish between different power relations, and neither know how to deal with different degrees of intimacy (e.g., friends, spouses) (Table 3-19). The advanced participants treat different power relations in much the same way too.

Both the intermediate and NS participants captured the differences the other groups did not. This fact reflects their distinct choice of using *must* only in the situations where there is a power relation between the intelocutors and high degree of intimacy. As Table 3-19 shows, this MV was used when the speaker (parent) had power over the addressee (daughter or son) and the degree of intimacy was high. Thus, when the intermediate participants and NSs chose to use *must* they considered the social situation as a whole and did not leave out power relations and social distance differences.

Table 3-19. Use of *must* in *new rule + urgency* situations

	Beginners	Intermediate	Advanced	Native speakers
Power relation – doctor to patient	No	No	No	No
No power relation - friends	Yes	No	No	No
No power relation – spouses	Yes	No	Yes	No
Power relation – parent to daughter/son	Yes	Yes	No	Yes

All groups used *must* in this situation (#16), except the advanced participants; however, it cannot be stated that all of them have the same understanding of when to use this MV. The beginning and advanced participants have divergent grammars from the intermediate and NS group. The proximity of the intermediate grammar, rather than the advanced grammar, to the NS grammar is surprising (see Table 3-19). This result may be due to transfer of training. There

was no control over which textbooks the groups were studying from, nor if they had been exposed to more or less appropriate modal usage by their teachers. What can be affirmed is that the beginning and advanced participants overuse *must*. They do not have the NSs' refined system to capture all the nuances of distinct social situations.

The only situation in which none of the groups use *must* is 13. This situation is between a doctor and a patient. Although the doctor has some power over the patient, the participants weighed the intimacy factor and how much a doctor can impose on a patient. Their choices reflected the sentiment that a doctor should present and suggest actions to be taken; however, a doctor cannot force a patient to do something since there is no intimacy between the interlocutors.

Summary - new rule + urgency. Out of all the features tested for this research, the *new rule + urgency* was the context able to detect the NSs' usage of root *must*. The test of appropriateness, the fill-in-the-blank, and role-play results point to the same conclusion: *must* is suitable for this context. Even though *must* is part of the appropriate group in Figure 3.5, it was scarcely used by the NSs in the role-plays. That is where one can notice how different the NSs' and NNSs' systems are. Both the understanding and usage of this MV are different. For the NSs, relationship power and degree of intimacy are crucial factors in determining the use of a specific MV or PMV. The NNSs do not have that sensitivity.

Pre-existing rule

Test of appropriateness. No statistically significant difference was detected in how the beginners perceived the variables in the situation that expresses a *pre-existing rule*. Statistically significant differences were noticed among the intermediate and advanced group answers. The Friedman test for the intermediate results are: Chi-square = 24.43, df = 5, Prob ($x > 24.43$) =

0.0002). The posthoc Nemenyi's test showed that the significant differences are between *be going to* and *must,* and *need* and *must* (Table 3-20).

Table 3-20. *Pre-existing rule* intermediate group Nemenyi's test (* = > 2.65 critical value for the data)

	X_{must}	X_{have}	$X_{'ve\ got\ to}$	$X_{'d\ better}$	X_{need}	$X_{'be\ going\ to}$
X_{must}	-	1	1.82	2.45	2.86*	3.50*
X_{have}		-	0.82	1.45	1.86	2.5
$X_{'ve\ got\ to}$			-	0.63	1.04	1.68
$X_{'d\ better}$				-	0.41	1.05
X_{need}					-	0.64
$X_{be\ going\ to}$						

The intermediate group system for the situation that expresses a *pre-existing rule* is as follows (Figure 3-9):

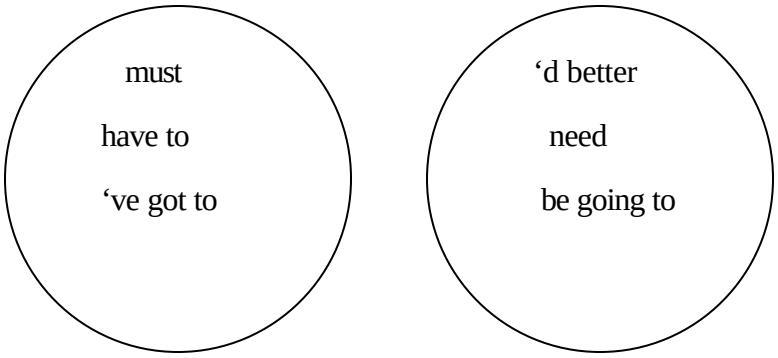
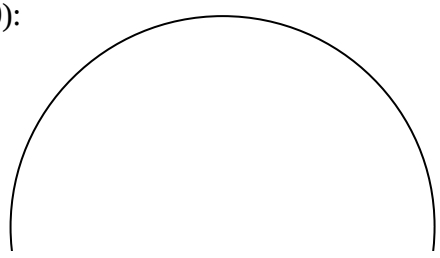


Figure 3-9. *Pre-existing rule* intermediate group's test of appropriateness

The Friedman test results for the advanced group are the following: Chi- square = 15.32, *df* = 5, Prob (x > 15.32) = 0.0091). The distribution of their MVs and PMVs are as follows (Figure 3-10):



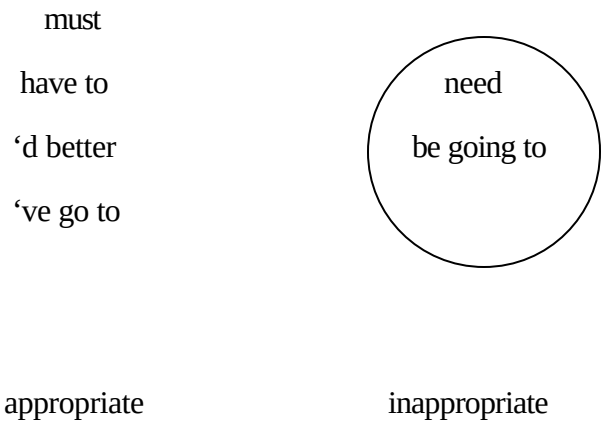


Figure 3-10. *Pre-existing rule* advanced group's test of appropriateness

For both the intermediate and advanced groups *must* is **the most appropriate** choice for the situation that involves a *pre-existing rule*, while for the NS group *must* is considered somewhat appropriate. *'d better* is considered inappropriate by the intermediate group and appropriate by the advanced group. The only rating that is the same for all the three groups (NS, intermediate and advanced) is the least appropriate: *be going to.* There are some similarities among the groups, but some divergencies as well. Figures 3-10 and 3-6 show that the advanced group system is closer to the NSs' than the intermediate to the NSs' (Figures 3-9 and 3-6). The beginners, on the other hand, do not even have a system that can be statistically captured.

Fill-in-the-blanks. There were two blanks that the participants had to fill involving the expression of a *pre-existing rule*. The first one required a negative form, and that confused many participants. Only the beginning and intermediate groups chose *must* (beginners 16,7% *must*, 8.3% *must not* and intermediate *must not* 18.2%). 40% of the advanced group chose *shouldn't*. The NS answers were even more consistent: 70% chose *can't*. The distribution is as follows:

Table 3-21. *Pre-existing rule* fill-in-the-blank percentage by group - 1st blank

	shouldn't	can't	must	must not	will not	had better not	may	could	have to	should
Beginners	8.3	16.7	16.7	8.3	-	-	16.7	0	8.3	8.3
Intermediate	9.1	18.2	-	18.2	9.1	9.1	-	9.1	-	-
Advanced	40	10	-	-	-	10	-	-	10	10
NSs	15	70	-	-	-	-	-	5	-	-

Table 3-21-- continued

	had better	might	ve got to	not be supposed to	have not to	be supposed to	zero
Beginners	8.3	8.3	-	-	-	-	-
Intermediate	-	-	9.1	9.1	9.1	-	-
Advanced	-	10	-	-	-	10	-
NSs	-	5	-	-	-	-	5

Completing the second blank, NSs preferred *have to* (30%) and *should* (20%), while the beginners preferred both *should* (25%) and *must* (25%), the intermediate students mostly chose *must* (63.6), and the advanced students chose *had better* (30%) and *must* (20%). *Must* was also a choice for some NSs, but only for 5% of them. Comparing these results with the ones from the test of appropriateness (see figure 3-6), one notices that the most appropriate PMV for the NS group (*'d better*) was not even chosen for the first blank and only received 15% of the answers for the second blank. As discussed in the section about the NSs' answers, the flaw here may be due to the variable *be going to* the researcher chose to include in the test of appropriateness rather than a problem with the feature itself. As for the NNSs, the fill-in-the-blank exercise confirmed their preference to use *must* (beginning, intermediate, and advanced) and *'d better* (intermediate and advanced).

Table 3-22. *Pre-existing rule* fill-in-the-blank - 2nd blank

	have to	should	've got	had better	need to	must	ought to	will	could	be supposed

										to
Beginners	8.3	25	8.3	-	-	25	-	16.7	16.7	-
Intermediate	-	-	-	27.3	-	63.6	-	-	9.1	-
Advanced	10	10	10	30	-	20	-	-	-	10

Role-plays. The role-play results confirm several results previously discussed. The beginner group who tends to use *must* quite often is, in fact, the only group that does so in the pre-existing rule situation. This result corroborates the results from the fill-in-the-blank test. The intermediate group only used *have to*, a much safer verb than *must*, since it can be appropriate in so many different contexts. The advanced group also preferred *have to* but used other verbs such as *should, be supposed to*, and *'d better*.

The advanced group choices are the closest ones to the NSs' MVs and PMVs for this context. The NSs preferred *should* and also used other verbs such as *be supposed to* and *need to, 've got to,* and *can't* in the role-plays that tested the feature *pre-existing rule*.

While the NSs captured a specific clue in this context that allowed them to use *can't*, the NNSs were not able to make use of specific context clues when choosing MVs and PMVs. This MV in the negative form was used when the speaker had power over the addressee and they were intimates.

New rule

This feature was the only one not validated by the NSs as a crucial element of root modality to distinguish among the various choices of MVs and PMVs. Due to this fact it is difficult to judge the NNS answers as appropriate or inappropriate for the *new rule* only context.

IL System

The data collected through different procedures to test the status of root MVs and PMVs in certain contexts, show that there are IL systems of these verbs. This conclusion comes from the fact that there was consistency within the groups on which MVs or PMVs they chose to use in the test of appropriateness, fill-in-the-blank, or role-plays. In most of the contexts, their system diverges from the native-like one. Yet, as their general proficiency increases, their IL gets closer to native-like.

NNSs also have a system of default root MVs and PMVs as the NS do. They do use *have to* and *need to* quite often, as do the NSs. Yet, *must* also comes up as a default MV, mainly for the beginning group and sometimes for the intermediate group as well.

Chapter Conclusion

Based on the NSs answers to the tests of appropriateness, fill-in-the-blanks, and role-plays, there are four features that have been validated: *speaker's necessity*, *urgency*, *new rule + urgency* and *pre-existing rule*. In other words, these contexts were able to elicit a consistent root MV and PMV system. These elements of root modality are crucial to the understanding and usage of root modality. The NSs showed sensitivity in the use of contextual clues in choosing their modal devices, taking into consideration who the interlocutors are and the relationship between them. The NNSs also show some systematicity in their root IL for MVs and PMVs. Their systems, however, diverge from the NSs basically because they are not aware of the semantic extension of each particular verb. Moreover, they are not able to use the

situational clues given. Their perceptive and productive grammar is very likely affected by inappropriate instruction and first language transfer (see Chapter 5 for this discussion).

CHAPTER 4
SPEAKER'S CHOICES AMONG ROOT MODAL COMPETING FORMS

Introduction

The focus of this chapter is to discuss the choices speakers make when they want to convey a root modality meaning. The data comes from the open role-plays[1] and debates. There are several linguistic structures that can be used to carry root modality meaning, such as the ones with MVs/PMVs, MEs and imperatives. Before discussing how NSs and NNSs differ in their choices and the consequences in terms of politeness[2], it is important to provide a root modality landscape and discuss the semantics of the linguistic structures.

Root Modality

Recall from Chapter 1 that this study works under a semantic perspective in which the root sense denotes real-world meaning, such as obligation, permission, or ability (Sweetser 1982). This modality sense refers to the domain of social interaction and contrasts with the epistemic sense, which refers to the domain of reasoning. It is also crucial to recall Talmy's (1981) idea of looking at modality in terms of *force dynamics*. In Talmy's point of view this

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[1] Although the use of role plays as data collection procedure is discussed in Chapter 2, it is important to emphasize their advantages and disadvantages once again. Open role-play is a procedure that yields the closest data to spontaneous conversation (Houck and Gass 1996). The data may not accurately reflect spontaneous speech but show the canonical shape of modality. A down side of the open role plays is that the participants may not perform the speech acts expected. Further studies that are based on natural setting conversations will certainly enlighten our understanding about the use of certain forms and their effect on the development of NS-NNS conversations.

[2] The dimension along which the different constructions are being investigated is the one of politeness. There are, however, other dimensions which are not the concentration of this present study. Therefore, the semantics of the linguistic structures discussed in the following section is based on this single dimension of politeness.

semantic category of root modality concerns the interaction between the speaker and/or subject and some force. This interaction is dynamic and may involve "the resistance of such a force, the overcoming of such a resistance, blockage of the expression of force, removal of such blockage, and the like" (Talmy 1988: 49).

Although there is a modal verb category distinct from other verbs in English (see Chapter 1), there are also other linguistic structures that communicate root meanings and could be understood in terms of force dynamic interaction. In order to understand how this interaction may vary, it will be discussed the meanings of structures with MVs/PMVs, with MEs, and with imperative and want-constructions.

Let us examine the meaning of structures with MVs and PMVs. A sentence such as (1) has a highlighted subject. This subject interacts with the MV force and with the complement of this verb.

(1) Paul *must* study every night.

In the above sentence, the speaker may be the origin of the force, or she may just be reporting a fact based on the knowledge she has of the situation. If the speaker can be identified with the origin of the force, she has a strong role (Achard 1996). For instance, a mother talking about her son who has been having problems at school could utter sentence (1). On the other had, the speaker has a weak role if she "merely reports that force" (Achard 1996).

If the subject of the sentence is the second person singular (2), it is very likely that the speaker has a strong role. However, there are still pragmatic factors that should be taken into consideration (e.g., power relation and social distance between the interlocutors) before one can categorically affirm the role of the speaker.

(2) You *must* study every night.

The essence of structures which carry an MV or PMV is that the subject of the sentence is prominent/profiled.

In this study, structures with MEs produced by NSs are of several types:

a) starting with a question word (e.g., *How about* you just give me the box, then? / Why don't you go to UPD and turn it in?)

b) with an adverb (e.g., *Maybe* we should tell the bus driver?)

c) with an impersonal construction (e.g., I don't see why *it's necessary* to go all the way down to Orlando.)

d) embedded sentence (e.g., I was wondering if you *could* put them in the box …).

Although these sentences are very different in structure, they do have the same basic function: to downgrade the connection between the doer and the modal process. This does not mean that the modal relation is no longer important but that it is not highlighted as it is in a sentence with an MV (1). In a sentence which has an impersonal construction (3), the doer of the action is in the subordinate clause and the root modal word (necessary) is in the main clause.

(3) It is *necessary* that you study every night.

The distance between the root modal word and the doer takes the profiled status away from the doer and makes the world the main figure of the modal relation. Another way of playing with the force dynamics of root modality is to start a sentence with an epistemic adverb:

(4) *Maybe* we should tell the bus driver.

In this case, the downgrading mechanism is different from the one present in (3). The epistemic adverb takes the focus away from the modal relation, softening the process which the doer is to

go through. How the other type of MEs play with the force dynamics of root modality is fully discussed in the section Modal Expressions (MEs).

Imperatives (6) and want-constructions (5) have been grouped together due to their pragmatic similarity. Their basic function is to express commands.

(5) I want you to study every night.

(6) Take out the garbage.

Although these structures do not have a root modal word, they are discussed in this chapter since they may substitute MVs, PMVs or MEs. The function of imperatives and want-constructions is the opposite of the function of MEs. Imperatives and want-constructions are very direct and focus on the doer rather than in the modal process or the world in which this process may take place.

Considering all the modal devices mentioned here (imperatives/want-constructions, MVs/PMVs and MEs), one could say that their meanings reflect some gradation from focus on the doer (personal) to focus on the process (impersonal). Imperative and want-constructions are at the very end of the most direct and personal structure since they are commands. In the middle, there would be the structures with MVs and PMVs. Within this group of MVs and PMVs, there are also gradations and specific usage (see Chapter 3), but they focus on the doer of the action. At the other end, there would be the MEs, which downgrade the modal relation and its doer. MEs use several different mechanisms, for instance, adverbs and embedded sentences, which are fully discussed later.

Politeness and Root Modality

Based on the meanings of the root modal constructions, this chapter analyzes one aspect of the situations tested: the relationship between politeness and speaker's choice of root modal devices. Since the choice of using one type of structure over another has direct consequences on the politeness aspect of the conversation, it is crucial to recall several points of Brown and Levinson's (1987) politeness work (see Chapter 2 for more details).

There are three sociolinguistic factors in determining the level of politeness between a speaker and an addressee: (a) the relative power of the addressee over speaker; (b) the social distance between the speaker and addressee; and (c) the type of pressure or onus involved in doing the face-threatening act (FTA)[3]. These are crucial for the understanding of modality usage, since based on these factors, the speaker chooses a strategy for the FTA. This strategy may be more or less polite , depending on the speaker's intentions to save or threaten the addressee's face. Thus, hedging and how they are expressed are central to our discussion, as communicative competent NSs use polite structures to achieve what they want without making the addressee lose face. How NSs and NNSs differ in being polite and in the understanding of the illocutionary force of root modal linguistic devices is the focus on this chapter. This discussion intends to touch the IL characteristics that make NNSs sound inappropriate: "… non-native learners often know parts of social routines, but fail in the overall delivery of them which may result in an undesirable impact on the addressee" (Goldschmidt 1996: 255).

Recall from Chapter 2 that in this present study, all the situations tested yield the use of FTAs. These FTAs are requests, orders, suggestions, remindings, and threats, which are root meanings. The analysis compares and contrasts the redressive and non-redressive characteristics of the linguistic devices (MVs, PMVs, modal expressions

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[3] According to Brown and Levinson, face-threatening acts:

> … are redressed with apologies for interfering or transgressing, with linguistic and non-linguistic deference, with hedges on the illocutionary force of the act, with impersonalizing mechanisms (such as passives) that distance S [the speaker] and H [hearer] from the act, and with other softening mechanisms that give the addressee an 'out', a face-saving line of escape, permitting him to feel that his response is not coerced. (1987: 70)

(MEs), embedded sentences, imperatives and want-constructions) used by NSs and NNSs in these FTAs. The illocutionary force, based on the imposition of the act, social distance between interlocutors and relative power of the speaker over the addressee, affect the choices speakers make. The choices that NSs and NNSs make are different, and NNSs' usage reflect their modal IL system and their acquisition processes.

Recent research on speech acts has shown the importance of social distance in determining how interactions take place (Wolfson 1988, Boxer 1991, 1993). Contrary to Wolfson's Bulge Theory[4] (1988), Boxer's (1991) study shows that for indirect complaints

responses, politeness rules are more followed among friends, acquaintances and strangers while intimates are free to show what they really feel. Interactions among strangers and friends are similar since while "… friends and acquaintances may be attempting to make themselves more likable to each other, strangers may merely be demonstrating politeness" (Boxer 1991: 191). Thus, if NNSs do not know these rules, they may act impolitely or condescendly without wanting to. NSs take into consideration all these factors and make their choices based on the meaning that each construction is able to convey. The root construction meanings, discussed in the previous section, are conventionalized by the speakers of the language and SLLs should learn them to become more competent.

All groups used fewer MEs, imperative, want-constructions and embedded sentences than *modal verbs* (MVs) and *periphrastic modal verbs* (PMVs) in both the role-plays and debates. In the debates the use of MEs, imperatives, want and embedded constructions ranged from about to 10 to 15 % of their total root linguistic devices in all groups except the advanced group, which did not use these forms at all[5]. In the role-plays, however, these occurrences increased, and the range was about 20 - 30% in all groups. Although quantitatively their usage is not large, there is an evident need for their functions to be investigated, since they show the acquisition pattern of the groups studied.

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[4] Wolfson's Bulge Theory (1988) states that since both intimates and strangers are certain of their relationships, there is not as much negotiation in face-to-face interaction among intimates and strangers as there are among friends.

[5] The numbers of MEs, imperatives, want and embedded constructions were low in the debates since the participants expressed their opinions and solutions to the topic being debated. There was no need for either hedges with MEs and embedded sentences or commands with imperatives or want-constructions.

In order to show that politeness is affected by how NS and NNS speakers deal with the focus of the sentences (impersonal, personal, command), and their face-saving or face-threatening (Brown and Levinson 1987) characteristics, this chapter is divided in the following manner: MEs, imperatives and want-constructions.

Modal Expressions (MEs)

Recall that the NS sentences with (MEs) have the function of taking the primary focus away from the modal relation. These sentences may carry adverbs, adjective or nouns that have similar meanings to MVs and PMVs. For instance, the adjective *necessary* in a sentence, such as 'It's *necessary* to get there on time', can be an alternative construction to 'I *need to* get there on time'[6]. The way NNSs use them differ from the way NSs do. The strategies the groups use are fully discussed in this section.

The role play results show that for all NNS groups about 3% to 7% of their root production was MEs, while the NS MEs correspond to 8.5%. The following list contains examples of the types of MEs produced by the groups.

Beginning:

1. *Maybe* one one one week you clean the apartment; and *maybe* ?? another week I clean the apartment.
2. **Maybe maybe* you go to go to the campus and buy for me the ticket.[7]
3. It's *impossible*?

Intermediate:

4. Because this this is *necessary* to the packet.
5. (…) it's *possible*?
6. **Maybe* you *can* walk or run or (…) walk.

Advanced:

7. I think a schedule *is better* or otherwise we can forget easily.
8. *This just happens too often, so *perhaps* we look away to solve this problem.
9. Is it *possible* for you?

NS:

10. *Perhaps* you *should* try a chewing gum or something like that.

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[6] The modal forces carried by these distinct modal devices, however, are different.

[7] Sentences or forms that have an asterisk (*) next to them are ungrammatical.

11. *Why don't* we give it to the bus driver?
12. I'd really appreciate you keep up on it a little more and *make sure* that you put money in there before you write a check and have it bounced.

NSs

As mentioned before, the MEs NSs used can be classified as follows: (a) starting with a question word, (b) with an adverb, (c) with an impersonal construction, and (d) with an embedded sentence.

Table 4-1. NSs' ME types in role-plays

ME types	Role-plays
a	3, 5, 7, 8, 9, 12, 20
b	9, 8, 14, 15, 16, 17
c	6
d	1,2,3,4,5,13,14, 17, 19, 20

Type (a) MEs with a question word, were used to express a suggestion mainly in situations where both the speaker and addressee know each other (except role-play 9). The degree of intimacy may vary: they are acquaintances, friends or intimates. In addition, the situations do not involve one interlocutor having power over the other (except role-play 20). Excerpt 1 below shows that the suggestions being given are to help find a solution to the problem in a way that the imposition does not sound too strong. That is the reason why this type of ME works well in conversations where the speaker does not want to threaten the addressee's negative face. Moreover, if the addressee rejects the suggestion, the speaker will not lose face.

1. (It is B's father's birthday and A (the spouse) wants to miss the surprise birthday party to go say good-bye to a friend who is moving)

…
B: What if you just get some dinner over there and bring it here and eat it?
A: I just want to say good-bye to Mike.
B: Oh man. How about if you use the phone? You can use that.
A: I may never see him again. I wanna hug him and say bye.
…

Type (b) MEs with adverbs were also used to express a suggestion mainly in situations where both the speaker and addressee are not socially distant (except 9 - which occurred between strangers). There was a great concentration of these structures in situations 14, 15 and 16 which involve the expression of a new

rule + urgency. In all cases the interlocutors were friends or intimates (little or no social distance), and in terms of power, only in 16 has the speaker authority over the addressee. Since the imposition is strong (there is an urgency and things have to change) the use this type of ME makes the tone of the conversation less tense and more cooperative (see excerpt 2 below)

> 2. (A has been to the doctor and found out she has to change her life style otherwise she might have a heart attack. B, a friend, knows A's bad habits and is giving some advice)
> …
> 1 B: At night, after dinner, they really lit the tennis courts. You can play at 2 night. I'd be glad to go with you. It doesn't have to be like a boring
> 3 thing like you feel you have to do. It can be a social thing. I really like
> 4 to play tennis. It's a good thing to do. **Maybe** we can go for bike rides or …
> 5 A: I don't like like rides.
> 6 B: What about swimming?
> …

The adverb *maybe* in excerpt 2 works as a hedging device for the FTA suggestion. The adverbs *maybe* and *perhaps*[8] are among the ones classified as epistemic adverbs (Givón 1993 1995) (see Chapter 1 for a brief presentation of epistemic modality). These adverbs are also called irrealis-inducing adverbs and "create an irrealis scope over the proposition in which they are lodged, in this way overriding realis tense-aspects such as past, present-progressive or perfect: **Maybe** she left." (Givón 1995:117). Nevertheless, when these adverbs are in a speech act that includes a root MV, their epistemic meaning does not override the root meaning of the MV, since both epistemic and root meanings are part of the irrealis scope. In this way, the epistemic uncertainty of these adverbs functions as a hedge for a suggestion or expression of a necessity. What seems to happen is that the external epistemic device does not reach the complement of the root MV. Youmans (1995), in a study of epistemic modal use in an East Los Angeles barrio, recognizes the function of *maybe* to express negative politeness (Brown and Levinson 1987). Her data show that this function is mainly used by the Anglo-Americans and not by her Chicano participants. The data from this present study, on the other hand, show that the use of *maybe* as a negative politeness device is part of the NSs' hedging inventory as well as NNSs' (discussed in the following section).

As mentioned above, there was only one role-play in which the speaker had power over the addressee and used an ME with adverb. The parent wanted to set new rules since the daughter/son needed

to get an A to graduate. This usage came towards the end of a conversation (excerpt 3 below) after a few want-constructions which work as command linguistic devices. Since the teenager sounded very willing to work and graduate, the parent softened and used an ME with an adverb:

> 3. (Teenager, B, needs an A to graduate but is willing to work hard. Mother, A, gives suggestions on how to get this A and is very supportive)
>
> …
> 1 A: Wow. It's tough. Well, we can sit down and review the material.
> 2 And make up some stories that will help you remember, instead of just
> 3 boring straight date, facts. I want you to do well. I want you to
> 4 graduate.
> 5 B: I'd like to graduate too.
> 6 A: I ?? we can go to the beach with friends this summer before ? you go 7 to college. **Maybe we can sit down one night and**
> 8 B: More than a night.
> 9 A: More than a night. Definitely more than a night.
> …

Type (c) ME, which has an impersonal construction, was very rare in NSs' speech both in the role-plays and debates. There was just one occurrence in all role-plays and one in the debates. The role-play in example 4 below has an ME with the adjective *necessary* on line 12. The parent does not want to allow her daughter to spend the night out because of the concert and wants to discourage the traveling (lines 13 and 15.)

> 4. (A, the daughter, wants to go to a concert and come back the following day. B, the parent, is strict and the house rules say that she can not come home after midnight)
>
> 1 A: Dad. This concert that I wanna go see in Orlando and
> 2 B: In Orlando?
> 3 A: Yeah. Orlando. Can I go? I was wondering if I could go. It's not
> 4 on school night. It's on weekend. The only problem is like I don't think
> 5 I can get down there and come back in one day. So, I'll probably stay
> 6 overnight.
> 7 B: Are you crazy?
> 8 A: No. That's why I'm asking you.
> 9 B: Orlando?
> 10 A: Yeah.
> 11 B: What's wrong with having fun right here in this town?
> 12 A: Because the concert is not here in this town.
> 13 B: Well, I don't see why **it's necessary** to go all the way down to
> 14 Orlando.

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8 *Maybe* and *perhaps* have been quantified together in this study. *Perhaps* was used by the advanced and NS groups, but much less often than *maybe*.

15 A: They never come to Gainesville. They never come here. They'd go 16 to Orlando, big stadiums, whatever.
…
17 B: But I'm not too keen on that idea of you going out of town
18 A: Why?
19 B: to go to a concert and stay overnight.
20 A: Why?
21 B: There's lots to do in Gainesville and no need to drive all the way to
22 Orlando.

The ME in line 13 above is used to emphasize the action or event of going to the concert rather than the addressee herself. The adjective *necessary* calls for an infinitive after it, not a pronoun. By doing this, the speaker leads the addressee to have the impression that 'going' is not necessary and not that the parent disapproves of 'her going'. This can be seen as a strategy to save the addressee's face. This attitude is confirmed by the same impersonal focus that B gives in lines 21/22. The use of there-construction allows the speaker not to use any pronoun *I* or *you* that would, otherwise, focus on who is not giving the permission or who is being prohibited.

Tsui (1994) discusses several strategies to minimize the threat in requestives, concentrating on who is the focus of the sentence. Although the ME in line 13 above is not a requestive but an expression of non-necessity, Tsui's view seems relevant here. Requestives that focus on the speaker's action rather than on the addressee's action sound less imposing and are more polite. If there is a shift from *you* to *I* (e.g., "Can I leave a message for him then in case I miss him at the other") (Tsui 1994: 105), the sentence is more polite than 'Could you take a message?'. It means that the benefit to the speaker is highlighted rather than the cost to the addressee (Leech 1983). Having in mind this idea of cost and benefit, the shift from the addressee's action to simply the action itself in the example 4 above stresses neither the speaker nor the addressee. An ME with an impersonal construction is even less imposing than any sentence that focuses on the speaker's action rather than on the addressee's action. Thus, an impersonal construction, type (c) ME (with an impersonal construction) can be seen as a more polite structure than those that contain a pronoun (e.g., I, you or we) - ME types (a) and (b).

<u>NNSs</u>

The NNSs' MEs can be structurally classified just like the NSs':

a) starting with a question word (e.g., *Why* don't you cancel your meeting?)

b) with an adverb (e.g., *Maybe* you have to go on a diet.)

c) with an impersonal construction (e.g., Is it *possible* for you? Do you have time?)

d) with embedded sentences (e.g., *I think you should* keep good practice)

The beginners produced only types (b) and (c) MEs, while the other groups produced (a), (b), (c) and (d). There were many instances of ungrammatical MEs, especially by the beginning group (e.g., **Maybe maybe* you go to go to the campus and buy for me the ticket). Yet, these structural errors learners make do not cause nearly as many problems as the pragmatic ones. Recall (Chapter 3) that people tend to excuse structural errors easily but take at face value pragmatic ones (Thomas 1983, Wolfson 1989). Therefore, the analysis concentrates on detecting the participants' mental grammars, discussing the cases in which the NNSs' structures carry the wrong illocutionary force.

Similar to NSs, type (a) MEs with a question word were used by the intermediate and advanced groups to express a suggestion. The difference between the NSs and NNSs is that the former group used type (a) MEs in situations where both the speaker and addressee knew each other (intimates or friends) while the NNSs used them less broadly, only among intimates (excerpt 5).

5. (B just returned from the doctor who said he has to change his life style otherwise he runs the risk of having a heart attack. A, B's spouse, is giving some advice)

…
1 A: So, what are you doing from now on? For your health.
2 B: Uh, I might try, you know, I'm saying cut down smoke a little less. I'll 3 see what happens, though. But I'll try what he says. I mean, he's a
4 doctor, so I'll try.
5 A: You had better better to try quit quit smoking. And I think you more
6 exercise. **How about** jogging or about any other exercise?
7 B: I think I might take some kinda sport. Jogging is kinda boring.
8 Tennis or something.
…

As for the NSs, in the situations in which type (a) ME is used there is no power relation between the interlocutors. Moreover, there is no threat to the addressee's negative face.

Type (b) MEs were used by the NNSs in two different contexts: (a) in role-plays which the power relation between the interlocutors involved authority from the part of the

speaker (e.g., role-play 13); (b) where there was no power relation between the interlocutors (no authority on the part of either interlocutor) (e.g., role-play #12). It follows a description of the appropriateness or inappropriateness of their usage (as compared to the NSs').

Table 4-2. NNSs' type (b) MEs in role-plays

Type (b)	Role-plays
Beginning	12, 17
Intermediate	13, 14
Advanced	8, 11 ,13 , 14, 16

Some beginning group type (b) MEs carry not only a structural problem, for instance no MV, but are also inappropriate as request sentences. The following sequence occurs in the very beginning of a role-play 17 (Appendix B) between two friends:

> 6. (A, a NNS, runs into a friend, B a NS, and tries to persuade him to stand in line and get tickets for both of them for a great concert. A has to be in class all morning, so he will not be able to go get the tickets.)
>
> 1 A: I I I I like go to the concert ???. I need tickets. **Maybe maybe you**
> 2 **go to go to the campus and buy for me the ticket**.
> 3 B: Sure. What time ?? I get the tickets?
> 4 A: I need two tickets.

The NNS (A) expresses his needs very directly (*I need tickets*, line 1) and when he wants to be polite, he softens the request with a proposition external adverb *maybe*[9]. The construction adverb + pronoun + verb + complement is used by the beginner students with the illocutionary force of a polite request. Yet, a similar type of construction was used by all the other groups as an apparent suggestion. It usually carries a root modal verb, such as *should* besides the adverb: *Maybe we should move in together*.

The use of type (b) ME as request only occurred in the beginning group. The imposition in role-play 17 is strong, since the speaker would like the addressee to stand in line to get tickets to a concert. Therefore, the beginning student seems to know that some type of

[9] Altman (1982) noticed that NNSs prefer to use the adverb *maybe* rather than a proposition internal epistemic modal verb, such as *might*.

hedging is necessary but does not know how to soften this request. The NSs used some types (a) and (b) MEs and embedded sentences in the same context as excerpt 6 (see excerpt 7 below with type (b) MEs).

> 7. (A runs into B and ask her to go get tickets to a concert. A cannot go because she has class)
>
> 1 A: There is a Phish show in a few months and I have a class right now
> 2 but they are really great. You really wanna see them. And if you **could**
> 3 **possibly** get a ticket for me and you then I'll get you back one day.
> 4 I swear. I'll pass you back with something. **Maybe** we can all buy a
> 5 ticket to something like that 'cause I really wanna go. They're the best ever
> and we'll have the have the best time.

The NSs used embedded sentences, especially for requests (their function is further discussed later in this chapter). Therefore, the hedgings that the beginning learners use are not the same the NSs use. This can definitely make a conversational exchange unsuccessful since the interlocutor can interpret the sentence as a suggestion and not as a request.

The use the intermediate group made of type (b) ME is the same as the NSs. These MEs are appropriate as suggestions given to a friend. However, the intermediate group also used this type of ME when the speaker has power over the addressee (role-play 13) and the interlocutors are acquaintances. Furthermore, the imposition the speaker reports favors the addressee, making the hedging unnecessary. The excerpt below shows an example of this inappropriateness:

> 8. (A doctor, A, is giving B, the patient, some advice. If B does not change her life style, she might have a heart attack)
>
> …
> 1 A: You you can, but try to try drink little coffee. **Maybe** you drink every
> 2 day, a cup of coffee. **Maybe you can** change for a cup for two days.
> 3 B: OK. Thank you for your advice.

The adverb in line 1 above is inappropriate. The speaker does not want to give a suggestion but, according to the context, she most likely wants to show a conditional idea. The second ME in line 2 is a suggestion; yet, coming from the doctor it has the wrong illocutionary force. The doctor has the power to tell the patient what to do without hedging too much. The NSs used very few hedges in this role-play, since the situation was really critical. In order to express that these changes had to be done with urgency, the NSs chose to use mainly MVs (*should*) and PMVs (*need* and *have to*).

9. (A doctor, A, is giving B, the patient, some advice. If B does not change her life style, he might have a heart attack)

…
1 A: … We have something serious to discuss here. I got the results of
2 your test today and you **need to** do a lot of changes in your life or you're heading for serious trouble.
3 B: What kinda trouble?
4 A: Well, you're looking at having a heart attack. If you don't change
5 your diet, start exercising and
6 B: Heart attack! Oh, change my diet. You mean I have to eat vegetables
7 and stuff?
8 A: You **have to** start to eat properly here. You're looking at having a lot
9 of health trouble down the road. You *need to* start exercising, go out to
10 jog or walk , do something active.
…

The advanced group used type (b) MEs for suggestions or advice. They did so in situations where the interlocutors were acquaintances, friends or intimates and neither the speaker nor the addressee has more power over each other. Yet, like the intermediate group, they also used these MEs in situations where the speaker had power over the addressee. In other words, the speaker had authority over the addressee (see excerpt 10). The intermediate and advanced group diverged from native-like usage, since they used type (b) MEs when the speaker was an acquaintance who is in a position of power in relation to the addressee (doctor to patient relationship). In these situations the mitigator *maybe* is not necessary.

10. (A, a NNS, is playing the role of a mother whose daughter, B - a NS - is having grade problems. The daughter needs to get an A to graduate)

1 A: Can you just tell me about your GPA for this semester?
2 B: Mom, it's like really good except for my history class. I'm not doing
3 well in that class, but it's the Civil War. I can't get the Civil War down.
4 A: Yeah.
5 A: Yeah. I was just talking to your teacher and he just said that you
6 don't work enough. **Maybe you have to make some effort**. You really
7 need an A to be graduated. Do you know?
…

Excerpt 10 above is the beginning of a critical conversation between a parent and her child. The teenager is on the verge of not graduating if she does not get an A in history. Thus, it seems that the mother is being too soft when she says: *Maybe you have to make some effort*. The adverb made the sentence tentative when the situation, in fact, called for a stronger statement. On the other hand, the NS group, in this same role-play, stressed the obligation of the teenager to get an A to graduate. This was done by using MVs and PMVs (*have to, need to*, and *must*[10]). The usage of one of these MVs gives the interlocutor a clear idea that the speaker definitely expects her to pass (excerpt 11).

11. (A, the mother, is talking to her daughter about the fact that she has to get an A to graduate from high school)

1 A: Susie, I just had a I just got through talking to our teacher and I just
2 want to let you know the it's really serious. And you **must must** get an 3 A
on your final history exam. If you don't, you're not gonna be
4 graduating from high school.
5 B: Did you talk to her so see if she does not have one of my test grades?
….
6 A: And this is what she told me. You **have to** get and A to graduate.
…
7 A: … but you girls don't study. You're talking, doing all kinds of stuff. 8
You're talking about boys. You really **need to** study. You know you
9 can do it.
…

---

[10] This was actually the only role-play in which NSs used the root modal *must*. See Chapter 3 for a discussion on root modal verbs and periphrastic modals usage.

Since the situation (# 11 above) was critical and the speaker had power over the addressee, the speaker used no hedges. She even used a strong MV *must* to emphasize how serious the situations was.

In summary, beginners tended to use epistemic adverbs (type (b) ME) to make polite requests and to give a few suggestions. Intermediate and advanced level participants also used epistemic adverbs inappropriately, yet in another way. They used the adverb, a mitigator, to soften statements in situations which call for straightforward sentences. They did so in cases where the speaker had authority over the addressee. The situation was such that there was need for new rules to be set with urgency (new rule + urgency context). NSs also used epistemic adverbs in suggestion sentences; however, they did so when the actions to be taken had been laid out and the interlocutor was willing to cooperate. Type (b) MEs work well for the NSs when the interlocutors have no power over each other. Moreover, NSs also used this ME when the speaker had authority over the addressee but there was an attitude of cooperation coming from the speaker (excerpt 3 above). Type (b) MEs have the function of reducing the FTA. Since they carry the pronoun you (most of the time), they do not reduce all the threat but save the speaker's face, since the sentence sounds like a suggestion.

Type (c) MEs - impersonal constructions - were produced by all the groups, especially the intermediate. For the NNSs these constructions were used to perform many different speech acts: request, refusal, suggestion, and to express necessity. The NSs, however, only used them to express necessity. Once again, the grammar that NSs and NNSs have for type (c) MEs diverge.

As in type (b) MEs, the structural problems are much fewer than the pragmatic ones. Yet, they occurred in the intermediate group role-plays (see example 12 line 8). What calls one's attention in the example below is that the necessity meaning is once expressed by an MV (line 4) and twice by an ME (lines 5 and 10):

12. (A, a NNS, brought a package to Federal Express the day before and wants to get it back. A is friends with B, a NS)

1 A: Hey, Bill. What's up?
2 B: How are you doing, man?
3 A: Remember that yesterday I bring here a package? But I have a
4 problem. These thing **must** go in the package and I don't put it. Would
5 you look for the box to put this? Because this this is **necessary** to the
6 packet.
7 B: Well, I can't get off of my desk and go back there and find your

8 package for you. There's so many packages back there that I'll never be 9 able to find it. What I could do is let you mail that with the package.
10 A: But I i **it's necessary that go today**. I mean, at the same time the
11 other package. **Could you (…) it's possible**?
12 B: Oh, what I could do is I'll just send that in the mail by itself today. 13 Like overnight or something like that.
14 A: OK, I understand that. You can't find the package because there's 15 a lot. I'm going to send this. OK.

The urgency of the matter is first stated with an MV (*must* line 4), and, then with the adjective *necessary* twice. In line 5, this adjective works an a synonym of *must*. In line 10, with the development of the conversation, it adds an emphatic tone to the situation. However, it is less imposing to the addressee, since the person that wants to do the action is not mentioned. In other words, the world in which the problem might be taken care of is highlighted rather than the doer of the action to solve the problem.

The NNS, A (excerpt 12), clearly wants to be polite although B is his friend. B knows that the request is one that threatens A's face (Brown and Levinson 1987), so B uses *would* (line 4) to make the first polite request. After that, B tries to start the same request with *Could you* (line 11), but he decides to be less imposing and instead uses an ME, *it's possible?* (11). When the speaker uses this type (c) ME, he changes the focus of the sentence from *you*, the listener, to *it*, the action. This is a strategy to minimize the addressee's threat, as previously discussed. It is a mechanism "that gives the addressee a face-saving way out" (Tsui 1994: 103).

The following example (13) shows how type (c) MEs are inappropriately used by intermediate level participants. The speaker A (a student) has no power over the addressee B (a teacher).

13. (A, a NNS, wants to apply for a job and needs a letter of recommendation from B, a NS)
1 A: Hi.
2 B: Hi.
3 A: Hi, teacher. I need that you help me because I need a job I need a job 4 and I need a letter for recommendation.
5 B: When do you need it by?
6 A: Ah ah as soon as possible because I I begin my job in 5 days.
7 B: I'm very busy but I can get it for you by the end of the week.
8 A: In the end of the week? **No, it's impossible for me because I I I**
9 **need to get my application on Friday.**
10 B: I can try and do it for you and have it by Thursday.
11 A: Thursday. Is it possible for you Wednesday? Because Thursday, I 12 have to travel.
13 B: OK. I'll try my best to get it for Wednesday.
14 A: Can I call you?
15 B: Yes, call me. .
16 A: When?

17 B: Wednesday morning.
18 A: OK. Thank you.

The NNS (A) says that it is not possible for him to wait (line 8) for the letter, although from a power relation point of view, he is not in the position to say that. After all, the one who has been asked the favor is the teacher. The usage of a root possibility ME does not have the softening characteristic in this situation, since it works as a refusal to the addressee person who has authority over the speaker. Although the speaker does not focus on the addressee/teacher but on himself (*for me*), he still puts pressure on the addressee, insisting on a earlier date to pick up the recommendation letter. The speaker could have softened his turn if it had not been a refusal, and if it were a **low manipulative strength** construction (Givón 1993). In Givón's (1993) discussion of manipulative speech acts, he states that when the hearer has more power than the speaker, the hearer has less obligation to agree to take the action the speaker wants, and the speaker is expected to be respectful. Thus, it would be appropriate for the speaker in example 13 to use a construction that would recognize the power relations. NSs do that by using embedded sentences, such as *I was wondering if you'd write me letter of recommendation*. Those are discussed later.

Inappropriateness of type (c) ME usage also occurred in the advanced level participant role-plays. The excerpt below (14) is from a role-play in which a teenager asks her father to go to a concert and stay overnight. This example shows that the possibility ME (line 1) is used when a statement of a pre-existing rule should have been more suitable.

14. (A, a Ns, asks B, her father - a NNS, if she can go away for the weekend to go to a concert.)

…
1 B: **Is it possible for you to come home before twelve**?
2 A: on Saturday night?
3 B: Yeah.
4 A: I don't know because the concert starts at 10 Saturday night. And I
5 think it'll go till 1 am or 2 am.
6 B: 1or 2?
7 A: Yeah. And we're afraid
8 B: No, **it's impossible.**
9 A: No?
10 B: No.

The role-play instructions the participants received stated that the parent was very strict and that one of the house rules was to be home by midnight. Therefore, the father's role was to **remind** the teenager what the rules are and not to ask about the possibility of her coming back home by twelve. The context called for a directive rather than a suggestion. The advanced participant used the wrong illocutionary force, giving the interlocutor the idea that the time to come home was negotiable. At the end of the conversation, the father (B) did not allow his daughter (A) to go out, without explaining why but by simply using another ME (line 8). It seems that in both instances (lines 1 and 8), the MEs were used with connection to a rule both participants were supposed to be aware of. The negative form (line 8) yields the correct illocutionary force since it denies the permission to the teenager. The sentence in line 1, however, carries the illocutionary force of a suggestion.

An illustration of how the NSs interpreted the same situation is in 15:

15. (A, the daughter, asks B, her father, if she can go away for the weekend to go to a concert.)

1 A: This weekend there is a concert, a Phish concert Saturday night. And
2 I really wanna go to it. And it's over I have I have to stay overnight.
3 But the thing is I'm 16 now and I think I should be able to do this.
4 Because I can drive a car and I can do all these other things. And I
5 think I am responsible enough to be able to stay overnight. And you
6 know how bad I wanna see this concert.
7 B: The rules is that **you can't** pass midnight on weekend night. So I
8 know you're 16 and getting old but still, overnight, it's kinda dangerous.
9 **Sorry**. **I can't** let you go.

The use of an MV (line 7) rather than an ME with impersonal construction shows the speaker's assertiveness. B sees no need to use hedges due to the relationship she has with the addressee. B knows she has authority over A and is not reluctant to state the known rule. B uses the pronoun *you* to state the prohibition (line 7), since B is in a position in which she can threaten A's face without losing face herself. The only attenuation or mitigation B uses is *sorry* (line 9). The use of this apology word is more a ritual than really an apology. Although B knows she has hurt A's feeling, her power and intimate relationship (social distance) with A allow her to be

direct and state the rule. The use of *sorry* saves A's face for a brief moment, but both interlocutors know its ritualistic force. The mitigator *sorry*; however, is directly followed by *I can't* (line 9). The speaker needs to emphasize the hierarchical structure that exists in their relationship (the parent has set the rules) and the pronoun *I* helps to make this clear. Example 15, which has a directive, contrasts with example 14, which has a suggestion ME. Thus, the illocutionary force that the last context (examples 15 and 14) requested, is better expressed by an MV rather than a type (c) ME. The context involved the statement of a pre-existing rule by a speaker who has authority over the addressee rather than the expression of a suggestion (example 14) by the speaker. The use of an ME is more suitable for the context in which a request is made (as discussed in the example 12 above); yet, it may not be very native-like.

In the same role-play where a teenager asks her parent to let her go to a concert, only one NNS (excerpt 16) used the same MV as the NSs (example 15). The advanced student used *can't* (line 6 below) to show his assertiveness.

16. (A, the daughter, asks B, her father, if she can go away for the weekend to go to a concert.)

1 A: Dad, I have a favor to ask you.
2 B: Yeah.
3 A: OK. On Saturday there's this awesome concert I really wanna go
4 with my friends. Can I please, please go? We're just staying over one
5 night. Just this once. I promise.
6 B: No, you know that you **can't** go out after 12 o'clock.
…

Summarizing, an ME with an impersonal construction is less imposing than any sentence that focuses on the speaker's action rather than on the addressee's action. Yet, an impersonal construction, type (c) ME, can be seen as a more polite structure than the ones that contain a pronoun (e.g., I, you or we) - types (a) or (b). NSs rarely used type (c) MEs, while the intermediate level participants used them very

often. The linguistic devices that the NSs more commonly used to hedge was type (b) and (d) MEs. Since type (d) MEs are commonly used by NSs, they are compared in the next subsection to the other MEs.

Embedded sentences

Embedded sentences[11] were mainly used to make suggestions and requests, having the function of softening the face-threatening aspect of a speech act. The embedded sentences present in the data can be divided into the following categories, based on their structural characteristics :

1. without a modal verb or modal adjective/adverb/noun (e.g., **I think is good if you start …*)

2. with a modal verb or periphrastic modal verb (e.g., *I think you have to call her* / *I think you should keep good practice* / *Is there someone you can call*?)

3. with both a modal verb or periphrastic modal verb and a modal adjective/adverb/noun (e.g., *Is there any way that you could possibly …* ?)

It has been shown that NSs and NNSs make different linguistic choices among the existing root modal devices. This difference is also noticed when these speakers want to make requests. Therefore, requests are the main concern in this section.

Both NSs and NNSs produced embedded sentences starting with the epistemic verb *think*[12]. There was actually only one situation in which a NNS produced an embedded sentence without starting with this verb (see example 18).

Many of the NSs' role-plays that involved requests started with an embedded sentence, such as 'I was wondering if you could …', 'I was hoping you could…' and others (excerpt 17).

17. (A is at the FedEx office to retrieve a box to put something in. B works there and the police is that she cannot retrieve boxes since there are too many)

1 A: I just Fedexed an important shipment to England this morning and I
2 went back to my office and just realized that I forgot a couple items to
3 include in it. **I was wondering if you could put them** .. I brought them
4 with me. **I was wondering if you could put them in the box**, so I
5 wouldn't have to mail them out again separately. If I did that they'd be

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[11] This analysis concentrates only on embedded sentences that have a modal linguistic device or at least that should have one. Since this study is concerned with root modality, only the sentences that carry this modality were taken into consideration.

[12] In a study on the acquisition of complementation of English as a first language, Bloom et al. (1989) state that the verb *think* as well as *know*, *see* and *look* are the most frequently acquired verbs between two and three years of age.

6 there a day late and …

Although these constructions call for the addressee's action for the benefit of the speaker (Tsui 1994), they are considered very polite. This is so, because the first clause of such embedded sentences focuses on the speaker's mental space. Therefore, it is the speaker who is highlighted. This temporary emphasis on the speaker takes the focus away from the addressee, whose action is requested in the second clause of such embedded sentences.

While embedded sentences were common among the NSs to make requests, the beginning and intermediate NNS groups did not make requests using any of the same embedded constructions as the NSs[13]. Both the intermediate and advanced groups produce other types of MEs or MVs/PMVs instead of the MEs with embedded sentences mentioned above (see examples 12 above and 18 below). Therefore, in order to take the focus away from the addressee, NSs may use all types of MEs, while NNSs use mainly type (c) MEs with impersonal constructions. The difference is that these NNSs' MEs were never used as the first request sentence, while some of the NSs' embedded sentences were (example 17 above).

The intermediate group preferred to simply use MVs/PMVs as their first request. The example below (18) shows a NNS starting a question with a modal verb (line 6). After that, he changed his mind and used a modal expression which probably seemed more polite and appropriate for the circumstance (line 7).

18. (A, a NNS, sent a package the day before but forgot to include something crucial in it. The following day, he wants the Federal Express employee - B - to get the package back so that what is missing is included)

1 A: Hi. I have a little problem.
2 B: OK.
3 A: Let me explain it to you. Yesterday morning in the morning, I ?? a
4 small package because I need to send ah ?? to my brother in England.
5 And believe me, I forget to send a letter in the box. The box is small and
6 it's like blue the cover and the direction is in Liverpool, England. **Can** I 7 ah include, if you ?? if **it's possible** include this letter in the box?
…

It is clear here that the intermediate students already have some notions of the type of situations that call for polite structures, but the forms they use are not target-like. The ME used (line 7) is an attempt

[13] The advanced group produced embedded sentences to carry out a request. An example is discussed later.

to soften the face-threatening (Brown and Levinson 1987) nature of the favor-asking speech act. In other words, the NNSs seem to have an idea that negative politeness (Brown and Levinson 1987) is a good strategy for the face-threatening act since the act involves some imposition. This imposition occurs as the customer asks for a favor that is not usually done at that particular store. One of Goldschmidt's (1996) features that defines favor-asking is that it "entails doing activities that require some time and/or effort on the part of the addressee …" (p. 242). In order to make this favor-asking less face-threatening the speaker takes a redressive action (Goldschmidt 1996). The NNSs do this redressive action with impersonal constructions, while the NSs do it with embedded sentences. Although an impersonal construction is able to do the job of taking the focus away from the doer of the action, the data show that the control group does not use it for polite favor-asking. It seems that NSs have not conventionalized the use of impersonal constructions for polite favor-asking. The control group in this study finds embedded sentences such as *Is there any way you could possibly get the box?* more suitable for favor-asking.

The advanced group usage of the other MEs was similar to the intermediate group. Besides the MEs already mentioned, they attempted to use MEs with embedded questions as request:

> 19. (A couple works in the same company and on of them is n charge of the paychecks. The computer crashed and erased all the payroll files. A, a NNS, has to ask his wife, a NS, to help him out since he also has a business dinner at that night)
>
> 1 A: Hey, Melissa. You know, ah the computer crashed down and all the
> 2 paychecks oh I have to make the paychecks. And I have to make all of
> 3 them for tomorrow till 6 o'clock. And I have a meeting tonight with an 4 out of town client. So, **I wonder if you can work today and make all** 5 **the checks for tomorrow**.
> 6 B: With the computer? The computer crashed down.
> …
> 7 A: So, you could make the checks?
> 8 B: Yes, I can
> …

Speaker A (excerpt 19) seems not to have yet mastered the use of *wonder* in polite requests. In all the instances in which NSs used *wonder* in a request it was in the past progressive followed by an if-clause with the modal verb *could* (e.g., *I was wondering if you could …*[14]) Although the use of the past progressive could be substituted by the simple present (*I wonder if you could …*), the modal verb *can* is not

an option in polite request constructions. The NNS sentence above (lines 4 and 5), with the present tense and an if-clause with *can*, sounds more like a statement of doubt than a request. Thus, once again the illocutionary force of the act is not quite target-like.

The use of types (a), (b), (c), and (d) MEs have the goal of saving the addressee's face. Some NNSs know that but still use them with the wrong illocutionary force. Their problems vary from using an ME for an inappropriate speech act (request rather than suggestion) to not knowing the force that a linguistic device carries. For instance, if the speaker has authority over the addressee, hedges are not that necessary, especially if the situation has some urgency (a MV or PMV would, then, work). Therefore, the force of redressive actions each linguistic device carries is not well known by NNSs. Type (d) MEs, such as *Is there any way that you could possibly …* ?, and *I was wondering you could …*, are definitely not part of the NNSs' mental grammar, except those that start with *I think* (e.g., *I think you should eat more*). It is interesting to notice that only advanced level participants tried to use embedded sentences like the NSs. However, they failed to use them with the correct illocutionary force.

Balancing between hedgings and directness requires good command of linguistic structures and social implication of those situations, that is to say, not only structurally but

also pragmatically. This same problem arises in the usage of imperatives and want-constructions, which is discussed in the following section.

Imperatives and Want-Construction[15]

Imperatives and want-constructions have been included in this chapter for two reasons. First, imperatives are intrinsically face-threatening acts (Brown Levinson 1987). Second, commands are also under the scope of irrealis (Givón 1995) just like the other constructions discussed (MVs, PMVs, and MEs). In certain circumstances, imperatives are not commands; they can also function as suggestions (Schreiber

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[14] Much less common was the use of *I was hoping if you could …*

[15] The want-construction included here is of the following type: 'I want you to do that'. This type of construction is also an embedded sentence; however, this type is semantically similar to imperatives, expressing commands.

1972). As these forms are used side by side, or instead of, MVS, PMVs, and MEs, their usage is crucial to our understanding of acquisition of modal devices.

Imperatives were more widely used than MEs and *want* constructions by the NNS groups in the role-plays. This was especially true for beginning and intermediate participants (Figure 4-1).

NSs tended to use imperatives and want-constructions in situations where the interlocutors knew each other. They were either friends, acquaintances or intimates[16]. In addition, the interlocutors had no authority over each other or the speaker had some authority over the addressee.

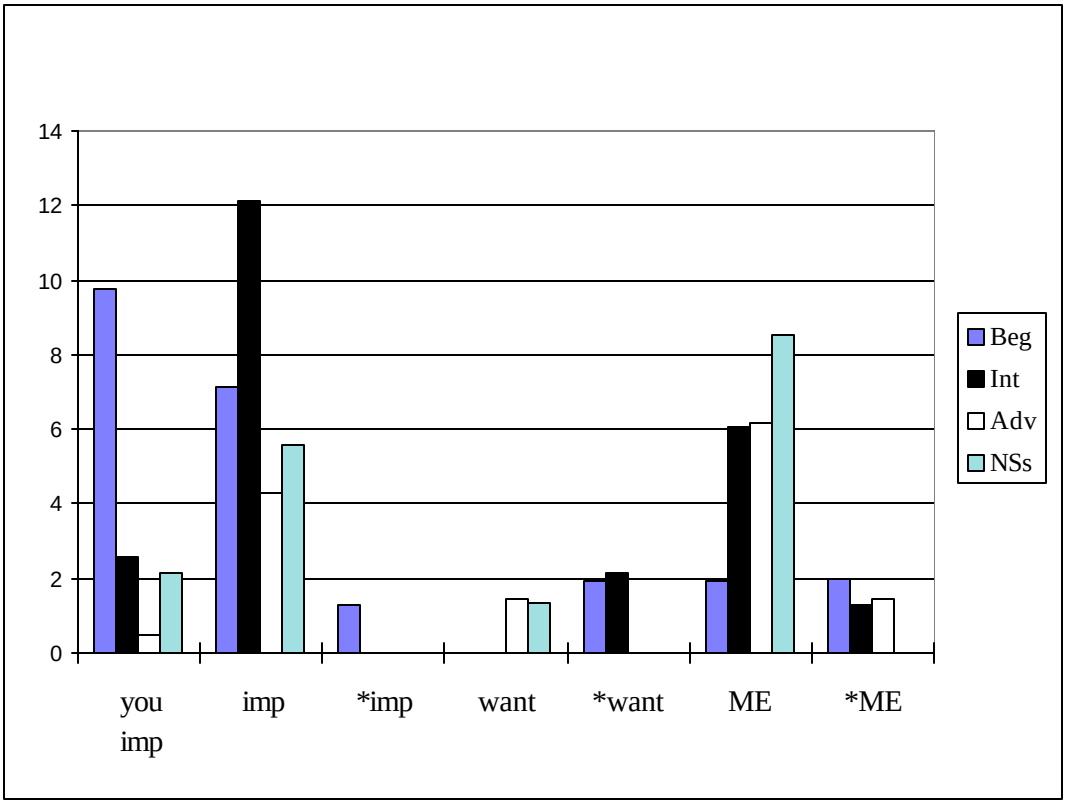

Figure 4-1. Percentage of occurrences of imperatives, want-constructions and MEs in role-plays

The excerpt below (20) shows an appropriate use of the imperative. None of the interlocutors supposedly have power over each other, but the speaker believes herself to have special rights over something (Celce-Murcia and Larsen-Freeman 1983).

[16] There was the use of imperative in a role-play which the interlocutors were strangers. Besides that, a speaker used a want-construction in a situation where the addressee had authority over the speaker. Since these two occurrences do no constitute a pattern, they will not be included in the analysis and generalizations.

20. (A and B are roommates. They way they have been sharing the household chores have not been successful.

1 A: You know, what's with you and the garbage? Why can't you take it
2 out? Don't you see it? It's overflowing (???) (Simultaneous talk)
…
3 A: **Take out** the garbage then.
…

The other types of situations where NSs used imperatives are also described by Celce-Murcia and Larsen-Freeman's (1983): (a) the speaker has power over the addressee, being able to command the addressee; (b) there is no power difference between the speaker and the addressee and they are in collaboration to accomplish a task. These requisites are extended to want-constructions (see an example of (a) in the excerpt below)

21. (A is the boss and wants B to go to FedEx to include something into a box she shipped in the morning)

1 A: I dropped off a FedEx package this morning and I just realized that I
2 forgot to put some important information in them. **I want you** to get
3 down to the FedEx office and and get it shipped off sometime today and
4 have them included in the box somehow because if you mail them later it
5 will be in another shipment.

The *you imperative* has more restricted functions than imperatives and want-constructions. It is appropriate when someone is giving instructions to children or when the speaker is in a large group and wants to make sure the person she is addressing is not confused (Celce-Murcia and Larsen-Freeman 1983)[17]. The NSs used this form in situations where there was no power relation between the speaker and the addressee (excerpt 22) or when the speaker had power over the addressee.

22. (A and B are coworkers. A is asking B to go to the FedEx office to inserted something in a box A took to FedEx that morning)

…
1 B: What do you mean by 'find the original package' here?
2 A: Well, find the original package (???)
3 B: Is that a way of me doing this?
4 A: Yeah, **you go to the office** and ask the people to, you know, look for 5 it. …

The use of *imperatives* and *you-imperatives* by NSs follows the functions mentioned by Celce-Murcia and Larsen-Freeman (1983). The NNSs, however, use these forms more often than the NSs in situations where the speaker and addressee were strangers. The NNSs' usage is distinct from the NSs'

usage in this study. As mentioned before (Boxer 1991, 1993), NSs tend to be more polite to friends and strangers rather than to intimates. How the NNSs violate this pragmatic rule and others is in the following discussion.

Table 4.3 below shows that the beginning group and intermediate groups attempted to use imperative and want-constructions much more often than the advanced and NS participants.

Table 4-3. Total attempts with imperatives and you-imperatives, want-constructions and MEs (including grammatical and grammatical forms)

	Total imperatives	Total want	Total MEs
Beginners	18.1	1.9	3.9
Intermediate	14.7	2.2	7.5
Advanced	4.8	1.4	7.6
NSs	7.7	1.3	8.5

The NNSs' overuse of imperatives reflects their lack of command of English as well as their ignorance of the pragmatic rules of the imperative usage. Therefore, beginning and intermediate participants used the imperative when there was power involved in the relationship between the interlocutors (addressee had authority over the speaker). Besides that, NNSs also used imperatives when the speaker and the addressee were strangers. Neither social distance nor power was involved in their choices.

Example (23) below is an excerpt from a role-play between a NNS and a NS. It shows that at the end the NNS seems to be giving instructions to her own teacher. She almost jeopardizes her chance of getting what she wants through her choice of linguistic devices (want / you-imperative). Nevertheless, her smiling and intonation (Tyler and Pickering 1996) helped her get what she needs[18].

23. (A student (A - a NNS) is graduating and wants to apply for a job. This students go to one of her professors' (B - a NS) office to ask for a letter of recommendation. The deadline for the job application is in 5 days)

1 B: Come in. What can do I ?
2 A: I want this winter I will graduate from UF. I want to look for a job,
3 so I need your help.

---

[17] Other constructions presented by Celce-Murcia and Larsen-Freeman (1983) that would be more polite than imperatives includes *please* or using sentences with modals.

[18] This result may be due to the limitations of role-plays (see Chapter 2 and the beginning of this chapter for the discussion). Further studies that are based on natural setting conversations will certainly enlighten our understanding about the use of certain forms and their effect on the development of NS-NNS conversations.

4 B: I don't have a lot of time. What do you need to do?
5 A: **I want you write explanation for me about my school schedule**
6 **something is good for me**.
7 B: I need some information. Where it should be sent to ??? ?? … And
8 I need that 2 weeks before it's is due. When do you need to apply?
9 A: Can you can you give me in 5 days?
10 B: 5 days? OK. Just once. All the other times 2 weeks 2 weeks.
12 A: The deadline is in 5 days
13 B: I need two weeks to do it. … I need the job description and also
14 your transcript.
…
15 A: I have been a student ?? leader leader and activities leader the
16 other ?? student English.
17 B: Write all that down …
18 A: When can you give me?
19 B: … Friday.
20 A: Can you give me Thursday?
21 B: Thursday?
22 A: Please.
23 B: All right.
24 B: Come Thursday at 2 o'clock.
25 A: Next Thursday I will come here. **You give me my rec**
26 **recommendation**. Thank you.
27 B: OK.

The NNS's success in the above conversation may be also due to the fact that the interlocutors were in front of a camera. The NS did everything to understand the NNS and probably took into consideration that whatever the NNS said that sounded somewhat inappropriate was because she was a NNS. Goldschmidt (1996) on her study about favor asking, reports that inappropriate favor-asking sentences "may result in undesirable impact on the addressee" (255). However, she also stresses that if the addressee is aware of the speakers' deficient command of English, the addressee may not let the interaction breakdown.

In summary, the results from the NSs' role-plays show that the type of structure chosen reflects the focus the speaker wants to give at that moment. When the imposition is strong the speaker may choose a structure that takes the focus away from the addressee/doer, so that the later does not feel too much pressure. The participants in the control group made linguistic choices that show that the closer the interlocutors are (little or no social distance) the less they worry about using less imposing constructions. Each type of structure discussed in this chapter yields a different meaning, which is suitable to different situations. These meanings are conventionalized by the group of people that speak the language. In the

case of this study, they are the NSs of English and specifically my control group. The answers this group provided indicated that, in politeness terms, less hedging is used with intimates than with strangers. Using less hedging means more imperatives, MVs and PMVs, and more hedging means more embedded sentences. There is a direct proportion between hedgings and social distance and an inverse proportion between power and hedgings which are detected in this study by the choices NSs make. The category of acquaintances, in the middle of the social distance scale may use more or less hedging, depending on the power relation between the interlocutors. For instance, if the speaker is a boss, there is less hedging and more imperatives, want-constructions or MVs/PMVs. If the interlocutors are roommates, there is more balance among the type of constructions chosen. Moreover, if the speaker addresses someone who has authority over her, there are more hedgings.

The NNSs who are not familiar with the conventionalized usage of various root modal devices sound pragmatically unsuitable in several situations. NNSs may use the *bald on record strategy* (Brown and Levinson 1987) more than they actually want to. In certain cases, they are aware that the situation requires a redressive action and use MEs. However, they overgeneralize and overuse this linguistic device as a tool to avoid confrontation. Although their grammatical competence seems to improve quickly from the beginning to the intermediate level, their pragmatic competence is still a problem. Furthermore, even advanced level participants lack control of some pragmatic rules. The fact that NSs use many embedded sentences to make polite requests and NNSs do not, shows that embedded sentences are definitely more complex in terms of acquisition than non-embedded sentences. Both pragmatic and structural rules get in the way of the development of NNSs' interlanguage modal system. The choices NNSs make to express root modal meanings show how divergent their root modal grammars are from the NSs' system.

Chapter Conclusion

NNSs need to become aware of the fact that different modal devices yield distinct modal forces. An ME, for instance, may carry some force that focuses on the event while an MV/PMV may concentrate on the doer. Even if one considers only the dimension of politeness (as this chapter has done), various contextual characteristics should be taken into consideration when choosing a modal form (e.g., type of

context, social distance). The results presented in this chapter show that even more proficient learners could profit from discovering more about the semantic extension of several modal devices.

CHAPTER 5
L1 TRANSFER

In the course of SLA history[1] the role of L1 has received differential attention from researchers. From the 1940's to 1960's researchers contrasted and compared languages to find differences and similarities between them. They believed that based on this comparison an effective methodology could be created. These contrastive analyses were of two types: (a) a priori; and (b) a posteriori. Doing only a posteriori analysis can lead to misleading conclusions about the learners' problem (Schachter 1974) since it cannot account for avoidance phenomena. However, a priori analysis can also over-predict problems the students might not have. Since the 70's, a great deal of research on second language acquisition has been done on developmental sequences (Dulay and Burt 1972, 1973, 1974), markedness (Eckman 1984), and discourse analysis (Hatch 1978). The role of L1 in SLA was downplayed in the research on developmental sequences and universals (Dulay and Burt 1972, 1973, 1974; White 1989). Yet, most recently there has been renewed interest in the role of L1 in second language acquisition:

> … there is now clear evidence that the L1 acts as a major factor in L2 acquisition. One clear advance in transfer research has been the reconceptualization of the influence of the L1; whereas in behaviourist accounts it was seen as an impediment (a cause of errors), in cognitive accounts it is viewed as a resource which the learner draws in interlanguage development. (Ellis 1994: 343)

The present research shares Ellis's point of view that the L1 does not hinder SLA by causing errors, but it works as a source of knowledge upon which learners formulate their IL. Looking at the context in which learners use certain structures, one can avoid some of the problems contrastive analysis had. The fact that speakers may use different structures in the same context, brings unique understanding of language acquisition. This could show us the different paths learners may take because of L1 transfer. The process of SLA is much richer than simply looking at the forms that they produce.

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[1] SLA as a research field is quite a young field, being a little more than 30 years old. It is not to say that there was no work done in second language before late 60's or early 70's. However, the focus of most research then was on second language teaching rather than on second language acquisition (Larsen Freeman and Long 1991).

As in Chapter 4, the present chapter presents a scope of modal devices (MVs, PMVs and MEs) used by learners to give a complete picture of what occurs in the acquisition of root modality, considering the limitations of the features tested (see Chapter 1 for a description of the features). The need for this broad investigation on modality has been pointed out by Collins:

> Despite widespread recognition that the category is realized by items from a range of grammatical classes (adjectives such as *likely* and *necessary*, adverbs such as *perhaps* and *possibly*, nouns such as *ability* and *probability*, and so on), most scholars have restricted their attention to the subset of auxiliary verbs known as the modals (Collins 1991:145)

This chapter looks at similarities and differences in the NNSs' modal choices in order to show the role of L1 in language acquisition. It is hypothesized that the L1 has a role in the IL process for modal usage. L1 may cause language transfer (Selinker 1972), which is divided in this study into two types: lexical and concept transfers. Lexical transfer is the influence of the L1 in the choice of a word or structure, for instance, an MV or PMV. Concept transfer is the matching of function and form in the L1 transferred into L2 usage. For instance, in Korean an if-clause is used to express obligation:

> i ch'aek-in an ilk-**o-myon**, an twe-n-ta
> this book-TOP NEG read-**MOD-if** NEG be good-PRES-PRT
> 'You must read this book'
> (*lit*.: 'If you don't read this book, it won't be OK')
> (Givón 1995: 122)

Therefore, if a Korean speaker uses an if-clause in English to convey the meaning that something must be done[2], the interlocutor will probably not understand it as an obligation but as a condition since it "carries a low-certainty epistemic mode" (Givón 1995: 122). This would be a concept transfer, since the if-clause in English does not imply obligation. This type of transfer may lead to literal translation into L2, as the example above shows, or to the use of a different construction which the learners believe to carry the concept they want to transfer (see section on Spanish speakers). Besides language transfer, there may also be transfer of training (Selinker 1972) based on what learners are taught in classrooms.

In order to show learners' root modality mental grammar, first, the structural errors each language group made are presented. Second, the cases of lexical and concept transfer are discussed. Third, a conclusion on the role of L1 in second language acquisition of modals is presented. The data used for this analysis comes both from the spontaneous conversation recorded in the course of two terms and from the

open-ended role-plays. Recall from Chapter 2 that the spontaneous conversations were tape-recorded by the speakers themselves without the presence of the researcher. The conversations were between a NNS and a NS on whatever topic they wanted. The role-plays, on the other hand, tested specific meanings used in specific situations. Therefore, the data reflect both somewhat controlled and uncontrolled oral production. It is important to emphasize that the analyses carried out in this chapter are limited to four different L1s. Furthermore, the number of participants from each L1 is very low. Twelve Spanish, six Korean, three Portuguese, and three Arabic speakers participated in the role-plays. A few speakers of other languages, such as Chinese, Japanese, French and Dutch, also took part in the role-plays, but their production is not analyzed in this chapter. One native-speaker of each of the following languages recorded the spontaneous conversation tapes: Spanish, Portuguese and Arabic. Due to the low number of participants from each language, all comments made in this chapter are preliminary and need to be further tested.

Structural Errors

The language groups analyzed here are Spanish, Brazilian Portuguese, Korean and Arabic. Some of these groups presented similar structural problems. Table 5-1 below shows that the participants used formulaic utterances (e.g., Can I help you , Mary?), the wrong complement for the PMVs, omitted MVs or PMVs, and placed the MV in the wrong syntactic position.

The Portuguese speaking beginners learned the chunk *Can I help you*? as a sentence that involved the meaning of help. When faced with a situation in which they had to ask for help rather than offer help, they simply used the formula that contained the word *help*. This is a common strategy employed in the early stages of SLA (Huang 1970; Hakuta 1975, 1976).

Table 5-1. Role-plays modal devices structural errors by L1 group

Levels	Portuguese	Spanish	Arabic	Korean

[2] Korean "if" is interpreted as high-certainty only when paired with a double-negative structure, as the example shows. Thus, concept transfer could occur with this type of structure.

Beginners	-Can I help you, Mary? -You need make a diet. -I need that you go to the Federal Express now.	-You need stop the smoke. -You you come back in one month …	-Must you change because junk food is not good for your body … -Must try one, two, three.	No participants
Intermediate	No structural problems	-…he told me that you must to have an A. -I need that you help me because I need a job.	No structural problems	-You had better to try quit quit smoking. -I need call to my father. -I think we need something to try to solve this problem.
Advanced	No participants	-This just happens too often, so perhaps we look a way to solve this problem.	No participants	No structural problems

Portuguese, Spanish and Korean speakers had problems with the complement of PMVs. The beginning Romance language speakers omitted *to* after *need* (e.g., You *need* make a diet) but also produced sentences with this same PMV with no structural problem at all (e.g., You *need to* change). This shows that at the time which these participants took part in the role-plays, they knew that *need* should be followed by an infinitive form. However, they overgeneralized the rule that MVs are not followed by an infinitive and applied it to the complementation of a PMV. At the intermediate level, the Spanish speakers still had problems with the complement of MVs (e.g., … he told me that you *must to* have an A). Thus, there is variability in the Romance language speakers' system regarding infinitival forms and MVs and PMVs up to the intermediate level. Another problem with the complement of PMVs, specifically *need*, appeared both in the production of the beginning Portuguese speakers and the intermediate Spanish speakers (e.g., I *need that you go* to the Federal Express now). These speakers might have translated from their L1, and thinking that it was necessary to include the conjunction *that* in the embedded sentence. The corresponding sentence in Brazilian Portuguese could be

(1) *Eu preciso que você vá.*
I need-first person that you go-third person subjunctive
I need you to go.

Moreover, the Spanish correspondent sentence could be

(2) *Necesito que vayas*
need-first person that go-second person subjunctive

I need you to go.

In both sentences 1 and 2, the first clause verbs (*precisar* and *necesitar*) are followed by the subjunctive, which is proceeded by the conjunction *que* 'that'. The mental grammar of these learners used their L1 as the source of information. Their L1 requires the use of the conjunction *that* (1,2); therefore, their L2 production also carried this .

The complementation problem Koreans have with modal device also involves the use of the infinitive. At the intermediate level, their IL shows variability in terms of PMV complements. They sometimes used the appropriate base form of the verb after *had better* and at other times they did not (e.g., You *had better to* try quit quit smoking). The intermediate level Korean participants overgeneralize the rule that verbs should take the infinitive form after another verb. On the other hand, they omit the infinitival particle *to* when necessary, after *need* (e.g., I *need* call to my father).

All groups (Portuguese, Spanish, Arabic and Korean) omitted the MV or PMV in some sentences. I have categorized them as imperatives or you-imperatives. In certain situations they are appropriate, while in others they are not (see discussion in Chapter 4). This omission results from lack of control of the modal system. For instance, *This just happens too often, so perhaps we look a way to solve this problem* produced by an advanced level Spanish speaker.

The Arabic group made structural errors regarding the collocation of the MV in the sentences. This is clearly transfer from their L1, a V(S)O language. The sentence below illustrates the word order in the Arabic dialect of Saudi Arabia, where most of the Arab participants were from:

(3) La:zem tijarib 1,2,3
must you-try 1,2,3
You have to try 1,2, 3.

The Koreans also seemed to have some problem with word order (e.g., I think we need something to try to solve this problem). The position of the object preceded the infinitival complement. Although both Korean (a SOV language) and Arabic have different word order from English, word order problems were more frequent among Arabic speakers. This may be due to the fact that there were no beginning level Korean participants, while there were many Arabs at this level. More collocation problems may have been observed if there had been Korean participants at the beginning level too.

The spontaneous conversation data corroborate the structural results from the role-plays. The stages[3] noticed in the tapes are the following:

Table 5.2 - Spontaneous conversation modal devices structural errors by L1 group

	1st tape	2nd tape	3rd tape	4th tape
Portuguese	I *need for* I'm happy	I *need* learn more.	I *have to* come back.	You *don't have to* be worried about money
Spanish	I *have to* wash the dishes.	You *have* now a schedule *for* visit her.	I *have to* take two more.	Why do I *have to* take this?
Arabic	But this Halloween *must* stay I wake up.	*Must* I buy.	And I *got to* ask the manager.	No modal device data

The Portuguese speaker had problems with the complement of *need* in tapes 1 and 2 and after having acquired the PMV *have to* she started using only this modal device to express necessity (tapes 3 and 4). It may also be the case that these forms are in free variation. Although the Spanish speaker was a beginning level student when tapes 1 and 2 were recorded, she was more proficient in English in general[4] than the other participants. She already used *have to* to express necessity in tape 1 and her problems with the complement of this PMV occurred in tape 2. The Arabic speakers' problem with the collocation of *must* came up in tapes 1 and 2. When tape 3 was recorded, the speaker used the PMV *got to*.

Summarizing, structural errors regarding the use of MVs and PMVs may be connected to developmental stages learners go through. They start at a level where formulaic structures are convenient and go on experimenting with structural rules. It is

then that they test if the MV or PVM is followed by an infinitive or bare form verb. Other problems, however, come from L1 structural transfer, such as the use of *that* pronoun as complement of *need* by Spanish and Portuguese speakers and the collocation of *must* by Arabic speakers. Unfortunately, there

[3] The sentences in Table 5-2 reflect the speakers' IL when the tapes were recorded. The intervals between each tape recording varied from one to two months. Their root modal IL may have gone through other stages not captured by this present study. The table shows the root modal choices the three speakers made. There is no claim here that all speakers of those L1s go through the same stages as they acquire root modal devices in English. However, they may follow similar steps. Research with more participants is needed.

were no Korean participants at the beginning level. Therefore, it is not possible to check if these L1 speakers of a SOV language have the same number of word order problems as the Arabic speakers, whose language also has a different word order from English.

These structural problems seem to occur with certain forms which are used by a certain language group. For instance, Portuguese and Spanish speakers made errors using *need*, while Koreans using *had better*. The next sections explores the possibility that the choices NNS make may be directly motivated either by L1 semantics or a L1 concept.

Spanish Speakers

The data produced by the Spanish speakers showed that their root modal IL has signs of both lexical and concept transfers from L1. The MVs and PMVs mostly used by both the beginning and intermediate Spanish speakers are *need*, *have to*, and *must* (Table 5.3)[5].

The use of *need* may be due to the fact that Spanish has a cognate verb *necesitar.* This verb may be followed by an infinitival complement or a noun. In certain Spanish speaking countries, for instance, Uruguay, *necesitar* is not so commonly used followed by an infinitive but rather by a noun (e.g., *Necesito zapatos nuevos*) (Irene Moyna, personal communication).

Table 5-3 - Spanish speakers' role-play choices

	Beginning	Intermediate	Advanced
Urgency	I *need to* put today. *Can* you can you ask for another employer? It's *impossible*?	And I *need to* do immediately … it's *possible* to include this letter in the box? And I *have to* pay more for a small letter? You *can* help me with put my few papers in ah in my letter? These thing *must* go in the package …. But it's *necessary* that go today.	I *need to* send I need it to be there by tomorrow. I *have to* make all of them for tomorrow till 6 o'clock. But you *can* use that one, right? So, I *wonder if you can* work today and make all the checks for tomorrow. So, *could* you make the checks?
Pre-existing rules	You *can* go if you come back at 12.	You *have to* leave the money inside the wallet.	No, you know that you *can't* go out after 12

[4] Her fluency, vocabulary and grammar was a little above the other two NNSs that recorded their spontaneous conversations.

[5] The tables which describe the modal devices used in the role-plays are organized by the features tested. In those contexts, modal structures that expressed other meanings were also included. For instance, request was included although it was not directly tested.

	You *can't* go. Go to police because … No, but you *have to* stay home and study for your test.	Please call him … *Leave* the money there. Don't think you *have to* do it. I *can't* spend all the money if you …	o'clock.
New rule	The solution I think you *can't* use the credit card. And I I I I *must* pay overdrawn. You weekend *you study study* Friday, Saturday and Monday. *Maybe* one …week you clean the apartment.	At 10 p.m., you *have to* go to bed. *Give* me your cellular phone. We *can* do a list with all the things … I we have ah ah we *need to* establish the rules again.	Do you wanna keep the ATM you or I *should* keep it? You *should*'ve told me that you you made the withdraws.

Table5-3 -- continued

	Beginning	Intermediate	Advanced
New rule + urgency	You you *can't* smoke. You *you come* back in one month … You *need (to)* stop the smoke. Run, run and and gymnastic.	I think that you *have to* change your routine in food. You *need to* change because it's too high in fat. It's *necessary* to complete the diet every day. You *must to* know everything and then put it in the exam. *Maybe* it's *possible* to change the habit of cigarette for chew chew gums. *Try* to eat a lot of fish … *Maybe* you can take the bus … …you *must to* have an A in your final exam …	No participants[δ]
Speaker's necessity	I *can't* buy the tickets. You *can* buy for me? *Maybe maybe* you go to the campus and buy for me the ticket.	I *need* that you help me because … No, it's *impossible* for me because … …I *have to* travel.	No participants

[δ]Since the situations were randomly assigned and there was no control of the numbers of participants according to their L1, some contexts were not tested by all L1s

Spanish speakers appear to use *need* very often, and this may very well be due to the fact that it is easy to use a target structure that resembles their L1. Thus, this is a case of lexical transfer which usually works well. Recall (Chapter 3) that *need to* is a default verb for the control group (NSs) for the expression of

the tested features. The use of *must*, which is not target-like, seems to occur since the semantic extension of the correspondent verb (*deber*) is wider than the one of *must*. As discussed in Chapter 3, *must* is only used by NSs when the situation involves the feature new rule + urgency. Besides that, the speaker has to have authority over the addressee and the interlocutors have to be intimate. Spanish speakers used *must* to express new rule + urgency just like the NSs. However, they also used it in urgency and new rule[6] contexts. The usage in urgency context is not native-like and could be considered a case of lexical transfer.

The intermediate Spanish speakers also produced the impersonal construction 'It's necessary …' in new rule + urgency context. Impersonal constructions were also used in requests 'Is it possible for you to do it?' (urgency and speaker's necessity context), to express possibility or refusal 'It's impossible …' (speaker's necessity context). This group was the one of the two groups[7] that used these type of constructions. There is a similar type of construction in Spanish '*Es possible tomar la caja?*' 'Is it possible to get the box?' from which these speakers could be translating. Since this type of construction is not very commonly used in Spanish, it is more likely that the Spanish speakers transferred the concept of impersonality into their IL. Recall from Chapter 4 that impersonal constructions take the focus away from the doer and/or speaker, making the event highlighted and at the same time less imposing to the address. In Spanish the most commonly used construction to convey impersonality is the impersonal with *se* and the verb in the third person singular[8]:

(4) Se puede tomar la caja?
'se' can get the box
Can (someone) get the box?

---

[6] Since there were mixed results from the NSs (see Chapter 3), a comparison between the NSs' and NNSs' usage is not possible.

[7] Impersonal constructions were also produced by Turkish speakers but at a much smaller number than by the Spanish speakers. No evaluation of the extent of this usage by the Turkish speakers is done in this study since these participants were very few and all at same level (advanced).

[8] Luján (1975) stresses that there is a structural difference between impersonal and reflexive passive constructions. The verb in the former construction is in the third person singular while in the latter it agrees with the complement.

In their concept transferring, the students come across the fact that English does not have this type of passive. Yet, they still want to use an impersonal construction to convey the modal meaning[9]. Thus, the Spanish speakers choose a modal device that allows them to keep the sentence impersonal: an impersonal construction formed by the pronoun 'it' + the verb to be + noun. At the intermediate level these students still lack the full command of more complex structures (e.g., embedded sentences, such as 'I was wondering if you could get the book for me?') and do not know how to make more polite sentences without making them impersonal. Impersonal constructions may sound sophisticated or more complex to the Spanish speakers than a sentence with a MV. Therefore, this could also have motivated the participants to use these forms. Since most of the Spanish speakers who used these constructions are over 35 years old[10], they might have wanted to sound more knowledgeable. They are probably very used to speaking with more complex sentences in their L1 than their English allows. At the advanced level, they are more familiar with some English politeness mechanisms and did not use impersonal constructions. One advanced participant actually tried to use embedded sentences. However, he chose an inappropriate MV (e.g., 'So, I wonder if you *can* work today and make all the checks for tomorrow') which gave an unsuitable illocutionary force to the sentence. This sentence sounded more like a challenge rather than a very polite request.

The use of the adverb *maybe* to soften suggestions or advice could be another lexical transfer from the Spanish *capaz, de pronto* or *talvez*, or an overgeneralization of the idea that *maybe* is a softening adverb. The beginners made this type of overgeneralization, using *maybe* to soften requests. The beginning level participants seem to want to make polite requests, but the only mechanism at their disposal is to use the softening adverb *maybe*. They did not know how to use MVs/PMVs or embedded sentences. What is interesting to notice is (see Table 5-3) that the beginning students start with *maybe* + pronoun + verb; at the intermediate level a modal verb is attached to this structure (coming very close to target-like); and at the advanced level the participants use a target-like form: *should*.

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[9] Irene Moyna (personal communication) called my attention to a possible transfer from *se*-construction into the impersonal construction in English

[10] There was just one 19 year-old participant who also used impersonal constructions.

Portuguese Speakers

The language transfer noticed in the IL of the Portuguese speakers was of a lexical nature. All these participants spoke the Brazilian Portuguese variety. The MVs and PMVs used by the beginners were *need* and *must*. At the intermediate level, these learners used *need* and *have to* (Table 5-4).

Much like the Spanish speakers, the Portuguese speakers' usage of *need* seems to be a lexical transfer from the cognate verb *necessitar.* This verb takes either an infinitival complement (5) or a noun complement (6) in Portuguese.

(5) *Eu necessito ir*
I need-first person to go
I need to go.

(6) *Eu necessito de sua ajuda*
I need-first person of your help
I need your help.

Table 5-4. Portuguese speakers' role-play choices

	Beginners	Intermediate
Urgency	I *need* that you … You *need* go … *Can* I help you? You *can* go now?	I *need to* put the document. Can you ask someone to go and …?
Pre-existing rule	You *you call*.	No participants
New rule	The apartment all its ah *must must* clean only must clean.	You *have to* arrive early home now … You don't; you *cannot* let home before this Turn on the TV and go to study now..
New rule + urgency	You *need (to)*make a diet. *Don't eat* meat. *You buy* the froze.	You *can't* at least some more, OK?
Speaker's necessity	You *need* write the letter for the manager in the store.	We *need to* go there, but I have a class now.

Necessitar is not so commonly used as other necessity verbs, such as *precisar* or *ter que*; however, learners rely on a similar L2 form to their L1 to build up their IL. This fact is clearly confirmed by the spontaneous conversation data (Table 5.5).

Table 5-5. Portuguese speaker's spontaneous conversation choices

1st tape	2nd tape	3rd tape	4th tape

I *need for* I'm happy. Did you *have* study? I don't speak English. I *can't*. *Can* be good witch?	I *need* learn more. *Can* you come?	…because I *have to* resolve … I *have to* come back. I don't know if I *can* go to Salvador. *Go* only in December. You *can* stay more time there, no?	Don't *have to* pay is the best way. *Can* you imagine at the beach right now? I *should* talk to you before.

It was not until the 3rd tape that the Portuguese speaker started using *have to* rather than *need*. *Need* is definitely the starting point for Portuguese speakers to express any type of necessity. As learners get more proficient, their ILs acquire other forms, such as *to have*.

The use of *must* in new rule contexts occurs in the beginning level. Similar to the Spanish speakers, these speakers do not know the semantic extension of the MV *must* and use it in an inappropriate context. They probably translate *must* from the Portuguese *dever*, without knowing that the semantic extension of these verbs are quite different.

These speakers mainly used the imperative to give suggestions (beginning, intermediate - Table 5-4 and 3rd tape Table 5-5) in contexts of new rule, new rule + urgency, and pre-existing rule. This usage in different contexts could be due to the fact that it is easier to use imperatives than to use the modal system. It is only in the 4th tape (Table 5-5) that *should* appeared as the advisability MV. Yet, at that time, the speaker wanted to use *should* to refer to the past but was unable to do it properly[11]. She said 'I should talk to you before' instead of 'I should have talked to you before'.

In summary, inappropriate usage of *must* by the Portuguese speakers may be due to lexical transfer. They lack the knowledge of the extension of this MV in English. They overuse imperatives as suggestion devices because of their structural simplicity. They use *need*, since it is a cognate of *necessitar*, with which they are familiar.

[11] Tense acquisition is beyond the scope of this research.

Korean Speakers

At the intermediate level the participants used both *need*, *have to*, *can't* and *had better* in the various contexts, while the advanced participants used the same ones and also *be supposed to*, *must*, *would*, *could*, and *can* (Table 5-6).

The Korean language does not have the same root modal verbs distinction that English has. The verb *haeya* in Korean corresponds to *have to*, *must* and *should* (Mi-Hwa Chun, personal communication). Korean students are not taught the distinctions among these MVs and PMV in their home country unless they attend advanced English studies. Moreover, some of the gradation they learn is improper. For instance, they learn that *had better* is less strong than *should*[12].

Table 5-6. Korean speakers' role-play choices

	Intermediate	Advanced
Urgency	I have I *have to* prepare the checks. I *can't* because the meeting is very important to me.	I hope I *can* find another way to mail it faster. I *have to* prepare the paychecks until tomorrow. So, *could* you do it instead of me? …*can* you find the package to England?
Pre-existing rule	If you *can't* attend this party my father will be ….very disappointed. You *can't* do that. *Can't* be excuse but maybe he … understands.	We *are supposed to* have a party at 7 … … *maybe* you *shouldn't* keep. You *can* turn it in the police station or tell the driver.

5-6 -- continued

	Intermediate	Advanced
New rule + urgency	I think you *had better* stop smoking. You *had better* to try quit quit smoking. Friday we *can* buy the ticket … We *have to* go …	I think you *have to* start reduce your cigarette per day … … you *must* eat better and vegetables, grains, legumes. I think you should *had better* take some exercise to get good physical condition. … if you keep smoking *maybe* hurting your heart, so it you *can't* exhale and inhale

12 Variation in intonation can make this true if *should* is heavily stressed.

		I think you *should* keep good practice … *Quit* smoking.
New rule	I think we *need* something to try to solve this problem.	… I'*d better* divide our account … You *have to* take again the class again. If you want go to college, you *should* try to study hard.
Speaker's necessity	I *need* call to my father. *Can* I call my father?	So, I *need to* find another advisor *Would* you do me a favor? I'm *have to* call my my parents.

Sentence (7) may be the source of confusion for Korean learners. The example below (Mi-Hwa Chun, personal communication) is a suggestion sentence from a person of high status to someone of lower status:

(7) jal mugeya he
better eat do
You'd better eat.

In direct translation from Korean, Koreans learn that the above sentence conveys the idea that the addressee has a choice to do or not to do what is being suggested. They are not aware of the fact that *had better* implies that there is a negative consequence if the addressee decides to do otherwise. As mentioned before, due also to transfer of training, Korean speakers understand that *should* conveys the meaning of something that has to be done with no option for the addressee to decide something else. It is important to emphasize that the Korean students were the only NNS group to use *had better* besides the NSs.

Taking into consideration that in the Korean speakers' mental grammar *had better* conveys a light suggestion and that *must* has a stronger connotation, it is interesting to notice the contexts in which these verbs are used. Both verbs appeared in the new rule + urgency context where the interlocutors were married and one of them had just found out about a health problem. When the suggestions (new rules) were expressed by a male participant, *must* was used. On the other hand, when new rule came from the wife, *had better* was used. The female participant chose a less imposing verb in her point of view. It is expected in Korean society that women be more polite to men than vice-versa (Mi-Hwa Chun, personal communication). This difference between the female and male answers was not systematically tested. Therefore, these comments are speculations that should be further tested.

In summary, both lexical transfer and transfer of training are responsible for the inappropriate usage of *had better* and *must*. First, there is one verb corresponding to *must*, *have*, and *should*. Second, learners are not taught the difference among these verbs. In fact, they believe that *had better* is weaker than *should*, just like Japanese speakers (Altman 1985).

Arabic Speakers

In a comparative study of English and Moroccan Arabic modality, Meziani (1983) states that while Moroccan Arabic has only three MVs, English has about ten. Moroccan Arabic uses other modal devices besides MVs, such as adverbs. English does too; however, the semantic extent of their usage seem to be very different.

Most Arab participants in this research were from Saudi Arabia. The Arabic dialect they speak also shows a discrepancy in quantity of modal devices in relation to their English counterparts. Therefore, it is difficult for these speakers to know the subtleties in the English modal system, affecting how they match the form and function of MVs and PMVs.

The types of transfer noticed in the production of the Arabic speakers are of lexical and training nature. The Arab participants seemed not to have problems in using root *can*[13]. Table 5-7 shows their very frequent use of imperatives and *must*.

The overuse of imperatives also occurred with speakers of other L1s since the imperative may also indicate that they do not know the MVs and PMVs.

Must is the preferred verb by the beginning group, used in urgency, pre-existing rule, and new rule + urgency contexts (Table 5.7). This verb was appropriate for the NSs in the new rule + urgency contexts and in the situation which the speaker had authority over the addressee. The Arabic speakers, however, used this verb indiscriminately when other verbs such as *need* or *have to* were more appropriate. This result is corroborated by the spontaneous conversation results tapes 1 and 2 (Table 5-8).

Table 5-7. Arabic speaker's role-play choices

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[13] Melouk (1989) states that his Moroccan learners of English overused root modals (e.g. *can*) in a context in which an epistemic one (e.g. *must*) was required. This phenomenon was also noticed in this present research. However, this study concentrates only on root modal meanings.

	Beginners	Intermediate
Urgency	I *must* send this today. *You take* this box. Can you help?	No participants
Pre-existing	Must if you *must* go what I can do. When you have 20 you *can* leave anywhere …	You *have to* follow this man and … No, you *can't*.
New rule	No participants	No participants
New rule + urgency	If you stop the smoking you *can* make exercise … But *must* you change your life … You *must* ah stop cigarette and … *Try*. *Must* try one two three.	No participants
Speaker's necessity	*Can* this space for me? *Can* you go to buy the ticket? *You come* to my home? I can't absent for the class.	No participants

Table 5-8. Arabic speakers' spontaneous conversation choices

1st tape	2nd tape	3rd tape	4th tape
But this Halloween *must* stay (I) wake up. I *can't* understand anything. *It's better* if you go for hours speak with …	*Must* I buy. I *can't* find.	And I *got to* ask the manager. I *can't* explain and talk. You *should* keep the this newspaper with you.	no modal data

In the dialect spoken in Saudi Arabia there is a word *la:zem* that corresponds to *must*, *have to*, and *should* (Waleed Bajouda, personal communication). Since, the grammar-translation method is the most commonly language method in Saudi Arabia, these learners are not taught the subtleties of these verbs. Therefore, transfer of training and lexical transfer are responsible for their inappropriate usage of *must*.

There is only one intermediate level participant that used *have to*. Yet, this usage is somewhat stronger than the choices that the NSs made for the same situations which focused on reminding someone of a pre-existing rule. While NSs gave suggestions using *should*, or *why don't you*, this NNS chose *have to*. Due to the lexical transfer and transfer of training, mentioned above, both beginners and intermediate level Arab participants do not know the semantic extension and limits of both *must* and *have to*. These learners have difficulties in matching a specific context with a specific modal verb.

In the third tape of spontaneous conversations the Arabic speaker uses a PMV (*got to*) rather than *must* (Table 5-8). Since there was only one occurrence of this PMV, it is difficult to affirm that the speaker

had acquired *got to*. This usage could be the repetition of an unanalyzed chunk. It is very likely that the speaker used it as a chunk since the context required a past tense sentence (e.g., I *had to* ask the manager) and he used the form that corresponds to the present time.

In the pre-existing rule context, NSs tended to give suggestions using *should* while the Arab participants used *have to* or *must* (Table 5-7). In the spontaneous conversations (Table 5-8), one notices that, at first, suggestions are given not with a modal device but with *it's better*. A few months later, this speaker apparently acquired the MV *should* and used it appropriately to give a suggestion.

In summary, both lexical transfer and transfer of training play a role in how Arabic speakers use the English root modal system. Contrary to what Melouk (1989) concludes about Moroccan learners, Saudi Arabian learners have problems with the usage of root *must*. One of the main differences between Melouk's (1989) research and this present study is that Melouk did his study with British English and this present one is with American English. Furthermore, he used discourse completion tests (DCT) (see Chapter 2 for the limitations of this type of data collection), and fill-in-the blank tests. Although the present research also used fill-in the-blank tests, there were many other data collection procedures that led to a variety of types of data, including spontaneous conversations.

Chapter Conclusion

These brief comments about L1 transfer suggest that learners take different paths in their learning of root modality, depending on their L1. Spanish and Brazilian Portuguese speakers start using *need* as their default root verb, sharing an indefinite semantic scope with *have to* and *must*. Spanish speakers use impersonal construction, transferring the impersonal concept from their L1. As they know that English does not have an impersonal constructions with *se*, they use the impersonal construction available in English. Koreans use *need*, *have to*, *must* and *had better*. Their default root modal seems to be *had better* and their language transfer are lexical and of training. Arabic speakers' default root modal is *must*. Their inappropriate root modal usage is due to both lexical and transfer of training. Besides that, word order is a

problem for the Arabic speakers[14], since their L1 is a V(S)O. On the other hand, Portuguese and Spanish speakers do not have these problems since their language is (S)VO, as is English.

Melouk (1989) downplays the role of L1 in the acquisition of modal verbs saying that "there is no clear evidence that the mother tongue plays any significant role, either as a facilitating or an inhibiting factor" (Melouk 1989:375). However, the results based on speakers of different L1s show the opposite to be true. Several strategies learners use are clearly influenced by their L1. The results analyzed in this chapter have a limited scope due to the small number of L1 participants. Above all, deeper analysis on each of the languages is clearly called for.

[14] Word order is a problem for these learners, but it is not only related to their acquisition of modality. It is certainly a much wider difficulty.

CHAPTER 6
CONCLUSIONS AND PEDAGOGICAL IMPLICATIONS

It was discussed in Chapter 1 that many ESL/EFL textbooks present root modal meanings in a very compartmentalized way. For instance, students do not learn to make connections between the expression of necessity and advisability. Furthermore, few contextual clues are given, and the meanings of the labels used may mean different things for different learners and teachers. This study suggests breaking down the labels into the elements that compose the vast semantic range of root modality. The most common labels, such as necessity and obligation, are of little help in our understanding of root modality. The elements that have been validated by the NSs' answers are *urgency*, *new rule + urgency*, *pre-existing rule* and *speaker's necessity.* Besides these contexts, other factors influence the choice of the modal device. Power relations and social distance are crucial factors in certain contexts. Above all, it has been shown that, although textbooks do not teach MEs and other root modal devices, learners use them. Therefore, a broad approach to the teaching of root modals should include a discussion of these alternative forms.

The features tested in this research are not the only ones important for the students to learn root modality and its modal devices. There may be others that this research did not test. Besides that, any semantic labeling should be discussed with learners and examples should be given. What may be a context in which a pre-existing rule should be reminded and/or assumed

in one culture may not be the same for someone from another culture (Hinkel 1995). This does not mean that all students should make an exhaustive semantic study of all possible root elements, but that they should be presented with real examples of contexts in which these features yield the use of certain modal devices.

The results from the tests, role-plays and spontaneous conversations are summarized here and some implications for teaching are drawn.

For the contexts in which there is the speaker's necessity or urgency features, *have to*, *need to*, and *'ve got to* are the appropriate verbs. The only verb usage which requires some power and social distance consideration is *'ve got to*. The use of this PMV is limited to circumstances where there is no power involved in the relationship. In all the social distance spectrum[1], this PMV is accepted, except when the interlocutors are strangers in the urgency context. Since *'ve got to* tends to be suitable for informal situations, it is not appropriate to be used by a speaker when addressing someone who has power over her.

The situations that tested the new rule + urgency feature also yield the PMVs *have to* and *need to* as appropriate. The NSs also felt it suitable to use *must* in this context. This usage calls for specific power relation and social distance characteristics. *Must* is used when the speaker (parent) has power over the addressee (daughter or son). The interlocutors are considered intimate. In the role-plays in which there were non-intimate power relations, *have to* and *need to* were used.

Once again, the PMVs *need to*, and *have to* are suitable for the pre-existing rule context. Although *have to* was not used in these role-plays, it was chosen in the fill-in-the-blanks. The PMV *´ve got to* was used as in the other contexts, when there was no power relation between the interlocutors. The verbs which

[1] Recall from Chapter 2 that the social distance spectrum goes from very intimate to not knowing each other at all. At one end, the interlocutors are very intimate, such as spouses or parent and child. Moving along the spectrum, the interlocutors are friends, then acquaintances, such as coworkers or teacher and student. Finally, they are strangers.

follow distinct usage in pre-existing rule are *should, be supposed to*, and *can't*. There are no restrictions in this context to use *should* and *be supposed to*, being *should* the most common one. The MV *can't* is also used to remind someone of a pre-existing rule; however, it occurred in a situation where the speaker had authority over the addressee and the interlocutors were very intimate (parent and child).

Besides pointing out to learners the usage of MVs and PMVs, it is also important to let them know that there are root MEs which have their proper functions as well. MEs which start with a question-word fit well in contexts which the speaker does not want to threaten the addressee's negative face. This type of ME has this characteristic since it functions as a suggestion structure.

MEs with adverbs were also used to express a suggestion mainly in situations where both the speaker and addressee know each other. In situations where there is strong imposition, (e.g., new rule + urgency), the use of this type of ME makes the conversation sound more cooperative.

MEs with impersonal constructions were very rare in NSs' speech both in the role-plays and debates, while embedded sentences were much more common. Embedded sentences[2] were mainly used to make suggestions and requests, having the function of softening the face-threatening aspect of the speech act.

From this summary of the results, there are several aspects of root modality devices that might help SLLs have an easier time learning and using the structures that convey this conceptual category.

Based on the features tested, it can be said that there are two categories of root MVs and PMVs: (a) neutral or default and (b) specific. The neutral and default ones (*have to* and *need*) are appropriate in all contexts tested, having no restrictions in terms of either power relation or social distance. The MVs and PMVs which are used in specific contexts are: *must*, *should*, *can't*, and *'ve got to* (Table 6-1).

Table 6-1. Specific usage of MVs and PMVs by features

	must	should	can't	've got to
new rule + urgency	speaker authority / interlocutors intimate	-	-	-

[2] It is important to emphasize that the terms impersonal constructions and embedded sentences are used here with a limieted scope (see Chapter 4). There are also impersonal constructions which involve embmedded sentences.

urgency	-	-	-	no power relation / any social distance except strangers
speaker's necessity	-	-	-	no power relation / any social distance
pre-existing rule	-	no power relation / intimates, friends or strangers	speaker authority / interlocutors intimate	no power relation / any social distance

Table 6-1 shows that *must* is suitable in the context of *new rule + urgency* when the speaker has authority over the addressee and the interlocutors are intimate. *Should* is appropriate in the *pre-existing rule* context with restriction only in terms of power relation but not social distance. *Can't* is also appropriate in the pre-existing rule contexts but only when the speaker has power over the addressee and the interlocutors are intimate. The PMV *'ve got to* is suitable in different contexts when the there is no power relation between the interlocutors.

The ME results show that learners need to have called their attention to the appropriateness of these root devices. While they make some appropriate usage of MEs with question word and with adverbs, they still would profit from careful training on the usage of these forms. Their biggest problems are in relation to MEs with impersonal constructions and embedded sentences. The mechanism of taking the focus away from the doer and/or speaker is inherent in impersonal constructions, but this is not a mechanism NSs often use to make polite sentences. They use other MEs, and especially for requests and some types of suggestions, they use MEs with embedded sentences.

Another consideration teachers should take into account is the learners' L1 background. The position teachers should take is not that L1 hinders acquisition but that learners build up their IL upon their L1. Chapter 5 showed that learners that speak different L1s take different paths on their way to learning root modality. Some structural errors are common among the various groups (e.g., if a MV or PMV should be followed by an infinitival complement) while others, such as word order, are specific problems caused by the divergence between L1 and L2 structure[3]. It was also noticed that different learners' default verbs vary. Portuguese and Spanish speakers use *need (to)* in any context, while *must* is the preferred form of Arabic

speakers. Although there was not spontaneous conversation data from Korean speakers, it seems that *had better* has the

default function in this group. During this research some NNSs were interviewed about the root modal system in their languages. It was noticed that learners like to talk about the similarities and differences between their L1 and L2. This study is not advocating the use of contrastive analysis with all students, but the consciousness of how some L1 and L2 rules work may help them acquire L2 better.

Transfer of training is also another factor that teachers should be aware of. Students may learn to associate certain MVs and PMVs with the wrong labels. Moreover, they may not learn the connection between the meanings of these various verbs and MEs. This problem occurs not only in the students' original country but also in environments where English is learned as a second language. Most textbooks available on the market, with few exceptions, present crude explanations of the usage of root modality devices. One way of broadening students' understanding and usage of root modal devices is to show them how these constructions are used in the real world. For instance, teachers may prepare activities in which students have to compare the constructions used in school catalogs or driver's handbook with the ones in comic strips or TV programs.

Above all, the contexts in which root modality devices are used should always be discussed with the learners. NSs intuitively know that a single factor, for instance, power relation, may change the whole approach to situations and, consequently, the use of modal devices. NNSs may know how to do that in their L1, but the linguistic mechanisms they are accustomed to use are very likely different from the ones used in the L2.

This research has shown that the investigation of the semantics of linguistic structures is able to yield crucial information to help NNSs improve their L2 knowledge and performance. The data collection with an NS group also pointed out to the fact that experimental design can display the canonical shape of

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[3] No conclusion can be drawn about the stages speakers of different L1s may go through in their process of learning root modal devices, since the data limited to a low number of participants.

modality, which in combination with less controlled data collection can improve our understanding of modality usage.

APPENDIX A
ROLE-PLAYS

Urgency

1
A.)
You're the manager of a local business.
You Fed-exed an important shipment to England this morning. It will be flown out of town sometime tonight. You just realized that you forgot to include some critical items.

You are at the local collection warehouse for Federal Express. Ask the FedEx emp loyee to find the box, so you can put the forgotten items in.

Explain that you need that package to be complete. If you FedEx another one now, it will arrive one day after the first one. That is too late. Tell the employee how urgent it is to get the box.

1
B.)
You work at the local collection warehouse for FedEx.

There is a policy that you cannot leave the desk to go to the back of the warehouse.

Even if you had to find something, it would be near impossible, considering how many boxes are there.

2
A.)
You're the manager of a local business.
You Fed-exed an important shipment to England this morning, but now you realize that you forgot to include some critical items.

Now, you call in one of employees to tell them that you are sending them to the local collection warehouse for Federal Express right away to find the original package and insert the missing items.

Explain that you need that package to be complete. If you FedEx a separate package now, it will arrive one day after the first one. That is too late. Tell your employee how urgent it is to find the box.

2
B.) Your boss calls you in to ask you to do something at work.
3
A.)
You Fed-exed an important shipment to England this morning. It will be flown out of town sometime tonight. You just realized that you forgot to include some critical items.

You are at the local collection warehouse for Federal Express. The employee that works there is your best friend so you think there is a good chance your friend will find the box for you.

Ask your friend to find the box, so you can put the forgotten items in. Explain that you need that package to be complete. If you FedEx another one now, it will arrive one day after the first one. That is too late. Tell your friend how urgent it is to get the box.

3
B.) You work at the local collection warehouse for FedEx.

There is a policy that you cannot leave the desk to go to the back of the warehouse. Even if you had to find something, it would be near impossible, considering how many boxes are there.

Your best friend is here asking you to do a favor.

4
A.)
You work for a local business. You Fed-exed an important shipment to England this morning, but now you realize that you forgot to include some critical items.

You can't leave the office because you have an important meeting.

Ask a coworker to go to the local collection warehouse for Federal Express right away to find the original package and insert the missing items.

Explain that you need that package to be complete. If you FedEx a separate package now, it will arrive one day after the first one. That is too late. Tell your coworker how urgent it is to find the box.

4
B.)
Your coworker asks you to do something at work.

5
A.)
You're an employee at a local business, and you work with your spouse in the payroll department.

You just realized that your computer system crashed and erased all the payroll files before the paychecks were printed. It is essential that the paychecks are ready by tomorrow morning.

It's already the end of the business day. You have plans tonight to meet with an out-of-town business client.

You ask your spouse if they can prepare the paychecks for you as a favor. This would mean they would have to stay after work as long as necessary to finish the paychecks by morning.

5
B.)
Your spouse, who works at the same company as you, comes into your office to ask you to do something at work.

Pre-existing rules

6
A.)
You're 16 years old.
You go to your parents to ask them if you can go with some friends to a (singer / group) concert.

You want to go away Saturday and stay overnight.

6
B.) You're a parent of a 16-old son/daughter. You don't allow your kid to stay out past 12:00 on weekend nights.

Now your kid comes to you and asks you if they can go away overnight to a concert with some of their friends.

7
A.)
You're married. Your father-in-law is celebrating his 70th birthday today and your spouse has planned a surprise party.

However, a good friend of yours is leaving Gainesville forever and tonight your friends are having a farewell dinner.

You can't decide which celebration to attend. Talk to your spouse about it.

7
B.)
Your father is turning 70 years old today and you've planned a surprise party for him. You've arranged for a number of people to come in from out of town for the event.

Now your spouse comes to you and is considering going to some other event instead.

You insist that your spouse comes to your father's party.

8
A.)
You find a wallet containing 75.00, some credit cards and an ID.

As you're holding it, your friend comes along and says hello to you. You tell them about the wallet.

You're really short of money. You're seriously considering keeping the money.

8
B.)
You see your friend standing on the sidewalk on campus. Your friend is holding a wallet that they found.

Say hello to your friend. Consider what to do with the wallet. You are basically an honest person.

9
A.)

You are sitting on a bus with two people sitting on your left side. When the bus stops, the person next to you stands up and gets off.

After the bus moves on, you notice a wallet left on the seat between you and the other person. Pick it up and look inside.

You're really short of money. You seriously consider keeping the money.

9
B.)
You are sitting on a bus with two people sitting on your right side. When the bus stops, the person next to you stands up and gets off.

After the bus moves on, you notice a wallet left on the seat between you and the other person. The other person picks it up and looks inside.

Consider what to do with the wallet. You are basically an honest person.

New rules

10
A.)
You're the parent of a 16-year old son/daughter. You've always been pretty liberal about letting your kid set their own hours and make their own friends.

However, lately their grades have been slipping at school and they've been getting into some trouble their teachers.

You're thinking that maybe you've been too lenient and maybe it's about time that you lay down some stricter rules.

You approach your son/daughter to tell them what you've decided.

10
B.) You're 16 years old. Your parents have always pretty much let you come and go as you please, but your grades haven't been very good lately.

Your parent comes to talk to you about this.

11
A.)
You're married and your spouse and you have a joint checking account. Recently you bounced a check because your spouse failed to record some ATM withdrawals.

You are really frustrated because this is not the first time this type of thing has happened, plus it's costing you money each time that you overdraw your account.

You feel like its time you and spouse sit down and decide how you can keep this from happening again in the future.

11
B.)
You're married and you and your spouse have a joint checking account. Your spouse approaches you to discuss your checking account.

12
A.
You live with another student in a two-bedroom apartment. Lately, there has been a problem with the sharing of the typical household chores: cleaning the bathroom, taking out the trash, mopping the floors, doing the dishes, etc.

The situation is getting on everybody's nerves.

One night while you are sitting around watching TV, you start up a conversation about how to solve the problem.

12
B.
You live with another student in a two-bedroom apartment. Lately, there has been a problem with the sharing of the typical household chores: cleaning the bathroom, taking out the trash, mopping the floors, doing the dishes, etc.

The situation is getting on everybody's nerves.

One night while you are sitting around watching TV, you start up a conversation about how to solve the problem.

<u>New rule + Urgency</u>

13
A.)
You're a cardiologist. You've just received the results of some tests on one of your patients and they don't look very good. In fact, if this person doesn't radically change their lifestyle, i.e. diet, exercise, etc., they're heading for a serious heart attack.

You are meeting with them to discuss the results of the tests and your recommendations.

13
B.) You've recently gone to see a cardiologist about some problems you're having.

You are a heavy smoker, you don't like to exercise and your diet isn't the best in the world.

Now, you are meeting with the doctor to discuss the results of some tests you've just had.

14
A.) You recently went to see a cardiologist about some problems you've been having.

Now, you've received the results from some tests and the doctor said you need to change your lifestyle. You are a heavy smoker, you don't like to exercise and your diet isn't the best in the world.

You are now talking to your friend. Explain to them what the doctor said about your health.

14
B.)
Your friend recently went to see a cardiologist about some problems they've been having.

You're concerned about your friend's health and want them to avoid more serious health problems in the future. Your friend is a heavy smoker, doesn't like to exercise, and doesn't eat well.

Listen to your friend's health problems and give some suggestions.

15
A.)
You recently went to see a cardiologist about some problems you've been having.

Now, you've received the results from some tests and the doctor said you need to change your lifestyle. You are a heavy smoker, you don't like to exercise and your diet isn't the best in the world.

You are now talking to your spouse. Explain to them what the doctor said about your health.

15
B.)
Your spouse recently went to see a cardiologist about some problems they've been having.

You're concerned about your spouse's health and want them to avoid more serious health problems in the future. Your spouse is a heavy smoker, doesn't like to exercise, and doesn't eat well.

Talk to your spouse about their health.

16
A.)
You just had a conference with the teacher of your teenage son/daughter. The teacher said that your kid can only graduate with their high school class if they receive and "A" on their final history exam.

Passing this course is a requirement for graduation. An "A" on this exam will just barely give them a passing grade.

Meet with your son/daughter to explain what the teacher said and discuss how to proceed.

16
B.)
You are a high school senior who is looking forward to graduation.

You currently have a failing grade in history and your parent just had a meeting with your teacher.

Meet with your parent and talk about the conference.

Speaker's Necessity

17
A.)
You are a huge fan of (singer / group). You just heard that they're going to play at the O'Connell center in a few months and tickets go on sale today. You know that the concert is going to sell out in a few hours.

You have to be in class all morning so you won't be able to go get yourself a ticket.

You run into a friend on campus. Try to persuade them to go and stand in line to get tickets for both of you. You've been to a lot of concerts but you still think that (singer / group) puts on the best. You're positive that your friend won't regret it if they agree to go.

17
B.) You run into a friend on campus.
18
A.)
You are waiting in a long line to buy tickets to a Gator football game.

You need to make an urgent phone call.

Ask the person in line behind you to hold your place in line for a few minutes.

18
B.)
You are waiting in line to buy tickets to a Gator football game.

The person in front of you turns to speak to you.

19
A.)
You are a huge fan of (singer / group). You've been to a lot of concerts but you still think that (singer / group) puts on the best. You just heard that they're going to play at the O'Connell center in a few months and tickets go on sale today. You know that the concert is going to sell out in a few hours.

You have to be in class all morning so you won't be able to go get yourself a ticket.

You try to persuade your boyfriend/girlfriend to go and stand in line to get tickets for both of you.

19
B.)
You meet you boyfriend / girlfriend on campus.

20
A.)
You are graduating this semester and applying for local jobs. You just learned of a new job opening.

Approach your professor and ask them to write a letter of recommendation for this job application. The application deadline is in five days.

20

B.)
You are a professor. One of your graduate students approaches you to ask you something. You have a very busy schedule.

APPENDIX B
TESTS

First Language: _____
Years/months of English instruction: _____

The purpose of this test is to help with research into the acquisition of English. You will not receive a grade for this test. The results of the test will be kept confidential.

PLEASE COMPLETE THE TEST BY YOURSELF. DO NOT WORK WITH A FRIEND. DO NOT CHECK A GRAMMAR BOOK. PLEASE TAKE 10 TO 15 MINUTES TO ANSWER THE QUESTIONS.

I- Read the situations below and rate the answers, according to what **you** would say. Put a ✓ in the square next to the number that best describes the appropriateness of the sentence for that situation. The numbers correspond to the following rating:
1 very appropriate for this situation
2 appropriate for this situation
3 somewhat appropriate for this situation
4 a little appropriate for this situation
5 not appropriate for this situation

You may choose the same rating for more than one sentence.

EXAMPLE: You are taking a test and you feel like going to the restroom. You come up to the teacher, who is rather formal, and say:

a. May I go to the restroom, please? 1❑ 2❑ 3❑ 4❑ 5❑
b. Could I go to the restroom, please? 1❑ 2❑ 3❑ 4❑ 5❑
c. Can I go to the restroom? 1❑ 2❑ 3❑ 4❑ 5❑
d. I'm going to the restroom. 1❑ 2❑ 3❑ 4❑ 5❑

1- You invited some friends for dinner. You are a great cook and are preparing everything by yourself. You are about to finish the dessert and realize that you forgot to buy a few ingredients. You call your sister and ask her to come to your house to keep an eye on the chicken that is already in the oven. Your guests are arriving in less than an hour. You explain the situation and say:

a. I must go the grocery store. 1❑ 2❑ 3❑ 4❑ 5❑
b. I've got to go to the grocery store. 1❑ 2❑ 3❑ 4❑ 5❑
c. I have to go to the grocery store. 1❑ 2❑ 3❑ 4❑ 5❑
d. I need to go to the grocery store. 1❑ 2❑ 3❑ 4❑ 5❑
e. I'd better go to the grocery store. 1❑ 2❑ 3❑ 4❑ 5❑

2- Your parents are very strict. You have a party this Friday and your father says:

a. You'd better be home by 11 o'clock. 1❑ 2❑ 3❑ 4❑ 5❑

b. You must be home by 11 o'clock. 1❑ 2❑ 3❑ 4❑ 5❑
c. You have to be home by 11 o'clock. 1❑ 2❑ 3❑ 4❑ 5❑
d. You've got to be home by 11 o'clock. 1❑ 2❑ 3❑ 4❑ 5❑
e. You're going to be home by 11 o'clock. 1❑ 2❑ 3❑ 4❑ 5❑
f. You need to be home by 11 o'clock. 1❑ 2❑ 3❑ 4❑ 5❑

3- You're the parent of a 16-year old son/daughter. You've always been pretty liberal about letting your kid set their own hours and make their own friends. However, lately their grades have been very bad at school. You approach your son/daughter to tell them what the new rules are. One of the things you say is:

a. You need to study hard every night. 1❑ 2❑ 3❑ 4❑ 5❑
b. You should study hard every night. 1❑ 2❑ 3❑ 4❑ 5❑
c. You've got to study hard every night. 1❑ 2❑ 3❑ 4❑ 5❑
d. You must study hard every night. 1❑ 2❑ 3❑ 4❑ 5❑
e. You'd better study hard every night. 1❑ 2❑ 3❑ 4❑ 5❑

4- You're a cardiologist. You've just received the results of some tests on one of your patients and this person may be heading towards a heart attack. You are meeting with them to discuss the results of the tests and to give some recommendations. You say:

a. You should change your diet and get some exercise. 1❑ 2❑ 3❑ 4❑ 5❑
b. You must change your diet and get some exercise. 1❑ 2❑ 3❑ 4❑ 5❑
c. You need to change your diet and get some exercise. 1❑ 2❑ 3❑ 4❑ 5❑
d. You have to change your diet and get some exercise. 1❑ 2❑ 3❑ 4❑ 5❑
e. You've got to change your diet and get some exercise. 1❑ 2❑ 3❑ 4❑ 5❑
f. You'd better change your diet and get some exercise. 1❑ 2❑ 3❑ 4❑ 5❑

5- Paul just remembered he has a test tomorrow morning.
When a friend calls inviting him to see a movie, he says:

"I'm sorry I can't come. ...
a. I have to study for a test." 1❑ 2❑ 3❑ 4❑ 5❑
b. I've got to study for a test." 1❑ 2❑ 3❑ 4❑ 5❑
c. I need to study for a test." 1❑ 2❑ 3❑ 4❑ 5❑
d. I must study for a test." 1❑ 2❑ 3❑ 4❑ 5❑
e. I'd better study for a test." 1❑ 2❑ 3❑ 4❑ 5❑

I - Fill in the blanks with the appropriate word (*can, should, may, might, have to, need to, could, be supposed to, must, 've got to, 'd better, ought to, will, be going to*), according to the dialogue situation.

1-(At Federal Express)
A: Hi. I have a problem.
B: What's your problem ma'am?

A: I Fedexed a box to England this morning and it's not supposed to leave till tonight but I forgot to include some information in it. So, I (a) _____ get it back to include the information.
B: Oh. I'm sorry, ma'am but our store warehouse policy states that we can't leave the desk.
A: OK. Is there someone that you can call to get the box? That you can have go to the warehouse?
B: Actually there is no one here around really. Actually, it's gonna be impossible for me to find the box. There are so many boxes.
A: I (b) _____ get this box to put the information in it. And if I send another out with the information there, it'll be there a day after the other one and that'll be too late.
B: I'm sorry but I again have to state our store policy: we can't leave the desk.
A: There's absolutely nothing you can do for me?
B: No.
A: OK.

2- (A married couple is talking)
A: Your dad is turning 70 tonight. And it's kind of a surprise party for him, but also my best friend Carl is leaving Gainesville. And my friends are having a farewell dinner for him also.
B: How can that be more important than my father being 70? It's not like he's 66 or 64 or something. He's 70. It's really important. I've been planning for weeks, all my good friends. This a surprise party. How am I supposed to be standing there without you there? How is your friend more important than my father's 70th birthday?
A: So, you're just telling me I (a) _____ go to my friend's farewell dinner?
B: Absolutely.
A: Right.
B: You (b) _____ go to my father's birthday party.
A: There is no way I could go to both?
A: No. No way.

3- (Two students share an apartment. Lately, there has been a problem with the sharing of the typical household chores: cleaning the bathroom, taking out the trash, doing the dishes, etc. One night while the two roommates are sitting around watching TV, one of them starts up a conversation about how to solve the problem.)

A: You know Tracy, you (a) _____ start cleaning this apartment. This is getting ridiculous. Your shoes are on the floor. The dishes are still in the sink.
B: Oh, I'm sorry. I've been really busy lately in school. You know, I mean. I'm working. I have a job and I go to school.
A: Well, it just takes two seconds to put the dishes in the dish washer.
B: I know. But, I am tired, you know. When I come home, I wanna eat or whatever. I don't feel like cleaning up.
A: But you (b) _____ start thinking about it, otherwise this isn't going to work out.
B: Well, you know, I'll try to clean, at least, keep my stuff in my room but I can't promise anything, I mean, I try to do my best already.
A: What about we just get a cleaning service?
B: It sounds great.
A: OK.

4- (A parent and his/her teenager son/daughter are talking. The teenager is running the risk of not graduating in high school because of history).

A: Honey, I talked to your teacher today and she said that you have to get an A on your history final to graduate in the class.

B: Oh, gosh. I knew this was gonna happen.
A: Did you?
B: I've been studying, you know. I haven't had dates, but history is so boring. And I hate the teacher. You don't understand. She doesn't like me. She hates me.
A: Oh, the most important thing is for you to graduate. History is a requirement. You (a) _____ study every night till your history final. You're not gonna go out, you're not gonna go to cheerleading practice. You're gonna study with me. And we're gonna get an A on this final.
B: OK. I guess graduation is more important.
A: Thank you.

5- (A lot of people are waiting in line to buy tickets to a Gator football game. A person turns and asks a stranger a favor.)

A: Hey, listen. I (a) _____ make phone call. My bipper went off and I (b) _____ call my work. Could you hold my place in line for a few minutes?
B: Sure.

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Deise Prina Dutra was born on June 6, 1964, in Presidente Prudente, Brazil. She graduated from the University of São Paulo with both a Bachelor of Arts and a Teaching Certificate in English and Portuguese in 1989. She received a Master's Degree in Linguistics from the University of Illinois at Chicago in 1993. In the fall of 1993 she started a doctoral program in Linguistics at the University of Florida. As a graduate student, she has taught English as a second language at the English Language Institute at the University of Florida. She was recipient of a College of Liberal Arts and Sciences Dissertation Fellowship in summer 1996 and of a Florida-Brazil Institute Tuition Exemption Award in spring 1998.