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**Lexical access in bilinguals: The case of English-based Spanish
calques**

Garro, Luisa Costa, Ph.D.

City University of New York, 1992

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LEXICAL ACCESS IN BILINGUALS:
THE CASE OF ENGLISH-BASED SPANISH CALQUES

by

Luisa C. Garro

A dissertation submitted to the Graduate
Faculty in Linguistics in partial fulfillment
of the requirements for the degree of Doctor of
Philosophy, The City University of New York.

1992

c 1992

Luisa Costa Garro

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This manuscript has been read and accepted for the Graduate Faculty in Linguistics in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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ABSTRACT

LEXICAL ACCESS IN BILINGUALS:
THE CASE OF ENGLISH-BASED SPANISH CALQUES

by

Luisa C. Garro

Adviser: Professor Ricardo Otheguy

Bilinguals in a language contact situation tend to acquire new usages for words in their native language (L1). These new features range from code-switching, a clear shift from forms of L1 to forms of L2 (e.g. Le pusiste el filling? 'Did you put the filling?'), through borrowing, where L2 forms are still detectable (e.g. Busco una casa furnida 'I'm looking for a furnished house'), to calquing, a more subtle type of change that involves only L1 forms (e.g. Corrió para gobernador 'He ran for governor', where the original form corrió in Spanish only means 'physically run'). In calquing, the words of L1 are used by contact bilinguals in a manner different from that of monolingual speakers of non-contact varieties. This study investigates the psycholinguistic reality of

English-based calques in contact Spanish with a semantic priming task (cross modal naming) that examines underlying changes of lexical representation for calque words in Spanish-English bilinguals. This task is used to determine (a) whether the meanings of calque words are linked to English-origin senses, confirming that its semantic representation is different from that of the same lexical item in the monolingual non-contact speaker, and (b) whether calque words exist as stable lexical items in the speech of bilinguals. Both questions focus on the nature of the change in the lexical organization of contact bilinguals.

Priming words related to calqued senses (correr/elección) and standard senses (correr/ejercicio) are compared for bilinguals and non-contact Spanish monolinguals in a reaction time (naming) paradigm. Response time differences between populations revealed that the calqued senses were primed through contact Spanish specific associations, supporting our claim that the lexical organization of bilinguals has changed in their L1. The size of the bilingual priming effects for calque pairs was as large as the one for the non-calque pairs, which confirms the internalization of the new lexical items in the bilingual lexicon. The results on

different calque types showed that the lexical access of calques is facilitated by phonological form, but not by semantic transparency. These findings were interpreted as supporting the table look-up model of lexical representation.

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Luisa Costa Garro

March 18, 1992

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CHAPTER 1

INTRODUCTION

When two or more languages come into contact, one, some, or all of them will undergo changes, with the more prestigious language usually influencing the less prestigious ones. The locus of the change in language contact situations is the speaker, a fact that is relevant to stress in this study, given its psycholinguistic nature. Speakers change their languages in different ways. In a non-contact situation, monolinguals adapt their language to serve new needs; in a contact situation, bilinguals behave as monolinguals do, but they also look into other languages in order to make use of the elements these languages readily provide. As a result, the bilinguals' first language is influenced by their knowledge and proficiency in their second language.

When bilinguals deviate from the monolingual norms of the languages they speak, linguistic studies have labelled this phenomenon interference (Weinreich 1953:1; Mackey

968:569; Grosjean 1982:299).¹ The term interference, though, has a negative connotation; in its place, we will use the term interinfluence, which better reflects the linguistic process it describes. One type of interinfluence is calquing, a process which has been studied sporadically in the past (Betz 1949; Migliorini 1948; Sandfeld 1912; Wagner 1952). Lately there has been an increased interest, which has produced several linguistic and sociolinguistic analyses (Daiuta 1984; García, Fishman, Gertner, and Burunat 1985; Granda 1979; Gusmani 1974; Montes Giraldo 1985; Nash 1979, 1980; Otheguy 1982, 1983, 1989, in press; Otheguy and García 1988; Otheguy, García, and Fernández 1989). None of these studies, however, offers a psycholinguistic approach to calques.

As a habitual user and creator of calques in Spanish, this author wondered about the linguistic characteristics of calque words, but more so about their psycholinguistic reality. Were bilinguals able to access meanings across languages? If so, what happened to the meanings once they were retrieved? Did they become a permanent part of the

¹ The linguistic influence of a second language on the first has also been called "first language attrition" by Seliger and Vago (1991), the title of a recent collection of articles about the topic.

meanings in the recipient language? If the calque meaning did become a stable part of Spanish lexical items, was this the reason why the calquing behavior did not interfere with effective communication? Were some types of calques easier to access than others? The main purpose of this research was to obtain more information relating to these questions.

Specifically, our study will focus on two psycholinguistic questions:

- a. Does a Spanish calque word contain senses which are psychologically linked to the senses of the model English word, confirming that its semantic representation is different from that of the same lexical item in the monolingual non-contact speaker?
- b. Do calque words exist as stable lexical items in the speech of bilingual Spanish contact speakers?

Both questions focus on whether the lexical organization of bilinguals has undergone demonstrable psycholinguistic changes as the observed new usages in the impacted language seem to indicate. In formulating our

questions, we use the notion of "sense" described in most current semantic theories in terms of the lexicographers' notion of small component units of meaning in a lexical entry. So when we talk about a calqued sense in a Spanish word, we rely on a componential notion of lexical meaning. By contact and non-contact speakers, we mean bilingual contact speakers and monolingual non-contact speakers. In a contact situation, there are two group of speakers who speak the contact variety: bilinguals and monolinguals. The monolinguals adopt and spread linguistic features into their native language modelled on the usage of bilinguals with whom they are in contact (Gingrás 1974; Mackey 1968; Samuels 1972; Stewart, personal communication). For our purposes, we are interested in bilinguals who are proficient in two languages and in monolinguals who have not been exposed to the contact variety. The monolinguals who speak the contact variety will not be included in this study.

The first question in (a) above relates to the semantic link between the model word in the speakers' L2 (English) and the calque word in their L1 (Spanish). By definition, a calque is a word in L1 that acquires a new usage modelled on L2. The criterion for considering words as calques is that they be Spanish lexical items already

existing in the standard language, but which have acquired new foreign-inspired usages. In contact Spanish, dura is being used in the manner of its English model hard, as in (1). Yet dura is also a lexical item in standard Spanish with usages other than those of the English word hard.

- (1) Voy a una escuela que tiene fama de
 ser muy dura.
 I go to a school that has the
 reputation of being very hard.

The semantic link between the presumed new sense [difficult] in the calque word dura and its model sense in the model word hard has not been experimentally demonstrated.² We applied a priming methodology (to be described below) in order to detect whether the sense [difficult] calqued from the English hard has been incorporated into contact Spanish dura. Calque pairs (e.g. dura-difícil) were devised to verify whether the calqued sense is activated by the presumed new English sense. And to produce a controlling comparison, standard Spanish pairs (dura-firme) were devised to verify whether the standard sense is activated.

Not all researchers agree that a calque usage as dura in (1) is externally induced, i.e. a consequence of

² We will use brackets as a semantic marker notation for new calqued meanings.

English influence. Some of them argue that, in many cases, the new usages could have developed on the basis of existing senses and are internally motivated. Otheguy (1989), for example, concedes that some calque words have undergone systemic changes and are true instances of contact. But he maintains that many of what appear to be calques are simply new usages representing cultural, not linguistic, change. In this view, calque usages can exist that do not reflect underlying alterations in the lexical structure of the impacted language.

This study sees calques as a product of language contact because their creation is either inspired by another language, i.e. that particular calque usage would not have occurred had it not been for the model in the source language, or the model in L2 accelerated an internal change which produced the calque. Whichever way we look at the process, it is the language contact situation, i.e. the presence of the model sense in L2, that fosters the creation of the calqued usages in L1. Regardless of how calques come about, we will assume for the purpose of this investigation, and contrary to Otheguy (1989), that all new calque usages reflect the rise of a new semantic link between the model word in the source language and the calque word in the recipient language.

Furthermore, we will propose that calque words are, in each case under study, an instance of linguistic interinfluence, revealing a merging of semantic systems at the lexical level. Evidence of this has been provided by some linguistic studies on United States Spanish (Klein 1980 and Silva-Corvalan 1986 in the Spanish verb system; Jagendorf 1988 in the Spanish article system), confirming Weinreich's (1953:9) suggestion that "for a bilingual, the two semantic systems in contact merge into a single system".

As we shall see, the results of our investigation will demonstrate that the new calqued senses found in the words of contact Spanish are linked to the senses of English model words, shattering the hopes of those researchers who want to keep a purist position in defense of the integrity of the Spanish language (Alfaro 1970; Perez Sala 1973, among others). Living in the United States, bilinguals are even under more social, economic, and linguistic pressure than Spanish speakers in Spain, where Pratt (1980) has been able to provide an in-depth analysis of English influence even in Peninsular Spanish. It would be too much of a coincidence that the source of the new calqued senses in the Spanish of the United States

were not the English language, the closest and undoubtedly the most powerful Spanish neighbour.

The second question in (b) above, whether calque words have become a stable part of the inventory of the bilinguals' vocabulary, explores the psycholinguistic stability of the new senses. Calques are unstable at the beginning of the language contact process and are gradually integrated into the language. Bilingual speakers seem to go through a learning process of the calqued senses. At the beginning of the bilinguals' immersion in a highly bilingual environment, they experience a bit of confusion, like monolinguals do when they first hear calques. They recognize the word because it is a regular Spanish word, but tend not to understand its new usage. Somehow the sense pertaining to this new usage is not accessed right away, and the bilingual has to translate the word into English in order to understand it. The calquing process does not seem to take place anew, rather once it happens a few times it is frozen in the bilingual's mind. Then, the new sense becomes a permanent part of the meanings for the impacted lexical entry. Thus, calques are first fleetingly produced, but once they are learned they become a permanent part of the inventory of meanings. Historically, many lexical items that started

off as calques have become part of the lexicon, e.g. English calling from Latin vocatio (Stewart, personal communication). Many of the calque words presented in this study might have the same fate.

Our two assumptions --that there is a semantic link between calque word and model word and that the calque word is now stable-- predict that there will be demonstrable differences between the mental representations of the lexicon of bilinguals and monolinguals. This prediction will be confirmed with a psycholinguistic test that is presented in Chapter 5. The differences in response time between calque pairs of the type duro/difícil and standard Spanish pairs of the type duro/firme will depend on whether the subjects are or are not bilingual speakers. The results of the priming study will be used to shed light on the questions mentioned above and on their psycholinguistic implications for a mental representation of calques. The scope of the study is limited to the detection of new meanings in the lexicon repertoire, which would imply a change in the lexical organization of bilinguals. At the same time, the results of this investigation may indirectly bear on some issues in bilingual lexical access.

Summarizing, the analysis that we propose is that the lexical semantic system in the Spanish of bilinguals has changed due to the influence of English. That is, something new has been added to the lexical items in the speaker's native language. In our case, English-Spanish bilinguals have added an extra sense to their native Spanish words, and it will be shown that this calqued sense is susceptible of testing at a psycholinguistic level. Furthermore, not only are new senses deployed in Spanish words, but also the intuitions of bilinguals who use contact Spanish are different from the intuitions of monolingual speakers of standard Spanish. Evidence to support this will come from the results of the rating task that we devised.

Chapter 2 discusses the literature relevant to language interinfluence. It will deal with the question of linguistic levels of interinfluence: code-switching, borrowing, and calquing, and how we can differentiate between them. We place calquing in a comparative structure with other similar language-contact processes to best define its linguistic characteristics. Chapter 3 reviews the literature related to psycholinguistic theories and experimentation in the area of lexical access. Evidence is presented from studies where priming has been successful

in detecting meaning links across languages. The purpose of this chapter will be to show that priming is a useful psycholinguistic tool to verify calqued senses in contact Spanish words.

Chapter 4 describes the preparations for the study. It explains how the questionnaires and the materials for the experimental tasks were devised and outlines the procedures to establish the final corpus. Chapter 5 describes the study itself, which consisted of the priming task and the rating task. The priming task tested the psycholinguistic reality of calques in English-Spanish bilingual and Standard Spanish monolingual subjects. In the rating task, both groups of subjects reported their usage on calques. The chapter continues with the presentation of the results, which confirmed the existence, for the bilingual subjects, of the calqued sense in Spanish words. The chapter concludes with a general discussion of the findings and how they can be explained in terms of a theory of bilingual lexical access and the levels of interinfluence proposed in Chapter 2.

CHAPTER 2

LANGUAGE CONTACT PHENOMENA

This chapter will review the literature on language contact phenomena at the lexical level and will present a framework of analysis for the general process of interinfluence. This framework was developed for the placement of calques in that structure. First, we will describe interinfluence and then the three proposed levels of contact-induced lexical change: code-switching, borrowing, and calquing.

1. Interinfluence

When placed under a language contact situation, speakers effect changes in their languages in different stages and in different degrees. These changes have received various labels including interference, convergence, and transfer. In this study, we will look at the literature on interference as representative of the three labels for this phenomenon. As mentioned before, we will use interinfluence as a cover term to include all contact-induced changes. The language that causes a change will be called source language or L2. The language that

undergoes the change will be called recipient language or L1.

Interference has been described as the overall process triggered by language contact. It can either become a permanent feature of the recipient language or be a transient process of intruding elements that accidentally appear in the languages of the bilingual. Weinreich's definition is an example of the first notion, and Mackey's and Grosjean's of the second.

Those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language.

(Weinreich 1953:1)

Interference is the use of features belonging to one language while speaking or writing another.

(Mackey 1968:569)

The involuntary influence of one language on the other.

(Grosjean 1982:299)

Weinreich describes interference as the general process of language change due to language contact, focusing on the speaker as the locus of the change. Weinreich (1953:3) adds that any interference phenomenon can be permanent or transitory, a characteristic that depends on extra-linguistic factors such as the speaker's "relative proficiency in each language, the speaker's

facility of verbal expression in general, specialization in the use of each language by topics and interlocutors, etc."

In contrast to Weinreich, Mackey and Grosjean regard the phenomenon of interference as always transitory and analyse it only from the point of view of the language, leaving the speaker aside. They portray the bilingual as a passive element in the contact situation. At first Mackey's definition does not seem to differ much from Weinreich's. But differences emerge when Mackey distinguishes the domain where interference occurs. He characterizes interference as a feature of "parole" and contrasts it with borrowing, which is a feature of "langue". Also Grosjean refers to interference as a transient process attributed to performance factors and equates it with "involuntary borrowing". He states that the "true" bilingual "could be characterized as having no permanent interference (1982:300)". Poplack & Sankoff (1984:99) too describe interference as "a momentary lapse". At one end of the continuum they place interference, and at the other integration (or borrowing). Silva-Corvalán (1991:151) also mentions a bilingual continuum, similar to a creole continuum, when describing the individual "lects" that are found in bilingual

speakers. She describes these lects as dependent on the level of L2 proficiency so that it is "possible for an individual to move or be moving toward one or the other end of the continuum at any given synchronic stage of his life".

Our approach to interference will be in line with Weinreich's characterization, i.e emphasizing the central role of the speaker in the language contact situation and stressing the permanent presence of contact features in all bilinguals. In particular, we will look at how interference at the lexical level represents the importation from another language of a dictionary sense that was not there before. This introduction of contact features, which we call interinfluence, will include all the various lexical changes (or levels of change as we will call them) that result from language contact.

In this study, interinfluence will be subdivided into: code-switching, borrowing, and calquing. These three levels are outlined in Table 1. The bottom line is the recipient language (L1) and the top line is the source language (L2). The three levels in between these two parameters will correlate with different degrees of

influence according to their distance from the source language (L2).

Table 1.
Levels of Interinfluence

Language 2	School is hard
Code-switching	La escuela <u>is</u> hard
Borrowing	La escuela es <u>arda</u> (or <u>jarda</u>) ¹
Calquing	La escuela es <u>dura</u>
Language 1	La escuela es difícil

The proposed levels of interinfluence stretch from the level of code-switching, where the speaker is obviously changing from one language to the other; to borrowing, where the words or phrases in L2 are dressed up with the phonology and morphology of L1 to look like members of L1; and to calquing, the more subtle use of a second language (L2) in the speaker's first language (L1). The levels of interinfluence are sometimes not distinctly separate. For example, nurse [nɜːs] in 'La nurse viene enseguida' (The nurse will come quickly) can either be labelled as a one-word code-switch or a phonologically and morphologically unassimilated borrowing. Also carpeta in 'La carpeta eliminó el ruido de las pisadas de los vecinos' (The carpet muffled the footsteps from the

¹These borrowings do not occur in an English-influenced Spanish, but, if they did, these are their probable shapes.

neighbors above) is borderline between a calque and a phonologically and morphologically assimilated borrowing. This difficulty in distinguishing among levels of language contact phenomena is a persistent problem in the literature. Poplack (1987:53) notes it when examining different contact phenomena. She agrees with Haugen's proposition that bilingual phenomena be located along a continuum of code distinctness: switching at one end of the spectrum representing maximal distinctness and borrowing (or integration) at the other end representing maximal levelling of distinctions. Haugen does not mention calquing as another level because he subsumes it as part of borrowing.

Poplack (1987) argues that theoretically these categories of contact phenomena are reasonable, but that in real life bilingual behavior is not so easily classified. Otheguy and García (in press) collapse these three types of interinfluence as "contact neologisms". In their analysis of linguistic contact in US Spanish, they stress the importance of the speakers' "need to reach for English meanings while talking in Spanish", and they put aside "the question of whether these English meanings come into Spanish along with their English forms (as in switching and borrowing), or lodge themselves in Spanish

forms, as in calquing". An attempt will be made here to bring some clarity to the differentiation between these three types of interinfluence.

The majority of studies on language contact have dealt with the first two levels of interinfluence: code-switching and borrowing. The third and last level of interinfluence, calquing, has sparked less interest and has been subsumed under borrowing most of the time. Below, we will look individually at all three levels of interinfluence. Each of the following sections will present a review of the literature, followed by our own proposals. We will not pursue the issues pertaining to long stretches of speech. Instead our focus will be single-item lexical forms.

2. Code-switching

In code-switching, the change in the speech of bilinguals involves the overt alternation between two languages. This view of code-switching is mostly agreed upon in the literature:

Code-switching may be defined as the alternation of linguistic codes (...) the alternation of grammatical rules, drawn from two different languages, which occurs within sentence boundaries.

(Gingrás 1974:167)

Code-switching can be defined as the alternating use of two languages on the word, phrase, clause, or sentence level (...) [with] a clean break between phonemic systems.

(Valdés-Fallís 1978:1)

Code-switching is simply the alternate use of the two languages in discourse, and even in a sentence, without any necessary influence of one language on those stretches of discourse realized in the other.

(Poplack and Sankoff 1984:102)

The following sentence taken from English/French code-switching in Canada will exemplify the above definitions:

(1) Faut que tu pack your own au Basics.
'You have to pack your own at Basics.'

(Poplack 1987:65)

Whether the languages are affected as a consequence of this alternation is not clear. When the languages are typologically similar, as in Spanish/English or French/English code-switching, the two languages remain unaffected by each other. But in typologically different languages, code-switches come closer to violating the patterns of one or both of the languages (Berk-Seligson 1986; Poplack, Wheeler, and Westwood 1987). Whether bilinguals display a propensity toward code-switching

rather than borrowing is also said to be typologically determined (Poplack, Wheeler, and Westwood 1987). In the case of Spanish/English, code-switching is more frequent because it is smooth and occurs at many permissible boundaries due to the similarities between the languages. But in the case of Finnish/English bilingualism, borrowing, not code-switching, is more productive because the two systems are typologically different. Code-switching would have more likely led speakers to violate the grammar of the languages.

Types of code-switches

Code-switches have been classified as: tag, sentential, and intrasentential (Poplack 1987:55). Examples of each are given below from the speech of Finnish/English bilinguals in Finland, and from Spanish/English among Puerto Ricans in New York and among Mexican/Americans in the Southwestern United States, respectively:

Tag:

- (2) Mutta en ma viittinyt, no way!
 But not-lp. I bothered,
 'But I'm not bothered, no way!'
 (Poplack, Wheeler & Westwood 1987:40)

Sentential:

- (3) You didn't have to worry que somebody te iba a tirar con cerveza o una botella or something like that.
 'You didn't have to worry that somebody was going to throw beer or a bottle at you or something like that.'
 (Poplack 1981:170)

Intrasentential:

- (4) El cabrón se puso jealous.
 'The bastard got jealous.'
 (Pfaff 1979:305)

Sentential and tag switching occur at definite and clear points in the discourse since they divide grammatical units. The intrasentential type of code-switching as in (4), however, has been the most difficult to characterize since it can happen anywhere in the sentence. It has been proposed that the realization of this type of mix is not haphazard, but rule-governed. Pfaff (1979) and Poplack (1981, 1982), among others, have reported that switches are subject to different syntactic constraints and discourse strategies at the word, phrase, and clause levels in a highly patterned behavior. Other authors, however, have questioned some of these constraints. For example, Berk-Seligson (1986) found that Spanish/Hebrew bilinguals often violated the equivalence of structure constraint but rarely violated the free morpheme constraint. In her data, most code-switching

errors involved the absence of a determiner, which violated Spanish syntax.

All three types of switches mentioned above have been described as flagged or unflagged. Poplack (1987) and Poplack, Wheeler, and Westwood (1987) maintain that they are flagged in the speech of French/English bilinguals in Canada, as in (5), mostly for rhetorical purposes; whereas in the speech of Puerto Ricans in New York the switches between Spanish and English are smoothly woven together at imperceptible points, as in (6).

- (5) Je suis un peu trop anglicisé,
anglifié, anglified.
'I'm a little too anglicized,
anglified, anglicized.'
- (6) So you todavía haven't decided lo que
vas a hacer next week.
'So you still haven't decided what
you are going to do next week.'
(Poplack, Wheeler, and Westwood 1987:34-35)

Even though Poplack, Wheeler, and Westwood (1987:34) state that "switches are usually not preceded or followed by hesitations or pauses" in the speech of English/Spanish bilinguals, Mahecha (1990) has found that these bilinguals can perceive when a switch is about to occur. Since Puerto Ricans also give a perceptible signal when they are going to switch, it is suggested that Spanish/English code-switching too is always flagged.

3. Borrowing

Of the three types of interinfluence, borrowing has been dealt with in the literature for the longest time. Whitney (1881) was one of the first to comment on the borrowing process. But it has sometimes been confounded with the process that encompasses it, namely the one we call interinfluence, and has not been individualized within that process. For example, Mackey and Haugen give the following definitions of borrowing that could just as well describe interinfluence:

Features of one language are used as if they were part of the other.

(Mackey 1968:569)

The process that takes place when bilinguals reproduce a pattern from one language in another.

(Haugen 1972:105)

In what way does Mackey's definition differ from the one he gives for interference as "the use of features belonging to one language while speaking or writing another"? In terms of the description, both are saying the same thing: that the two languages are sharing features which would not normally be shared had it not been for the contact situation. Mackey does state though that their domains are different: interference is a feature of parole, and borrowing, of langue. However, we

disagree with this differentiation, as we discussed before.

Haugen (1972:80) uses the term borrowing to replace mixture. His definition portrays the general process, and it describes what we have been referring to as interinfluence, not borrowing. Whitney (1881: 14) also equated borrowing with mixture and acknowledged only the borrowing of "the grosser elements of speech", exempting the grammar from intrusion. On the other hand, Weinreich (1953) and Grosjean (1982) define borrowing quite specifically:

Borrowing results in mere additions to an inventory.

(Weinreich 1953:1)

Interferences at the word level are ... lexical borrowings.

(Grosjean 1982:302)

Their notions only focus on the lexical level, which is our aim in this study. But they admit that borrowings can occur at the phonological, morphological, and grammatical levels as well.²

² Sapir (1921) argued, as Whitney (1881) had done earlier, that morphology, as it relates to the syntax of the language, is not borrowed. However, studies on grammatical borrowings (Jagendorf 1988; Silva-Corvalán 1986) show that language contact affects all aspects of language.

More recently, Thomason and Kaufman (1988:37) defined borrowing as "the incorporation of foreign features into a group's native language by speakers of that language" in line with Weinreich's and Grosjean's definitions. They contrasted borrowing with substratum which they described as "a subtype of interference that results from imperfect group learning during a process of language shift". They stress that the difference lies in the area of impact: rather than affect the vocabulary as in borrowing, substratum affects the phonology and the syntax of the language.

Types of borrowings

Haugen (1950, 1953) divided borrowings according to their extent of morphemic substitution: none, partial, or complete. In his terminology, loanwords do not substitute but import morphemes, as in American English shivaree imported from French charivari. Loanblends partly substitute and partly import, as in Pennsylvania German blaumepai. Blaume has been imported from German and the English morpheme pie has substituted the German form. Loanshifts (i.e. loan translations and semantic loans) show complete substitution without importation. For example, Spanish rascacielos was modeled on English

skyscraper. The native morphemes completely substituted the foreign ones. In our classification, Haugen's loanblends are considered loanwords, and his loanshifts are the equivalent of our calques.

More recently, Pratt (1980) presents an exhaustive classification of borrowings labelled "lexical anglicisms". He divided them into obvious and not obvious anglicisms ("anglicismos patentés y no patentés"). The first type has either not changed its English morphology (e.g. sidecar) or has been adapted to the Spanish orthographical rules (e.g. boicot). The second type includes new forms that reflect a new invention or concept (e.g. cosmética), which did not previously exist in the recipient language, and also traditional forms (the ones we call calques) which are already Spanish words (e.g. agresivo with the meaning [active, dynamic, entrepreneurial]).

In this study, we consider borrowing as synonymous with loanword. Each term looks at the same process from a different point of view and direction of influence. The term loanword describes L2 as the lender. L2 gives a word on loan to L1. Borrowing describes L1 as it appropriates a word from L2. The borrower, L1, is going into L2 to take

a word. The speaker's role in both actions is similar: he either takes a word on loan, or he borrows one. There is not more or less emphasis on the speaker by using the terms loanword or borrowing. In our analysis of Spanish/English contact, we use the term borrowing and divide borrowings into two types: those that retain the original phonology and morphology of the source language, as in (7), and those that are modified in conformity with the recipient language, as in (8). The former will be called phonologically and morphologically unassimilated borrowings. The latter will be called phonologically and morphologically assimilated borrowings.

(7) nylon [náylon] steam [stim]

(8) nilón [nilón] estím [Estím]

Usually borrowings fill in semantic gaps as in nylon, which is a relatively recent coined term to describe a new type of material derived from petrochemical products. In the case of steam, Spanish has the equivalent word vapor. But Puerto Ricans in New York have never lived in a cold climate and are suddenly overwhelmed by the amount of new experiences they do not know how to name, even if Spanish has words for these items. It is easier for them to use the words that the new environment readily provides. This is similar to what Haugen (1972) recounted about Norwegian

The quantitative analysis done by Poplack, Sankoff, and Miller (1988) found that speakers integrate well-established loanwords, as in (11), more than they do nonce borrowings.

- (11) Puis les parents ont jamais voulu
qu'ils la dépluggent, mais elle est
/deplôg/
morte quand meme là.

'And the parents never wanted them to
unplug her, but she died anyway'.
(Poplack, Sankoff, and Miller 1988:52)

Nonce borrowings (e.g. copér) and well-established loanwords (e.g. dépluggent) have been contrasted in terms of acceptance in the community and frequency of use. Momentary or nonce loanwords are not widely accepted nor used by the community, and their frequency and acceptability criteria are unclear or nonexistent. Well-established loanwords are widely used in the speech community, recur relatively frequent, and have achieved a certain level of recognition or acceptance, if not normative approval. A key feature distinguishing nonce from established loans is that nonce borrowings can rarely be attested in a written source, as in a dictionary for instance.

Unassimilated nonce borrowings (e.g. nursing home) are difficult to differentiate from one word code-switches

(e.g. anglified). The smaller the switched constituent, the more difficult it is to decide whether it is a code-switch or a borrowing. Evidence from typologically different language pairs, as in Finnish/English, strongly suggests that these two types of language contact phenomena are in fact distinct. Poplack, Wheeler, and Westwood (1987) suggest that the occurrence of nonce borrowings is more productive in the conflicting typologies of Finnish and English, outweighing code-switching by a factor of at least 5:1. But when the two languages are typologically similar, like French-English, noun morphology is frequently null, and the word order is very similar. Therefore, a one-word switch and a nonce borrowing are almost indistinguishable, except that code-switches are often accompanied by translation, metalinguistic commentary, and other flagging devices, such as false starts and pauses (Poplack and Sankoff 1984:93). This characteristic might turn out to be the key feature in distinguishing one-word switches from nonce borrowings.

Table 2 will help clarify where each type of borrowing stands in the levels of interinfluence we have considered so far.

Table 2.
Types of Borrowings

Unassimilated Borrowings

Flagged: code-switch 'anglicisé, anglifié,
anglified'
Unflagged: nonce borrowing 'nursing home'

Assimilated Borrowings

Unattested: nonce borrowing 'coper'
Attested: anglicism 'dépluggent'

A code-switch can be distinguished from a nonce borrowing in that a code-switch is flagged either through translation, metalinguistic commentary, or other perceptible cues, whereas a nonce borrowing is not flagged. Assimilated borrowings may be distinguished from a nonce borrowing because nonce borrowings are not attested in a written source, whereas established borrowings --usually labelled "anglicisms"-- appear in dictionaries.

4. Calquing

Calquing is a subtle type of language contact phenomena, which has been studied mostly as a part of borrowing and seldom in its own right. Bowen (1975) lists the different types of borrowings from English into the Spanish of San Antofito, New Mexico. One of his headings

is semantic adaptations, which he describes as borrowings as they affect meanings. He states that "sometimes the loan is a form, but under this classification it is usually an idea adapted to a native form". Haugen (1953) also includes loanshifts --his term for calques-- as a type of borrowing. One of his examples is Spanish rascacielos modeled on English skyscraper. Also Pratt (1980) follows Haugen's classification and includes calques as a subgroup of borrowings.

Weinreich (1953:47-48), on the other hand, separates "the outright transfer of the phonemic sequence from one language to another" (borrowing) from "the extension of the use of an indigenous word of the influenced language in conformity with a foreign model" (calque). An example of the latter is ministro 'cabinet official', which in Colorado Spanish has acquired a new meaning [protestant ecclesiastic] on the model of English minister. Otheguy (1983) too makes a distinction between calques and borrowing. In the case of borrowings, contact speakers borrow meanings together with the words that carry those meanings. In calquing, they use the words from one language with meanings from words of another language. The inference here is that calquing adds a dictionary meaning that wasn't there before, affecting the dictionary entry

for the impacted lexical item. Otheguy's examples are from the New York Times: English junta and guerrilla are loans from Spanish; discourses (modeled on Spanish discursos) 'speeches' and patronized (modeled on Spanish patrocinar 'to sponsor') are calques.

The examples that Weinreich and Otheguy give for calques are unfortunate because the phonemic sequence in Spanish ministro and English discourse could be considered an outright transfer from L2, this being one of those cases where the dividing line between borrowing and calque becomes fuzzy. More fine grained is Haugen's (1953:391) distinction between loanwords and loanshifts (or calques) which is based upon "the extent of substitution: loans which import part or all of the phonemic shape of the foreign word and loans which do not". Otheguy and García (1988) and Daiuta (1984) echo Haugen's distinction even if their theoretical frameworks differ. For Otheguy and García (1988:213), both loanwords and calques share the motivation that speakers have in creating them: "...none of the traditional words of Spanish [the recipient language] --at least those [words] the speaker knows-- quite express the American message..." Otheguy and García use a communicative theory to account for lexical innovations, which is their cover term for

borrowings and calques. They state that these lexical innovations copy the usage of the source language. Their separation of calques from borrowings relies on Saussure's theory of linguistic signs, which are divided into a signal and a meaning. This is similar to the way Daiuta (1984:73) separates form and content in her language constructs. She contrasts calques and loanwords in the following way: "Loanwords enter the recipient language via the outright transfer of some form-content construct of language X into language Y, whereas calquing involves the transfer of language X content alone, using the forms of language Y to render the content". Daiuta (1984) differentiates calques and borrowings on the basis of a theory of translation: the calquing process involves some kind of translation, but the borrowing process does not.³ Regardless of their theoretical backing, both Daiuta (1984) and Otheguy and García (1988) agree that calques transfer foreign meanings into native forms, while borrowings transfer both foreign forms and meanings.

In all comparisons of borrowings and calques, the emphasis is the nature of the form: whether it is a form in the recipient language or not. Calques are different

³ Daiuta (1984) is devoted to the exploration of the nature of this translation process mostly in the calquing of long stretches of speech.

from unassimilated borrowings in that calques are stable lexical items and lack any overt foreign material, as in (12). On the other hand, unassimilated borrowings are not part of the lexicon and are obviously foreign, as in (13).⁴

(12) El barrio donde vivo es callado.
'The neighborhood where I live is quiet.'

(13) Voy al roof.
 /rUf/
'I'm going to the roof.'

In some cases, however, the line between assimilated borrowings and calques is difficult to draw. Rufo is an assimilated borrowing from English roof, and it is clearly a borrowing because it does not appear in the Spanish inventory of lexical items. On the other hand, Spanish carpeta, a calque that is phonologically similar to the English model carpet [rug], could be classified as a borrowing too because it could be argued that the phonological form as well as the meaning is being borrowed. For example, Weinreich (1953) considers Spanish grosería (modeled on English grocery [store]) a loanword, but Haugen (1972) categorizes it as a loan homonym which is a type of loanshift or calque, where only the meaning has been borrowed.

⁴ The examples where no source is mentioned are my own.

Also Haugen (1953:390) attributes the borrowing of a new meaning in Portuguese humoroso [capricious] to its phonetic similarity to the word in English humorous, but the fact that the calque and its model have the same phonological form in both languages could be only an accident. Some scholars do not consider the similarity of the phonological form in both languages one of the reasons that triggered the extension of meaning. They argue for the same reason, whichever it may be,⁵ that gave rise to (12), where Spanish callado is not phonologically similar to the English model quiet. By the way we have defined calques as members of the stable vocabulary of a language, cases such as Spanish grosería and Portuguese humoroso would belong to the category of calques, not to the category of borrowings.

Calquing is a language contact phenomenon that has been given many labels and definitions. Otheguy (1989) gives an overview of the definitions of calques and the problems with the terminology used to describe them. He lists the variety of terms that have been used to refer to this phenomenon: loan translation, loanshift, semantic extension, modeling, calque, semantic borrowing, semantic

⁵For a thorough analysis of the factors that can give rise to contact-induced changes, see Thomason and Kaufman (1988) and Pratt (1980, Chapter 6).

loan, semantic reassignment, loan homonym, loan synonym. These terms do not indicate any difference of scope. On the contrary, they all refer to the same contact-induced language change.

The label "calque" is used for long stretches of speech, such as llamar pa'trás 'to call back', or for individual lexical items, such as asistir 'attend' (Amastae:1989). The term calque is frequently used in analyzing pidgin and creole languages, where calquing is a widespread phenomenon. For example, Holm (1988:86-87) defines it as "a process whereby words or idioms in one language are translated word-for-word (or even morpheme-by-morpheme) into another". He mentions extreme cases of calquing where, "by a universally logical analysis, units of meaning are lexicalized, e.g. 'male child' for 'son'". In a way, pidgins and creoles are extreme examples of language contact, where otherwise more subtle linguistic influences occurring in stable bilingual environments become quite evident.

Sandfeld (1912) was one of the first linguists to use the term calque. It is derived from the French verb calquer 'to copy' or 'to trace'. It conveys the image of an active process on the part of the bilingual speaker who

copies or traces a meaning from a form or a whole string, molding it into its own language. The bilingual goes through the form of the source language, copies the meaning, and subreptitiously uses it with stable lexical items from the recipient language. A calque describes the process itself, not a state, such as a loan homonym for instance. Therefore, the term gives a concrete and striking description of a basic cross-language phenomena, emphasizing the role the speaker plays in the process.

This study will use the term "calque" and will define it as a covert borrowing. A calque is partly like a borrowing in that the bilingual is going into L2 to get new materials. The bilingual, however, does not do this overtly, as in the phenomenon we have been referring to as borrowing in Section 3. When calquing, the speakers are borrowing or switching covertly: they are employing the forms of L1 while subreptitiously using the meanings of L2. Therefore, calquing is a covert process because the meanings of L2 are hiding behind stable forms and grammatical structures of L1. The next section will present the different classifications of calques that have been proposed in the literature and the one we will use for our study on calques.

Types of calquing

Sandfeld (1912) divided calques into three categories:

- 1) Emprunts semantiques (semantic borrowings)
- 2) Mots composés ou dérivés (Compounds or derived words)
- 3) Tournures de phrase et des locutions (Idiomatic expressions)

The first category in his classification is wrongly labelled because it names the process that creates the items in all three categories. The first category should really be called one-word calques since the other two categories are divided by length and type of morphemic units. This is confirmed by the examples in his first category, which are single lexical items as in (14), while the examples in categories 2 and 3 are not, as in (15) and (16):

- (14) Polish and Czech zamek 'lock' also has the meaning 'house' on the model of German Schloss.
- (15) Compounds: German Hintergedanke and Danish bagtanke are modeled on French arrière-pensée.
 French presqu'île, German Halbinsel, Danish halvo, Slavic poluoostrov, and Finnish puolisaari are modeled on Latin paeninsula.
 Derived words: German Gegend is modeled on Latin contrata.

- (16) German den Hof machen is modeled on French faire la cour.

The meanings are being copied across languages in all three instances. Sandfeld suggests that the calquing process is effected through translation. That is why he also calls calques emprunts de traduction. He emphasizes that this is a semantic process which ties all European languages together and opens the way to the creation of 'Esperanto'. This idea of a unifying force that underlies the calquing process is intuitively correct. Calquing merges two linguistic systems, but not so much as to create a completely new system. His study provides numerous examples of the phenomenon of calquing even when the source language in many cases cannot be determined. His work represents a first attempt at leading the way in the classification of a language contact phenomena that had not been focused on before.

Betz (1949 quoted by Daiuta 1984) went a step further and divided all calques (not just one type, as Sandfeld had done with his first category) according to the process each resulting product had undergone:

- 1) Lehnübersetzung (loan translations)
- 2) Lehnübertragung (loan transformations)
- 3) Lehnschöpfung (loan creations)

He describes loan translations as morpheme by morpheme translations of the model. For example, German Wolkenkratzer is translated from English skyscraper. His loan transformations adhere less closely to the model: (a) in terms of structure, German Rundfunk does not completely follow the English model radio; or (b) in terms of meaning, German Halbinsel is not exactly like Latin Paeninsula. Betz's third type is loan creations which come about when there is no corresponding recipient language word: German Weinbrand from French cognac. These three types are three different products of the calquing process. His classification is symmetrical in that at least the three look at the processes that brought them forth: translation, transformation, and creation.

Wagner (1952) did not try to do a taxonomy of calques, but he implied three types of calques:

- 1) the translation of a foreign expression;
- 2) the extension of meaning in a word on the model of a foreign one; and
- 3) the imitation of words due to phonetic similarities.

Wagner mixes cause and effect in its descriptions of linguistic calques in the Sephardic language. Translation and imitation from the source language are processes that result in an extended meaning in the recipient language.

So the second type, extension of meaning, is not excluded from the other two since all calques add or expand a meaning to an existing word in the language regardless of the means by which this is achieved. Some of his examples for each type appear in (17), (18), and (19).

- (17) Sephardic kabayiku was modeled on Bulgarian (wodno) konce 'water horse'.
- (18) Sephardic fuerte also means [strong] and [difficult] from Turkish guç, which has both meanings.
Sephardic familia means [wife] as well as [family] from Turkish familya, as in "Mi familia está preñada".
- (19) Sephardic las tres péndolas was modeled on Bulgarian tri pera/triper 'gonorrhea'.

The examples in (18) show that the extension of meaning happens in words of two types: phonologically different from the model as in fuerte and phonologically similar to the model as in familia, which would correlate with the processes that originate them. Thus, Wagner's three types can be narrowed down to two: translation and imitation.

Haugen (1950, 1953) analysed the language contact features in the speech of American Norwegians. His typology of linguistic borrowings includes loanshifts, his term for what we call calques. He uses the term shift because loanshifts "appear in the borrowing language only as functional shifts of native morphemes (1972:85)". By

using this term, his emphasis is on the changes in the usage of native words, more than on the extension of meaning that native lexical items undergo. Haugen divided loanshifts into two types:

- 1) semantic loans
- 2) loan translations

He describes semantic loans consisting of native terms in the same arrangement as they appear in the source language, but extending the meanings of these terms as in (20). On the other hand, loan translations are new arrangements of native terms, as in (21). This type of calque also involves an extension of meaning.

(20) American Norwegian god tid from English good time.

American Norwegian brand [fire] adds the English meaning [bran].

(21) American Portuguese frío adds the English meaning [cold].

American Portuguese responder para atrás from English to talk back.

In (20), both sound and meaning work together in creating the extension of meaning. All of Haugen's American Norwegian examples in his classification of loanshifts are similar phonetically. Thus, Haugen has to resort to American Portuguese to find unequivocal cases, where the resemblance to the model is only semantic, not phonetic. The contrast Haugen makes between semantic loans and loan

translations lies on whether the arrangement of morphemes is already found in the recipient language or not, a distinction he does not always follow. Nevertheless, this presents a problem when the calque is a single lexical item because there is not a string of morphemes to be compared between the model and its copy. Haugen's terms, however, have acquired other uses. Semantic loans stand for calques as individual lexical items, and loan translations stand for calques that are compounds, phrases, and idiomatic expressions (Ullmann 1951 quoted by Otheguy, García, and Fernández 1989).

Pratt (1980) divided his group of "anglicismos no patentes", i.e. those which are recognized as Spanish forms, into:

- (1) Traditional forms
- (2) New forms

In the traditional forms, the influence operates at a semantic level. It can either be "paronymous", i.e. etymologically similar to the English model (e.g. Spanish agitación in its political or social sense), or a translation of the model (e.g. Spanish cadena referring to chain of stores). This is one of the clearest analysis of what we call calques. The second group, the new forms, can be completely novel either because they were coined in

English as well (e.g. abrasión) or because they have added a prefix or suffix to a Spanish word modelled on the English novelty (e.g. copiloto). This second grouping does not belong to a classification of calques because the forms were not in the language before the contact took place, one of the characteristics we stated as defining a calque.

Otheguy, García, and Fernández (1989) divide what they call calquewords (as opposed to loanwords) according to three different criteria:

- 1) Meaning
- 2) Form
- 3) Message types

According to their semantic characteristics, calquewords can either have a similar meaning to an already existing one in the recipient word, as in contact Spanish colectar cartas 'to collect cards', or a totally different meaning, as in contact Spanish jugar música 'to play music'. The sense introduced into colectar [to gather objects] and in cartas [each of the pieces used to play cards] is similar to one of the existing meanings in the recipient words; whereas the sense introduced in jugar música is different from all the existing senses in jugar. According to their phonological characteristics, calquewords can either have

a similar phonological shape, as in colectar cartas, or a different one, as in jugar in jugar música. Otheguy, García, and Fernández call the first type merged forms and the second type independent forms. According to their third classification, calques are "vehicles for the introduction of new message types". They draw a distinction between duplicating and innovative calquewords. Duplicating calques introduce information already conveyed by existing Spanish types that they replace, as in colectar cartas, where colectar is conveying the information that coleccionar already transmits. On the other hand, innovative calques introduce "a new sense motivated by the need to communicate in Spanish notions that are not readily communicable by means of unaltered traditional words", as in cartón de leche where the new sense in cartón identifies a new referent.

All the authors quoted above tried to capture the essential traits of calques. Some of the studies are confusing, and one has to wade through the data. Others were successful in clarifying the types of calques. All of them, however, recorded a phenomenon that had passed unnoticed by other linguists. From these studies, two types of calques can be extracted based on the length of forms:

- 1) single lexical items
- 2) compounds, phrases, or whole structures

A typical example of a one-word calque is Spanish descansar with an added sense from English rest [to stop voluntarily from presenting evidence pertinent to a case of law], as in (22). An example of the second type of calque is the Spanish structure in (23) calqued from an English idiomatic expression.

- (22) El abogado descansó el caso.
 'The lawyer rested the case.'
- (23) Ya hiciste el punto.
 'You already made your point.'

Calquing of single lexical items in particular has been recognized as an acculturation phenomenon which affects the linguistic system. The calque word has transferred a new sense from the source language to the recipient language, which sometimes comes in with new syntactic information (Daiuta 1984). Even though calques have been described as violation of the syntactic and pragmatic system and the semantic content of the recipient language (García, Fishman, Gertner, and Burunat 1985), the new syntactic information that comes with the calqued senses does not necessarily violate the syntactic structure of the language. Transformational syntax proposes strict subcategorization features that prevent

combinations that would produce grammatical violation. Each lexical item has syntactic feature specifications indicating the syntactic context into which it can be inserted. In the case of the calque, there may be an elimination, an addition, or no change at all in the subcategorization features of the stable lexical item in L1 receiving the calqued sense from L2.

For example, new strict subcategorization features are very likely introduced in (22) above. Traditional Spanish descansar requires the structure of an intransitive verb. But this instance of contact Spanish descansar, modelled on English rest, becomes a transitive verb. The insertion of a new meaning in descansar causes changes elsewhere in the system (See Labov 1971). The calque brings with it its own syntactic structure which creates a change at the level of the lexicon, i.e. a change in the subcategorization features. But this change in the grammar of the lexical item, as in descansar, does not violate the syntactic structure of the recipient language because the structure of an intransitive verb is permissible in the recipient language. If the structures that resulted from the calque were impermissible, we would have an instance of code-switching (Poplack, Wheeler, and Westwood 1987).

The elimination of subcategorization features also occurs. Silva-Corvalán (1986) gives an example of the loss of semantic distinctions in Los Angeles Spanish between ser/estar in cases like 'Mi hermana está alta' with a non-circumstantial aspect. The innovative use of estar with certain predicate adjectives has eliminated certain constraints that restrict the use of estar in individual frame contexts (i.e. she is tall now, before she wasn't) and has allowed this construction in a class frame context (i.e. she has always been tall).

Longer stretches of speech, however, provoke controversy about how they came about and whether they constitute a linguistic change. Linguists do not agree whether this type of calque is the product of the synchronic, creative use of the speaker's native language, or a diachronic innovation modeled on the speaker's L2. Otheguy (1989) questions whether there are instances of calquing that involve more than one word. He says that it has not been demonstrated that calques in compounds, phrases, and sentences are indeed the product of the direct influence of one language on another either through translation or semantic and grammatical substitution. He argues that loan translations (compounds, phrases, or

whole strings) are not instances of language contact but of cultures in contact.⁶ He describes this phenomena as "synchronically creative responses to new, culturally conditioned conceptualizations, metaphorical and otherwise, that are expressed through unaltered linguistic means (1989:126)". Otheguy recognizes the modeling effect of L2 on L1, but he wants to maintain a distinction between concepts expressed through linguistic meanings and the linguistic meanings themselves. He argues that concepts are not part of the language unless embodied in linguistic forms. However, concepts make themselves manifest through the meanings and forms of the language. And we have given examples of calques where meanings have been added to L1 forms embodying concepts of L2. Bilinguals model their lexical innovations on another language, even if in many cases the language already has the capacity to generate new structures and meanings. These innovations are the product of the interaction of the bilingual's two languages. When these innovations are incorporated into the language, some change will be effected.

⁶ This idea dates back at least to Bloomfield (1933), who called this process cultural borrowing because of the motivation that ignited the use of loanwords.

Our study will not include calques of the second type, i.e. compounds, phrases, and sentences. It will focus instead on one-word calques, i.e. lexical items in L1 which extend their list of senses to include a new sense from L2, effecting a change in the semantic system of the language. This extension of meaning appears in two types of forms:

(1) An item in L1 is similar to the L2 model: lexical items in L2 which are phonologically similar to lexical items in L1 often pass on their meaning to L1. The English meaning [to make a request in the form of a written application] is added to Spanish aplicar as in (24).

- (24) Apliqué a la universidad.
'I applied to the university.'

(2) An item in L1 is phonologically different to the L2 model: lexical items that are not similar in form to the source but whose contexts and use provide a model for the speaker to add on another meaning. The English meaning [to enter into an election contest] is added to Spanish correr as in (25).

- (25) Corrió para gobernador.
'He ran for governor.'

Conclusion

We started this chapter looking at three levels of interinfluence: code-switching, borrowing, and calquing. Then we described each phenomenon individually and tried to distinguish between each level. At the same time, we presented some of the issues that revolve around them. We summarize below the trickle effect of the phenomenon of interinfluence from L2 to L1 in four levels focusing on individual lexical items:

- (1) Phonologically and morphologically unassimilated borrowings (equivalent to code-switching of Table 1)
- (2) Phonologically and morphologically assimilated borrowings
- (3) Calques phonologically similar to the model word
- (4) Calques phonologically different from the model word

In Table 3, we consider each lexical item as a construct made up of form and meaning. In our classification, a form is new when it is not a vocabulary item of the recipient language. The form is old when it is already found in the L1 inventory of lexical items. A meaning is new when it fills a semantic gap or adds another sense that the form did not have previously. A

meaning is old when it is already available in the dictionary entry for that form in the recipient language.

Table 3.
Levels of Interinfluence at the Lexical Level

BORROWINGS

Phonologically and Morphologically Unassimilated

	FORM	MEANING
<u>nylon</u> [náylon]	new	new
<u>roof</u> [rUf]	new	old

Phonologically and Morphologically Assimilated

<u>nilón</u>	new	new
<u>rufo</u>	new	old

CALQUES

Phonologically Similar ' <u>Apliqué</u> a la universidad'	old	new
Phonologically Different ' <u>Corrió</u> para gobernador'	old	new

STABLE WORDS IN L1	old	old

Phonologically and morphologically unassimilated borrowings appear at the first stage. The foreign word is brought into the language in its original form and meaning. In this case, roof [rUf] is phonologically and morphologically unassimilated to the recipient language. In the second stage, the form is adapted phonologically and morphologically to the recipient language. From

English roof, rufo is the product of the assimilation into the morphology and phonology of the recipient language. This type of borrowing has become an alternative to the original form and meaning techo, which has been displaced by the new form rufo in contact Spanish.

The third stage is calques. Another meaning is added to words that are already in the inventory of the language. Calques are of two types: phonologically similar to or phonologically different from the model word in the source language. Aplicar is an example of the former, and correr of the latter. When the calque is phonologically similar to the model, the historical roots of the model word and the calque word might be the same. Aplicar is a word in Spanish, but, in 'Apliqué a la universidad', it has a new meaning brought in from English apply. In corrió, the meaning is borrowed, but the form run is left behind in L2. The old form bearing this new meaning is phonologically different from the model run.

As the review of the literature indicated, most studies on calquing concentrated on linguistic and sociolinguistic analyses. No study, to our knowledge, has focused on the psycholinguistic aspects of bilingual lexical access of calques. In the next chapter, we will

present psycholinguistic background to introduce a testing technique that has been used for monolinguals and bilinguals and will be used here for testing the psycholinguistic reality of calques.

CHAPTER 3

PSYCHOLINGUISTIC BACKGROUND

This chapter will present evidence from psycholinguistic studies on how the priming technique can tap meanings within and across languages and, therefore, can be successful as a tool for the study of calque words. The priming task will be explained through a general overview of the literature on monolingual and bilingual priming studies, preceded by an introduction to studies on monolingual and bilingual lexical access.

Introduction

Psycholinguistic studies are designed to reveal the underlying mechanisms in language processing. In order to achieve this, the nature of the experimental task has to be fine tuned to measure only linguistic information and nothing else. Colheart's (1978:170) comment is appropriate in this context: "If we wish to discover how lexical access is achieved, it seems advisable to use experimental tasks which cannot be performed in the absence of lexical access, but require little else". A testing technique that has been claimed to directly tap on-line language

processing is priming. Probably for this reason, priming has been judged more successful than other techniques (translation, recall, association, the Stroop task, etc.) in accessing the semantic representation of lexical items in monolinguals and bilinguals. Due to this advantage, a primed naming task has been chosen in the present study to investigate the mental representation of English-based Spanish calques, which is explained in detail in Chapter 5. Before we describe the priming technique, we will give a short overview of studies on monolingual and bilingual lexical access.

1. Monolingual Lexical Access Studies

Two major groups of models that purport to account for lexical access (or retrieval, as it is sometimes called) in monolinguals have been proposed: the search or table look-up model and the direct access or connectionist model. The search model is proposed by Forster (1976) and Forster and Davis (1984). The direct access model is exemplified by the logogen theory of Morton (1970) and Jackson and Morton (1984), and by the cohort theory of Marslen-Wilson and Welsh (1978) and Marslen-Wilson (1984). In Forster's search model, lexical access is achieved through an active search process analogous to searching a

"mental dictionary". Orthographic or phonological codes are compared to entries in the mental lexicon. The entries in the mental files contain all the information (orthographic, phonological, semantic, and syntactic) about a word. The comparison between the input and an entry is done via a frequency-ordered search, i.e. higher frequency words are compared to the input before lower frequency words. A second search checks lexical items that are semantically related to earlier words. The two searches are done simultaneously, and the input is recognized whenever a match is found in either list.

For instance, if the word henchman is visually presented, there will be a search through the orthographic access file for the first few letters or the first syllable of the word. "When the similarity between [the stimulus and an entry] exceeds some previously defined criterion, the search stops, and the pointer is used to direct the system to the entry in the master file. At that point, the full orthographic specification of henchman needs to be extracted and compared with the properties of the input stimulus (Forster 1976:269)".

In contrast, Morton's logogen system does not require an active search through the lexicon. It is a direct

access model where each word has a corresponding logogen with the word's acoustic, visual, and semantic characteristics. "The logogen is a counting device that is incremented every time it receives an input which matches one of the characteristics of the word. When the count exceeds a certain critical value, the appropriate response is made available (Morton 1970:206)". The internal representation of each word in the lexicon has a certain "threshold" of response associated with it. When its threshold is exceeded, the meaning becomes automatically available to the listener, i.e. it is activated. The meaning is sensitive to two sources of input: one from the senses (e.g. phonological information) and one from semantically-related words. Input from these two sources is complementary. So if a semantically-related word has recently occurred, then the amount of sensory information required to activate a meaning is less than if no related word had preceded it. The logogens for high-frequency words will have lower critical values. For these words, fewer sensory attributes will be required to produce the response than for low-frequency words.

Morton (1970:206) exemplifies how this logogen model works. If the word cat were presented visually, all words beginning with "c" would have their count raised, as well

as all three letter words, e.g. dog, words whose second letter is "a", e.g. cap, etc. The logogen cat would automatically receive an increment for each of these attributes. When the count for a logogen is raised above a certain threshold by these series of increments, then the word would be made available and other responses would be inhibited.

Another direct access model of word recognition is presented by Marslen-Wilson and Welsh (1978:60). Though similar to the logogen model, "it makes no claims for the existence either of internal counting mechanisms or of all-or-none threshold based decision functions". According to the cohort theory, the initial 200 msec segment of speech accesses all lexical items consistent with that speech segment--the cohort. Items then drop out of the cohort set when they are found to be inconsistent with either further input from the speech perception system or the semantic context of the sentence. When all words but one have dropped out, that word is recognized. Aspects of the cohort model have been studied using the "gating task" developed by Grosjean (1980) and Grosjean and Soares (1986). In the gating task, subjects are presented with a very small initial segment of an auditory stimulus while the rest of the stimulus for the word is replaced by

noise. The process continues until the entire stimulus has been presented with no noise component.

These models make a set of predictions that differentiate them from each other in experimental studies. Forster's (1976:272) search model "predicts a terminating search for words and an exhaustive search for permissible nonwords". This means that the search for a word terminates when the word is found, and the search for a permissible nonword continues through the entire access file. Morton's logogen model has a mechanism that prohibits the recognition of permissible non-words since these do not have logogens and will be reacted to the same way as impossible non-words. In the other direct access model, the cohort model, permissible non-words have longer reaction times than words. This is because in order to detect a non-word every element has to be eliminated as a candidate, whereas in order to access a word all elements but one must be eliminated. The longer reaction time is due only to the time required to eliminate one more element as a candidate, which should not be very long.

Regardless of the theory of lexical retrieval, one striking aspect of this process is that it occurs extremely rapidly. One variable that seems to affect the

time required to access a lexical item is the frequency with which the word occurs in the language. In general, as word frequency goes up, the word is retrieved more rapidly. This aspect must be taken into consideration in the choice of lexical items for psycholinguistic experiments.

2. Bilingual Lexical Access Studies

Understanding how two language systems come into contact or overlap in some way in the cognitive system of bilinguals is related to important theoretical issues regarding the nature of the bilinguals' lexicon(s) and the relationship between the internal processing of a concept and its surface form. A question that has received considerable attention with respect to lexical access in bilinguals is whether the bilingual has one lexicon or two, one for each language. There are two parts to the lexicon: the semantic representations (meanings) and the linguistic form referring to the representations.¹ Bilinguals must have two sets of linguistic forms (two sets of words) for at least most of their vocabulary (with the possible exceptions of cognates and/or homonyms). It

¹ Refer to Table 2 in Chapter 1 for the relationship between meanings and forms of lexical items in a language contact situation.

is not clear, however, whether the bilingual has two sets of semantic representations or meanings (Altenberg 1981).

Weinreich (1953) first applied the Saussureian relationship between forms and meanings to the bilingual. Then Ervin and Osgood (1954) developed it into the dichotomy of compound-coordinate. These two concepts are based on the belief that the different age, use, and/or manner of second language acquisition will result in radically different ways of language coding, storage, and retrieval in bilinguals. For example, in terms of age, those who learned the second language before six would be compounds and those who learned it after puberty would be coordinate; in terms of language use, people in a community that regularly switches languages would be compounds; in terms of the manner of second language acquisition, a one-parent one-language situation would result in coordinates, and so forth. These concepts, however, have been severely criticized. Diller (1974) negates this distinction as poorly defined and based on weak experimental evidence. Altenberg (1981) points out that many of the experiments could be interpreted as supporting one or the other concept. Albert and Obler (1978) caution us about labelling a bilingual compound or coordinate since many unaccounted factors can influence

anatomical mechanisms in bilingualism. Even if the data on this area of investigation is inconclusive, the concepts of compound and coordinate were used as the basis for the psycholinguistic concepts now mostly employed of language interdependence and independence in current models of lexical representation and processing. Three major models have been proposed for bilingual speakers, as reported by Kirsner, Smith, Lockhart, King, and Jain (1984) and Chen and Ng (1989):²

1) The word-association model postulates two sets of semantic representations, one for each language. Translation equivalents in the two languages of a bilingual speaker are directly connected to each other. Semantically related words in a given language are also directly linked. On the other hand, semantically related words in the two languages are not directly connected, but rather indirectly connected through corresponding translation equivalents.

²In earlier psycholinguistic studies these three major models have been given different names, and the description of their networks varies slightly, but on the whole they can be considered variations on the same theme. The previous models have been called: the independent or separate-store hypothesis, the interdependent or common-store hypothesis, and the revised independent or bilingual dual coding hypothesis (See Altenberg 1981).

2) The word-interconnection model postulates that all words in the two languages, including both translation equivalents and semantically related words, are directly connected to each other. That is, the bilingual has a combined lexicon for both languages: one set of semantic representations is linked to two forms, one from each language.

3) The concept-mediation model, in contrast to the other two models, assumes that neither within-language nor between-language words are directly connected, except through translation equivalents; rather, they are all linked to their concepts or meanings. In this model there are two sets of semantic representations, one for each language, each linked to a third, common nonlingual store, the imagery system, which represents knowledge of the world. Entries in the two lexicons of a bilingual speaker are linked at the amodal conceptual level, but not at the language specific lexical level.

The Word-Association Model

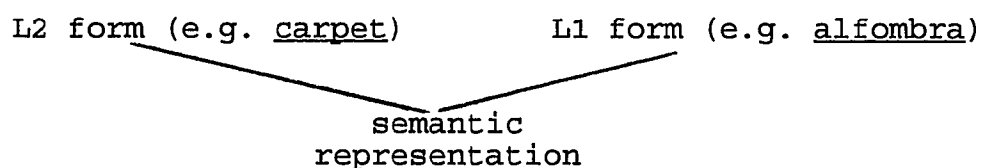
L2 form (e.g. carpet)

|
semantic
representation

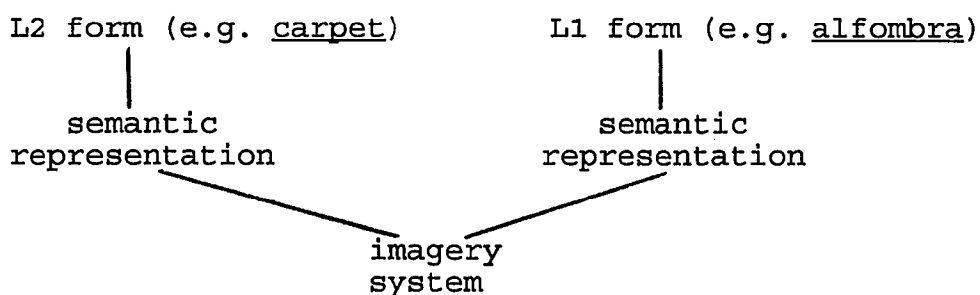
L1 form (e.g. alfombra)

|
semantic
representation

The Word-Interconnection Model



The Concept-Mediation Model



Although an extensive discussion of the merits of each model is beyond the scope of this study, it should be mentioned that results vary from one study to the next. For our purposes, we will note that, of these three models of bilingual representation, the word-association model can not account for interference across languages since it assumes a total separation of language storage.³ Of the remaining two models, one or the other model of bilingual access is possible. But up to date, no definitive answer has been given to this question.

³The presence of interference from the other language system has to be explained through the existence of some functional relations between the bilingual's two languages.

3. Monolingual Priming Studies

According to Foss (1988), the priming phenomenon is one of the most thoroughly studied effects in recent experimental psychology.⁴ Priming refers to the fact that the time to respond to a word is affected when that word is preceded by another word. Priming paradigms have been used to investigate a number of issues in cognitive psychology since priming was first reported by Meyer, Schvaneveldt, and Ruddy (1972). In the more standard technique, two stimuli are sequentially presented. The initial or prime stimulus is presented. The second stimulus is the target or probe. The subject can make a timed response to either the prime or the probe. In this study, the term "probe" will be used because its meaning [an instrument for examining and sending back information] clearly describes its role in the priming technique. The processing of the probe, i.e. the time it takes to understand it, is said to be affected by whether the prime is semantically related or not to the probe. It is presumed that if the prime and the probe are related (e.g.

⁴ Priming literally means 'to prepare for firing by supplying with a primer', like priming the pump (Webster's Dictionary). The meanings of lexical items are under the level of consciousness. Through priming, the researcher pre-activates the meaning or meanings he wants to tap and goes past the threshold of consciousness.

doctor-nurse) the response time to the probe is quicker than if they are not related (e.g. bread-nurse). Therefore the semantic variable of relatedness affects the speed of retrieval, i.e. the amount of time a subject spends searching and finding a lexical item in memory.

Priming has been employed mostly with lexical decision tasks. In a lexical decision task, the subject has to make a lexical decision: whether the probe, i.e. the second stimulus presented, is a word or a non-word. Subjects are instructed to press a yes-key or a no-key as soon as they decide whether the probe is a word or not. The response time is measured from the presentation of the probe to the subject's pressing a key. When priming is combined with a lexical decision task, the priming technique is presumed to go a step further into the minds of the subjects. It is a sophisticated lexical decision task. A prime is added before the probe to which the subject still has to make a lexical decision. The prime can be a neutral warning signal (e.g. ready), a non-word, a semantically related word, or a semantically unrelated word. Research using primed lexical decision tasks has demonstrated that the probe, processed shortly after a semantically related word prime, is responded to more rapidly than when the same word is preceded by a

semantically unrelated word prime. This is explained by several authors through a semantically organized lexical model. In this model, the concept of a word is represented as a node in a network with properties of the concept represented as labeled relational links from the node to other concept nodes. For example, the node for a concept like DOG would be linked to nodes for concepts that serve to define its meaning like ANIMAL, FUR, TAIL, etc., as well as to nodes for strong associates like CAT. Concepts sharing these defining features, like DOG and CAT, would also be linked through the ANIMAL node, the FUR node, etc. In this way, a network can be created in which semantically related concepts are closely linked together.

One of the aspects the priming studies have addressed is the effects of semantic context on recognizing words. Semantic context is a variable, which together with experiential and structural factors,⁵ seems to affect the retrieval of information. Posner and Snyder (1975) propose a two-factor theory of context: an automatic spreading-activation process and a conscious attentional mechanism to be involved in the retrieval of information to account

⁵Examples of experiential variables are the frequency and recency with which one has heard a word. Examples of structural variables include the morphological structure of a word, how it is subcategorized, how many meanings it has (lexical ambiguity), etc.

for local context effects. They follow Morton's (1970) view that verbal long-term memory contains logogens. In terms of a spatial metaphor, the logogens for semantically related words are supposed to be located nearer one another than are logogens for semantically unrelated words.

According to the spreading-activation process, there is facilitation when a stimulus automatically activates its logogen,⁶ and this activation automatically spreads to adjacent, semantically related logogens but not to remote, semantically unrelated logogens. Automatic activation is fast because it does not require processing resources, and it occurs without intention and awareness. A second, slower, and attention-requiring process occurs, which involves a conscious attentional mechanism. The use of this second mechanism leads to facilitation for expected items because such a mechanism operates with intention and conscious awareness. The attentional mechanism leads to inhibition for items not expected because the information is stored in logogens upon which this mechanism is not focused. Therefore, the automatic spreading-activation and

⁶ Facilitation is equivalent to priming. Both refer to the fast recognition of words in context, which appears in the experiments as a short response time. These two terms will be used interchangeably throughout the study.

conscious attentional mechanisms are complementary rather than mutually exclusive mechanisms.

The automatic spreading mechanism accounts for a semantic facilitation effect commonly obtained in primed lexical decision tasks. For example, Meyer, Schvaneveldt, and Ruddy (1972) found that subjects are quicker to respond that a probe letter string (e.g. nurse) is a word when the prime is a semantically related word (e.g. doctor) than when it is a semantically unrelated word (e.g. bread). This is explained by Posner and Snyder's (1975) model as activation that automatically spreads from the logogen for doctor to the logogen for nurse. Inhibition occurs with unrelated logogens because the logogens for bread and nurse are not conceptually linked as are doctor and nurse. The conscious attentional mechanism accounts for the fact that a semantically unrelated word prime produces a facilitating effect when the subjects expect a certain pairing (doctor and nurse) and an inhibition effect when they are not expecting a certain pairing of words (e.g. bread and nurse). In this framework, the distance that attention must traverse in shifting from the logogen for doctor to the logogen for nurse is less than the distance it must traverse in

shifting from the logogen for bread to the logogen for nurse.

The basic assumptions of the Posner and Snyder two-factor theory were tested, for example, by Neely (1977) and Tweedy, Lapinsky, and Schvaneveldt (1977). Both experiments used a primed lexical decision task. Neely (1977) found strong support for Posner and Snyder's two factor theory of attention. He controlled the subject's attention to avoid the confounding of the facilitating effects of conscious attention with the facilitating effects of automatic spreading activation. Subjects were instructed that when the prime word was body, they should shift their attention to expect that if the probe was a word (as opposed to a non-word) it would be the name of something to do with a building. If the prime word was building, they should shift their attention to expect that if the probe was a word it would be the name of parts of a building. The novel point in this experiment is that the activation in the "building" logogen would not have automatically occurred when body was presented, because the body-"building" association is not a well-learned, automated decision like the bird-"bird" association. Neely's data confirmed that there was an inhibition effect in the processing of a word probe when it followed a

semantically unrelated word and facilitation in its processing when it followed a semantically related word. This facilitation existed even when the subject was using a prime word semantically unrelated to the probe word to direct the subject's attention to the area of lexical memory containing the logogen for the probe word.

Tweedy, Lapinsky, and Schvaneveldt (1977) showed the need for adding an adaptive component to the two-factor-theory of Posner and Snyder (1977). Three groups of subjects were exposed to exactly the same set of words and non-words but in different semantic relations. Subjects in the high-likelihood condition saw seven out of eight semantically related pairs (e.g. aunt-uncle, army-navy). Subjects in the low-likelihood condition saw seven out of eight semantically unrelated pairs (e.g. aunt-navy, army-uncle). Subjects in the medium-likelihood condition saw four semantically related pairs and four semantically unrelated pairs. Tweedy, Lapinsky, and Schvaneveldt found more facilitation when the proportion of related word pairs was increased. They suggest that once the subjects knew that the pairs would be semantically related, they were able to predict the semantic relatedness of the subsequent pairs. For Tweedy, Lapinsky, and Schvaneveldt this implies an adaptive process on the part of the

speaker, who uses not only the immediately preceding but also the past contextual information to modulate the word recognition process. This variable was not considered in most priming studies, where semantic context effects were accounted solely by postulating facilitation for those words semantically related to the particular preceding prime. Tweedy, Lapinsky, and Schvaneveldt's addition is consistent with Posner and Snyder's two factor theory. Accessing a particular item in lexical memory causes an automatic spreading activation to semantically related items, facilitating their encoding upon a subsequent encounter.⁷ Tweedy, Lapinsky, and Schvaneveldt's study extends the cause of the facilitation from the residual activation produced by the recent processing of the meaning of semantically related word or words to the overall proportion of the previous semantically related word pairs.

⁷ The postulated transience of the semantic context effect received support from Meyer, Schvaneveldt, and Ruddy (1972): Interposing a non-word or an unrelated word between two highly related words substantially diminished the amount of facilitation provided by the preceding related word.

4. Bilingual Priming Studies

Facilitation effects can also take place across languages in priming tasks where the prime and the probe are in different languages. The occurrence of such effects is often regarded as indicative of the lexical representational structure of the bilingual. The facilitating effect within a language (the prime and the probe are presented in the same language) is compared with the between language effect (where the probe is either the same word in translation or an associate to the prime). The size of these effects are interpreted differently by different scholars, a debate which has been narrowed down to the last two models mentioned in the section on bilingual lexical access and their differing predictions.⁸

⁸The word-interconnection model predicts that the repetition and the semantic association effects should be similar to each other because the words in the two languages of a bilingual speaker are interconnected to each other. In this model, the links connecting translation equivalents in repetition tasks are not different from those linking semantically related representations in semantic association tasks. The concept-mediation model predicts that the repetition effect should be larger than the semantic effect. This should be so, it is argued, because in repetition priming only a single concept (meaning) node is activated, whereas in semantic priming two concept nodes are activated; therefore, it takes longer to access them.

Between-language priming studies using association pairs (Chen and Ng 1989; De Groot and Nas 1991; Jin 1990; Kirsner, Smith, Kockhart, King, and Jain 1984; Meyer and Ruddy 1974; Schwanenflugel and Rey 1986, among others) have shown that two semantically related words appearing in different languages do prime one another. The seminal study of Meyer and Ruddy (1974) used a primed lexical decision task in a bilingual situation. The prime and probe words were presented in either the same language (both in English or both in German) or in different languages. Their experimental evidence showed that the facilitation effect can happen across languages. Bilingual English-German speakers performed a lexical decision task with varying linguistic and semantic relations within the word pairs. The subjects had to classify pairs of letter strings (i.e. first the prime, then the probe) as words (e.g. horse-acht'eight') or non-words (e.g. schlatschpersage) in the two languages. Their major findings were that responses to the mixed pairs (German/English) were significantly slower than responses to the pure pairs (German/German; English/English); that shorter reaction times occurred when the words were semantically associated (horse-cow; sieben('seven')-eight) than when they were unassociated (horse-eight; sieben-kuh'seven-cow'); and that the association effect was approximately equal for

the pure (horse-cow) and mixed pairs (horse-kuh). Their first finding does not bear on this investigation since they account for the delay in terms of a code-switching mechanism between the languages. The last two are relevant to this study since they strongly support the contention that priming taps semantic relationships, even across languages.⁹

While Meyer and Ruddy demonstrated a between-language facilitation effect using words associated to the probe as primes, other studies have used category names as primes and also demonstrated facilitating effects across languages. For example, Schwanenflugel and Rey (1986) researched the degree to which words in one language could activate concepts of varying semantic distance in the other language, i.e. the degree of facilitation on cross-language priming. They presented probe words in either the same or a different language after the onset of the prime (e.g. body-arm, body-brazo). The prime was either a category name (body-cuerpo, bird-pájaro, building-

⁹ Different studies vary on how they explain the existence of facilitation. For some, facilitation is based on a semantically organized lexical memory. For others, facilitation is based on an overlearned, automated association, which relies on the world knowledge of the speakers. Others, as Meyer, Schvaneveldt, and Ruddy (1972), do not make a difference between association and semantic relatedness and use these terms interchangeably.

edificio, etc.), or a neutral prime (ready or listo). The probe was a nonword item or distractor that followed English or Spanish phonological/orthographical rules (e.g. jouth and muyar, respectively) or a body part (arm/brazo), a building part (window/ventana), a bird (parrot/cotorra), etc. Schwanenflugel and Rey found facilitation effects in mixed language conditions. Facilitation from the category prime was not greater when the prime was in the same language rather than in the other language nor when neutral language cuing or nonwords were used. They used this finding of equal facilitation across languages to focus on the representation of semantic information in fluent bilinguals.¹⁰

Whereas semantic priming has been successful in activating meanings across languages, repetition priming between-languages has not yielded consistent results. Some studies did not obtain between-language facilitation, while others did. Kirsner, Smith, Lockhart, King, and Jain 1984, for example, showed facilitation only in within-

¹⁰ Schwanenflugel and Rey support a model of bilingual semantic representation where lexical items are connected both within and between languages via a language neutral conceptual system (Potter, So, Von Eckardt, and Feldman 1984). This model is a variation on the Dual Coding Hypothesis (Paivio and Desrochers 1980), which we equate with the concept-mediation model.

language conditions, but not in between-language conditions. The prime was the same exact word or a translation (dog-dog or perro-dog), not a semantically related or associated word. The aim in Kirsner et al's experiment was to test for the "repetition effect", long since demonstrated in monolinguals, whereby the recognition of a word is faster following its repetition as compared to its first presentation. French and Pynte (1987), among others, support the explanation that the repetition effect depends more on the orthographic similarity of stimuli than to the processing at a conceptual level. In other words, subjects may not have accessed the semantic representation of the words but rather only the phonological representations. Recent evidence refutes this reasoning. Davis, Sánchez-Casas, and García Albea (in preparation) found that the similar form control condition did not produce a facilitation effect (e.g. rict did not open the entry rico). They argue that words of similar meanings are "grafted" together. That is, the Spanish word rico is grafted on to the English entry rich.

Other recent research confirms across-language facilitation effects in repetition and semantic association tasks. In a Korean-English study, Jin (1990)

obtained a repetition effect for the translations of the prime words, even though there was no orthographic similarity between the stimuli, and also a semantic priming effect for the associates of the translations.¹¹ Chen and Ng (1990) explored translation and semantic priming effects in Chinese-English bilinguals using a lexical decision task. They found greater priming effects with translation word-pairs, even when the physical stimuli were completely different, than with semantically related between-language pairs.¹²

De Groot and Nas (1991) used within- and between-language repetition and semantic priming to study the organization of the mental lexicon of Dutch and English bilinguals. They obtained facilitation effects across languages for translation cognates (bath-bad) and non-

¹¹ Jin's main contribution is the finding that the between-language associative priming effect for concrete word-pairs was greater than for abstract word-pairs, which makes the semantic priming effect dependent upon the particular characteristics of the associated word-pairs. In Jin's view, his results support the bilingual dual-coding hypothesis of Paivio and Desrochers (1980). It predicted reduced or absent priming for abstract word-pairs since, in their model, concrete words would have their meaning closely tied to a common, imaginable referent.

¹² Chen and Ng also found comparable effects of semantic facilitation with pictorial, between-language, and within-language primes. These results were interpreted as supporting the amodal conceptual system in terms of the concept-mediation model.

cognates (watch-horloge), as well as for associated cognates (author-boek'book') and non-cognates (uncle-tante'aunt'). They still attributed the repetition priming effect in cognates to their physical similarity, whereas the new evidence of a repetition priming effect in non-cognates was attributed to the automatic spreading activation within the lexical memory of the bilingual. As for the associative priming effect, their results are in agreement with previous studies, which have consistently shown a semantic facilitation effect across languages.

Conclusion

The literature review presented above shows how the priming paradigm has succeeded in tapping meanings within the same language in monolingual studies and across language boundaries in bilingual studies. These studies have found that the priming effect varies according to the relationship between the prime and the probe. Most researchers found that this relationship is stronger when the pairs are close semantic associates than when they are repetitions of the lexical item in translation. This reported advantage of the use of semantically associated primes across languages and their production of a facilitating effect seems to uphold the priming technique

as a useful tool for the research question in our study:
Can new English-based senses be shown to have become part
of the meaning of certain calque words in the Spanish of
bilinguals?

CHAPTER 4

PREPARATIONS FOR THE STUDY

Below we present the preliminary steps that were taken to establish the data base for our experiment and questionnaires. The steps we followed to establish a final list of calques and their associations to be used in the tasks required for our investigation are presented.

1. Choosing the Calque Words

The aim of our lexical access study is to investigate if a new sense can be found in the lexical repertoire of bilingual subjects.¹ To prepare for the study, it was first necessary to identify a group of calque words that bilinguals were likely to be familiar with and monolinguals were not. In order to arrive at a preliminary selection of calque words, we employed various methods. We scanned the materials in the research files of professors working on this topic and the published literature on English-influenced Spanish. We also included calques that

¹The term "sense" refers to one of a set of meanings a word may have, as in a dictionary entry.

we read in letters from friends or heard in the speech of bilinguals even though they had not been recorded in the literature. We thus collected over one hundred calques. This initial corpus was then refined and subjected to several corroborating checks in order to produce a smaller, final corpus for use in the priming task (i.e. the psycholinguistic experiment) and the rating task (i.e. the questionnaire on calque usage), which are explained in the next chapter.

We narrowed down the initial corpus of over one hundred calques in three ways. First, we consulted María Moliner's Diccionario del uso del español to verify whether the words we considered calques did not already have the usage we attributed to English influence. Second, to verify that monolingual Spanish speakers of the non-contact variety did not have the calqued sense, a monolingual Spanish speaker living in Argentina and not exposed to English was given a list of 89 paragraphs where calque words appeared in appropriate contact Spanish contexts. The informant had to respond whether the underlined words in the given contexts were used correctly or incorrectly. As part of her responses, the informant said, for example, that abusó in (1) was used incorrectly and adicional in (2) was used correctly, even though we

had initially thought that they were both calque words. Appendix A contains the sentences with our initial list of presumed calques and our informant's responses.

- (1) El padre abusó de la hija y la dejó embarazada.
'The father abused the daughter and left her pregnant.'
- (2) Aprenda alemán en 30 días. Para información adicional, llame a nuestras oficinas al teléfono 236-1924.
'Learn German in 30 days. For additional information, call our office at 236-1924.'

Third, the list was narrowed down further to those calque words for which we could find clear and indisputable associations for both the calqued sense and the standard sense.² For example, the calqued sense in adicional in (2) is so semantically close to the sense in the standard word that it is difficult to find an associate to the calqued sense that will not be associated to the standard sense as well. Given this situation, and in this instance coupled with the fact that the usage was accepted as correct by the informant, we decided not to use this item in our study. We explain the choice of associations with further details below.

²From now on, the term 'standard' will refer to standard Spanish.

2. Looking for Associations

It should be remembered that between-language priming studies, as reported in Chapter 3, found that the relation between the prime and the probe is more firmly established through close associates or synonyms across languages than by repetitions of the lexical item in translation. This finding supports the choice of semantic relatedness for our experimental design, for which we devised pairs of words consisting of a calque word and its associate words to: (1) the presumed English-origin, contact sense and (2) the standard sense. A semantic associate of each sense had to be found that would elicit in the mind of the speaker the response that we wanted.

Semantic associates are of various kinds:

- (a) a high associate, e.g. nurse-doctor, where the words are closely related or linked by context;
- (b) a synonym, e.g. bug-ant, where the sense of one word is included in the other;
- (c) a syntagmatic association, e.g. drive-car, where the preposition and the article are left out.

All three associate types were used in the priming task. But most of the priming pairs were either high associates or synonyms, which purportedly work better than syntagmatic associations. We now present the method used to arrive at the associations to the calque words and the results.

METHOD

Subjects

In order to help us find associations, we asked two Spanish monolinguals and five Spanish-English bilinguals to fill out a work sheet. The Spanish monolingual subjects were Argentinians. The Spanish-English bilingual subjects were three Argentinians and two Cubans.

Materials and Procedures

The work sheet with a list of 106 calques that appears in Appendix B was given to the subjects. They were asked to write down at least two words that came to mind for each of the listed words.

RESULTS

Some of the responses of the monolingual subjects were:³

atrayerente: hermosa, atractiva, mujer.
deprimido: velorio, inflación, amigo.
duran: zapatos, comida en la heladera, muebles.
cadena: esclavos, prisioneros, prisión.

Some of the responses of the bilingual subjects were:

demonstración: gentío, manifestación, afecto, habilidad, cocinar.
corren: trenes, caballos, chicos, rápido, carrera.
envuelto: cubierto, paquete, regalo, activo, padre.
renta: alquiler, negocios, ganancia, pérdida, inversión.

After the responses given by the subjects were listed, those associate words that the investigator felt best brought out the English-origin calqued sense and the standard sense of each word were selected. If none of the responses given was considered appropriate, the investigator either provided one or eliminated the calque word from the list. Later on, we added five more calque words (especial'special', distribuidor'distributor', tren'train', factoría'factory', fracasar'fail') for which we provided the associations.

³English translations for these items are provided in the Glossary.

The pairs were made up of a mixture of semantic associate types. Most of them were high associates (correr-ejercicio 'run-exercise') and synonyms (duro-firme 'hard-firm'). There were a few syntagmatic associations, however, that work in the same way as pure associates when, for example, the preposition and article are left out, as in admitir-hospital 'admit-hospital'. The final list of calques and their associations used in the priming task appear in Appendix C.

The next step consisted in making sure once again that our final choice of usages for the calque words was not generalized in the non-contact Spanish monolingual population. In order to do this, a group of monolingual speakers of the non-contact Spanish variety answered a calque screening test and filled out a personal information questionnaire, which we now go on to describe.

3. Personal Information Questionnaire for Monolingual Subjects

A questionnaire was designed to elicit information on personal and language background of each of the monolingual subjects answering the calque screening test.

METHOD

Subjects

Forty monolingual speakers of the non-contact Spanish variety living in Argentina who had little or no knowledge of English were given a personal information questionnaire and a calque screening test. Thirty-nine monolingual subjects out of the 40 who answered the calque screening test returned the questionnaire.

Materials and Procedures

The one-page personal information questionnaire for these monolingual subjects determined their place of birth and that of their parents, their knowledge of other languages, level of education, social class, sex, and age. The questionnaire appears in Appendix D.

RESULTS

Two informants failed the criterion of having been born and raised in Argentina and were discarded. Another informant did not fill out the personal information questionnaire, which left a total of 37 completed questionnaires considered for the analysis. All subjects were born and raised in Argentina. All the subjects'

parents were born in Argentina, except in four instances. The father of one subject was born in Spain; the father of a second subject was born in Italy; both parents of a third subject were born in Greece; and in the case of the fourth subject, the mother was born in Italy and the father in Spain. All reported that they read and wrote in Spanish very well. In Table 4, we provide the rest of the information gathered with the questionnaire.

Table 4.
Personal Information on Monolingual Subjects

1. Sex	Women	51%
	Men	49%
2. Age	over 32	54%
	under 32	46%
3. Age mean	36	
4. Education	College	54%
	High School	41%
	Elementary	5%
5. Occupation	Professional	40%
	Employee	20%
	Teacher	14%
	Student	11%
	Housewife	6%
	Other	9%
6. Knowledge of a Second Language	None	66%
	Some French	13%
	Some English	11%
	Some Italian	6%
	Some Greek	2%

Overall we can characterize this group of informants as belonging to the middle class and in their thirty's. They are Argentine Spanish monolinguals who have had little or no exposure to English or to the contact Spanish dialect of the United States.

4. The Calque Screening Test for Monolingual Subjects

A screening test was designed as part of the effort to determine whether the final corpus of 87 calque words were not in general use in the non-contact Spanish of the monolingual population. A group of monolingual speakers of the non-contact Spanish variety reported on their usage of the 87 Spanish words with calqued senses. The words appeared in contexts which reflected the new calqued sense used by contact bilingual speakers. The calque screening test was given while on a visit of the investigator to Argentina. We expected monolinguals to tell us that they did not use the calque words in the contexts in which they appeared. The calque screening test was given only to monolinguals of the non-contact Spanish variety. It was not given to bilingual subjects because we wanted to save these subjects for the study itself.

METHOD

Subjects

Of the 40 monolingual subjects that responded to the preliminary version of the rating task, only 37 respondents were considered for the analysis because two of them had been born and raised in Italy and one respondent did not fill out the personal information questionnaire.

Materials and Procedures

Eighty-seven Spanish words with calqued senses were used in the calque screening test. They are listed alphabetically in Appendix E. Of these, 35 were used as nouns, 30 as verbs, 21 as adjectives, and one as an adverb. That is, the parts of speech described here refer to the word function in the sentences where the calque appeared. For example, anciana can either be a noun ('an old woman') or an adjective ('ancient'). In the sentence from the calque screening test, "Así se hacía según la ley anciana" (It was done this way according to ancient law), the calque word anciana is used as an adjective and was counted as such. The quantities of parts of speech in the calque screening test correlate with grammatical constraints usually mentioned about borrowing: nouns are

the first category borrowed, followed by verbs, followed by adjectives. This hierarchy goes as far back as Whitney (1881) and as recently as Amastae (1989). It has repeated itself here in the search for and final choice of calque words for our study.

The calque words chosen for the calque screening test were put in context so that they would clearly bring out the calqued sense. One- to two-sentence contexts were written for each of the 87 items. Two questions were asked: (1) whether the informants had heard the calque word in the context where it appeared, and (2) whether they considered this usage part of the standard. With the first question, we were trying to find out whether the subjects themselves used the calque words in these contexts. The rationale for this question was that we wanted to obtain this information in an indirect way. Subjects are more likely to acknowledge what words others use rather than what words or expressions they themselves use. With the second question, we were trying to bring out the subjects' acceptability judgement of the calque words. In rephrasing the question, we explained that we wanted them to tell us whether the underlined words were used appropriately in those contexts. Being monolinguals of the non-contact variety, we expected the subjects to respond

"no" to both questions in the sentences where the 87 calques appeared. If we had given the calque screening test to the bilinguals as well, we would have expected them to answer either "yes" to both questions or "yes" to the first one and "no" to the second one.

The calque screening test appears in Appendix F. Of the 100 sentences, 87 had Spanish words with the calqued sense, and thirteen were fillers. Subjects were asked to read the instructions and stop after the second example to discuss the sentences with the investigator, who verified whether they understood what the questions asked.

RESULTS

As we expected, most calque words were neither used nor accepted in the contact usage by the non-contact monolingual subjects. But unexpectedly some were. This could have been for two reasons. Either the items were in fact used by the monolingual population, or the monolingual subjects did not understand the instructions and rated the items as familiar Spanish words, even though they were not. We revised some of the sentences that we thought did not bring out the desired calqued sense. For example, sentence (3) was changed to (4).

- (3) Mi hijo atiende la escuela que está enfrente.
'My son is attending the school across the street.
- (4) Mi hijo de 5 años atiende la escuela que está enfrente.
'My five-year old son is attending the school across the street.

Many subjects told me they had thought that the 'son' in (3), was a doctor who took care of the kids that got sick at school. The added phrase de 5 años in (4) helped to disambiguate the calque sense of atiende.

By revising some of the sentences, we were able to ascertain that, if the non-contact monolingual subjects still answered "yes", it was due to the generalized use of the item by the monolingual population at large, and not a problem with the context where the underlined word appeared.

Before going on to the next chapter, we want to make a last comment about the calque screening test. The test showed a few unexpected responses from some subjects who evinced a bit of confusion and insecurity in their ratings. Specifically, it is interesting to note that several subjects rated standard words as not used and/or unacceptable in the calque screening test. For example, reprimir was rated by several monolinguals as not used in

the context in which it appeared in (5), even though it is a standard usage.

- (5) El gobierno supo reprimir la
rebelión.
'The government knew how to quash the
rebellion'.

This finding underscores the importance of using the priming task (i.e. the psycholinguistic experiment) as a tool to check whether calqued senses are lodged in the Spanish words under investigation, regardless of the linguistic intuitions of the speakers. Now we go on to describe the study in detail.

CHAPTER 5

THE STUDY

This final chapter deals with the study itself and its results. In our discussion, we explain the organization of our study, describe the methods, provide evidence to support our predictions, and conclude with the interpretations for our findings.

Introduction

This study was designed to provide evidence of contact-induced changes in the psycholinguistic organization of the bilingual mental lexicon. The overall research questions are: Can one demonstrate through the use of associations specific to English-influenced Spanish dialects the existence of a new semantic component in the lexical entries of words in the impacted language? Is the new sense in the impacted language the result of newly established semantic links with a model word in the source language, or does the new sense simply represent an internal development and application of the existing

meanings in the language undergoing the change?¹ We believe that a substantial portion of the new lexical usages in the contact variety are modelled on source language forms rather than on the non-contact forms of the impacted language. Our purpose is to demonstrate the existence of calque words as a consequence of language contact and not as a result of internal changes within the language. It is useful to have in mind Pratt's (1980:171) comment that "el comportamiento lingüístico no es esporádico, espontáneo, ni anárquico" ('Linguistic behavior is not sporadic, spontaneous or anarchical'). The fact that these new senses could have direct parallels in English makes it highly improbable that no relationship in fact exists between the source and the recipient language at the level of lexical entries. That the new usages have arisen as a result of internal changes in the language independently of linguistic contact seems without foundation given the findings of this study which, as we expected, provide concrete evidence that the lexical entries of contact-Spanish calque words resemble those of English and differ from those of standard Spanish.

¹The notion of "sense" is used here in the familiar way described by lexicographers and current semantic theories to refer to a component unit of meaning in a lexical entry.

A secondary question is whether different types of calque words show any difference in the way they are accessed. Two variables, one phonological and one semantic, are considered. The phonological variable deals with whether the similarity in form between the calque word and its model helps in accessing calques. Specifically, forms phonologically similar to the English model (Spanish carpeta/English carpet) are contrasted to forms phonologically different from the model (duro/hard). Our expectation is that the calque whose form is similar to the model word, listing the model sense [rug], is easier to be processed in the mind of the bilingual and more likely to be confirmed as having the calqued sense in its lexical entry. The second variable deals with whether semantic relatedness between the new calqued sense and any of the existing senses in the word affects lexical access. That is, if the calqued sense is semantically related to one of the existing senses in the recipient word (e.g. Spanish carta used with the sense [baseball card]), the speed in accessing the model sense will be faster than if there were no semantic relationship between them (e.g. Spanish envuelto with the sense [involved]). These two variables are discussed in more detail later on.

The exploration of the calqued senses is done with two procedures. The first one we call the priming task. This psycholinguistic technique taps the mental representation of the lexicon at an unconscious level, as reported in Chapter 3. In this study, it will determine whether the presumed English-origin calqued senses are detectable in the lexical entries of Spanish words used by bilinguals. The second procedure we call the rating task. This sociolinguistic technique taps the calque usage at a conscious level, since informants have to report whether they use or have heard the presumed calque words in context.

Our assumption for the psycholinguistic investigation (i.e. the priming task) is that the calqued sense is lexically based rather than accessed through a network of interconnections between the lexicon(s) in the two languages. Our focus is not on how the model sense was calqued into the recipient word (e.g. translation processes), but rather on whether the calqued sense has become a permanent part of the bilingual native lexicon. If our results confirm the existence of a calqued sense in the lexical entry of words in bilinguals, we can conclude that the mental representation of their lexicon has changed and that the access to the calqued sense is not

done over and over across languages every time that a calque word is used.

To explore the question of the calqued sense at a lexical access level, a priming technique is used to detect the existence of a semantic link between the model word in the source language (English) and the calqued sense in the recipient language (Spanish) by using associations specific to English-influenced dialects. That is, we want to verify that the dictionary entry for several Spanish words has acquired a new sense calqued from English.

The study contrasts two groups of speakers:

(1) Argentine Spanish monolinguals who:

- a. live in Argentina,
- b. know a little or no English,
- c. do not speak English, and
- d. do not use calques.

(2) Argentine Spanish-English bilinguals who:

- a. have lived in the United States for at least two years,
- b. are fluent speakers of English,
- c. use both English and Spanish daily, and
- d. create and use calques.

It is important to note that, as mentioned in Chapter 1, there is a third group of speakers not studied here. These are monolingual speakers of the Spanish contact dialect in the United States, who adopt and spread contact-induced linguistic features even though they themselves do not know English. One of the features bilinguals create and use is the calqued-from-English sense in their Spanish words. This type of monolingual, however, is not included in our study because we wanted to make a clear contrast between those who have the calqued sense (i.e. the bilinguals) and those who don't (i.e. the monolinguals of the standard variety). It should be clear then that when we use the term monolingual we are not referring to contact speakers.

The findings of the Meyer, Schvaneveldt, and Ruddy (1972) study presented in Chapter 3 served as a guideline for our priming study. Their subjects reacted faster to associated pairs (nurse-doctor) rather than to unassociated pairs (nurse-bread), which meant that semantically-based associations played a part in the speed of lexical retrieval. We adapted this idea and created pairs constituted by an English-based Spanish calque and its associate (correr-elección) and contrasted them with pairs constituted by the Standard Spanish counterpart and

its associate (correr-ejercicio). We expected the bilingual subjects to show facilitation, i.e. to have a faster reaction time than monolinguals to the first kind of pair.² This would confirm the existence of the calqued sense in the Spanish of bilinguals, but not in the test of monolinguals. This would show a change in the Spanish lexical organization of the bilingual population. The monolingual subjects thus served as a control group, since we assumed they did not have the calqued sense and would not prime the calque pair correr-elección.

In what is reported below, a basic cross-modal semantic priming technique was used to detect whether calqued senses were activated in the processing of Spanish words by monolingual and bilingual speakers.

THE EXPERIMENT

As stated in the introduction to this chapter, the experiment was done with two groups of subjects: Spanish monolinguals and Spanish-English bilinguals. The testing session lasted about forty-five minutes. The priming task, i.e. the psycholinguistic experiment, was conducted in two

² The term facilitation is almost equivalent with the term priming. A priming effect is evidence that facilitation of meanings has taken place.

parts. Each lasted about ten minutes with a ten minute break. During the break the subjects filled out a personal information questionnaire. When the priming task was finished, the subjects responded to the rating task, i.e. the calque usage questionnaire, which lasted about fifteen minutes. First, we will describe the personal information questionnaire, then the priming task, and lastly the rating task.

1. Personal Information Questionnaire

The questionnaire was designed to elicit information on each informant's background. We used this information to have a general description of the kind of subjects who participated in the study and also to discard those subjects who did not meet the selection criteria, for example, two years of residence in the United States for bilinguals. There were two types of questionnaires, one for the monolingual subjects described in Chapter 4, and another one for the bilingual subjects.

METHOD

Monolingual Subjects

The 25 monolingual subjects were Argentine Spanish speakers, who were chosen for two reasons. First, the investigator, being Argentine herself, had easy access to the Argentine bilingual population in New York City. Second, the Argentine dialect has almost no English-influenced calques. With Argentinians, there is not a constant flow back and forth as in the case of Puerto Ricans or other Caribbean Spanish speakers. The geographical location of Argentina in the southernmost tip of South America helps in the isolation of the language. The English language remnants which might still exist are from the 19th century British, who set up some of the infrastructure in the country (waterworks and railroads, for example). Yet they had very closed networks of association, socially and economically. With the advent of cable TV and a surge of advertising of American products, there has been a recent invasion of English terminology. But since this is a recent development and most of our subjects were older people coming through New York as tourists, we can consider that there is little or no appreciable English influence in our monolingual sample.

Bilingual Subjects

The 34 bilingual subjects were Spanish-English bilinguals from Argentina living in the New York area. Due to the migration of Spanish communities to New York City, English and Spanish have become unlikely neighbors. The locus of the contact is bilingual English-Spanish speakers who calque from English into Spanish, adding new usages to stable standard forms in order to convey information they know how to say in English, but, due to a process of attrition, they can no longer find equivalents in their Spanish. (See, for example, Barbeau 1939 in the case of Canadian French). These speakers were considered bilinguals by the researcher, who selected subjects for the experiment who spoke English fluently and who were active calque users in Spanish.

Materials and Procedures

The monolingual subjects filled out the same one-page questionnaire that was used in the preparations for the experiment (See Appendix D). The bilingual subjects filled out a slightly different two-page questionnaire (See Appendix G). Both questionnaires determined place of birth, knowledge of other languages, level of education, social class, sex, and age of monolingual and bilingual subjects. In addition, the questionnaire for the bilingual

subjects determined their bilingual ability with questions about their use of English and in what environments. Thomason and Kaufman (1988) describe the intensity and intimacy of contact as a crucial variable in determining the degree of contact-induced language change. Having this in mind, our personal information questionnaire exhaustively inquired about the sociolinguistic context of our bilingual speakers to determine their degree of bilingualism.

The findings of Poplack, Sankoff, and Miller (1988) also served as a guideline for the formulation of the questions in the questionnaire and for the selection of the bilingual subjects for this study. Their preliminary statistical manipulations indicated that educational attainment had little or no effect on the amount of borrowings brought from the source language into the recipient language. Their major determinant of borrowing rates (i.e. in terms of types and tokens) was social class membership: the working class groups led middle-class speakers in the usage rates of types and tokens. Their younger bilingual speakers used more nonce (used once) borrowings and fewer widespread loans. Their highly bilingual speakers were importers of lexical innovations such as nonce and unattested borrowings (See Chapter 2 for

definitions and examples of these items). This finding could be extended to the use of calquing as well since bilingual speakers are the originators of calquing. Having in mind these results, we expected no effect from the level of the subjects' education. But we did expect an effect from social class, age, and bilingual ability. However, we ran into some difficulties for the selection of subjects belonging to the working class. Most working class speakers who considered themselves bilingual were not. In order to have a stable variable of bilingual ability, i.e. bilingual proficiency, we sacrificed the option of having working class speakers in the study. Therefore, most subjects belong to the middle class. We considered bilingual proficiency more important than social class because we argue that calques are created by bilinguals due to their fluent use of and switch between the two languages. This opinion is also confirmed by Seliger and Vago (1991:4) in their comments on first language attrition: "the first language is weakened by the increased frequency of use and function of the second language". Therefore, L1 use and function were considered significant sociolinguistic variables in our study. The analysis of the variables of age, age of arrival, years of residence in the United States, level of education, use of English and in what environments, and knowledge of another

language were included in the questionnaire and are presented in the results.

A question on when subjects had learned English was not included in the questionnaire. Critical period of language learning was not paid attention to because we believe that the calquing process happens to the frequent users of the second language, regardless of when they learned it. Mahecha (1990) confirms this assumption in her study of perception of code-switching cues. She found no significant differences among the performance in groups of bilinguals classified according to language dominance, age of second language acquisition, or amount of exposure to code-switching. Also Davis, Sánchez-Casas, and García-Albea (in preparation) found no differences among bilingual groups with varying degrees of experience in the second language. Their pattern of cross-linguistic priming effects for cognates and noncognates was the same across all the groups of bilinguals they tested.

RESULTS

Monolingual Subjects

The 25 monolinguals who participated in the study responded to the personal information questionnaire. Since

one subject reported she had a good knowledge of English, she was not included in the analysis. All 24 monolingual subjects tested were from Argentina, except for one subject who was born in Chile but was raised in Argentina. Most of them were second generation, except for five. For three of them, one of their parents had been born in Portugal, Italy, and France, respectively. In the other two cases, both parents had been born in Spain. All subjects reported that they read and wrote in Spanish very well. In Table 5, the rest of the information on the monolingual subjects is presented.

Table 5.
The Experiment
Personal Information on Monolingual Subjects

1. Sex	Women	58%
	Men	42%
2. Age	over 30	99%
3. Age mean	53	
4. Education	College	42%
	High School	38%
	Elementary	20%
5. Occupation	Professional	44%
	Housewife	23%
	Teacher	15%
	Student	3%
	Other	15%
6. Knowledge of a Second Language	None	40%
	Some English	40%
	Some French	8%
	Some Italian	8%
	Some German	4%

Overall the monolingual subjects belonged to the middle class and were middle aged. They were speakers of Argentine Spanish and were not exposed to the Spanish contact dialect of the United States.

Bilingual Subjects

Thirty-four bilinguals responded to the personal information questionnaire. Two bilingual subjects were discarded. One failed to meet the criterion of two years of residence in the United States. A pre-requisite for participating in the study was that bilingual subjects should have lived in the United States over two years. Another subject was discarded because he started falling asleep during the priming task. Thus his responses were not considered reliable. In sum, of the 34 bilinguals who participated in the study, the results of 32 bilinguals were analysed.

All 32 bilinguals tested were from Argentina, except for one subject who was born in Chile but was raised in Argentina. Most of the subjects were second generation Argentinians, except for four. For three of them, one of their parents had been born in Turkey, Lebanon, and Poland, respectively. In the fourth case, both parents had

been born in Turkey. In Table 6, the rest of the information on the bilingual subjects is presented.

Table 6.
The Experiment
Personal Information on Bilingual Subjects

1. Sex	Women	60%
	Men	40%
2. Age	over 30	99%
3. Age mean	38	
4. Age of Arrival	between 21 and 30	
5. Years of US Residency	between 2 and 28	
6. Average years of US Residence	over 11	50%
	under 11	50%
7. Travelled outside the US	More than Once a Year	88%
	Never	22%
8. Education	College	99%
9. Occupation	Professional	70%
	Housewife	16%
	Teacher	7%
	Student	7%
10. Knowledge of a Second Language other than English	None	44%
	Good French	12%
	Some French	41%
	Some Italian	1.5%
	Some Portuguese	1.5%

11. Use of English		
At Home	Always	8%
	Once in a While	25%
	Never	67%
At Work	Always	20%
	Once in a While	56%
	Never	24%
In Social Settings	Always	6%
	Once in a While	78%
	Never	16%
12. Reading of Spanish		
Books, Magazines, and Newspapers	Always	19%
	Once in a While	72%
	Never	9%

On a self-report on language use and proficiency, all bilingual subjects said they read and wrote, spoke and understood both English and Spanish very well. Practically all bilingual subjects thought it was important to know Spanish as well as English in the United States. The degree of bilingualism of the subjects was determined by how much they used each language and in what environments, and by the investigator, who observed the subjects and their performance as bilinguals. Most of their answers correlated with the author's impressions.

Overall the bilingual subjects belonged to the middle class and were in their 30's and 40's. They had lived in the United States for at least two years. They were fluent speakers of English and Spanish and used both languages daily and in different environments.

2. The Priming Task

The priming task is the psycholinguistic experiment that was used to detect the English-based calqued senses in 87 Spanish words.

METHOD

Subjects

Subjects were the same as those who filled out the personal information questionnaire above. There were 24 Spanish monolinguals and 32 English-Spanish bilinguals.

Design and Materials

A cross-modal priming task developed by Swinney (1979) was used for psycholinguistic testing. The experiment is in two modalities: auditory and visual. The first word in the pair, the prime duro, is heard by the subjects through earphones. The second word, the probe, is flashed on a computer screen and read aloud by the subjects. This reading aloud of the probe word is called "naming". A common assumption in psycholinguistic experimentation (e.g. Lupker 1988) is that word naming involves minimal processing after lexical memory has been accessed. Therefore, naming is now considered a better

task than lexical decision (i.e. saying whether the probe is a word or a non-word), which involves post-access decision processes that are absent in the naming task.³ Naming, to our knowledge, has not yet been used by any of the most recent lexical processing studies across languages, where the task demand was lexical decision (e.g. Chen and Ng 1989; De Groot and Nas 1991; Grainger and Beauvillain 1988; Jin 1990, among others).

There were four priming conditions in our study:

- a. a calque priming condition, where the probe word was related to the calqued sense: duro/difícil;
- b. a standard priming condition, where the probe word was related to the original standard sense: duro/firme;
- c. a control priming condition to the calqued sense: duro/ninguno; and
- d. a control priming condition to the standard sense: duro/citar.

³Recent articles (Durgunoglu and Roediger 1987; Gerard and Scarborough 1989) have reported that the specific conditions of testing are the main determinants of results in studies of bilingualism because various experimental tasks emphasize different processes. The present study uses a testing design that might be less likely to be affected by task-specific strategies than other testing tasks.

The calque condition (duro/difícil) tests activation of the presumed new sense of the English-based Spanish calque duro. The standard condition (duro/firme) tests activation of the sense in standard Spanish duro. The subjects' response times were measured and contrasted in terms of priming (activation) of the meanings. We go on to discuss the procedure in detail.

For each calque prime, e.g. duro, there was a set of four probe words. This set was composed of one experimental word semantically related to the calqued sense (in this case difícil); one experimental word semantically related to the standard sense, (in this case firme); and two control words which were not semantically related to the standard or calqued senses. Both control pairs were matched to each of the experimental pairs for frequency and length: in this case, the probe firme was matched with citar, and difícil with ninguno. In order to determine the frequency of use of the Spanish words, we consulted Recuento de vocabulario español by Rodríguez-Bou (1952) and Informe de la investigación del léxico básico de la lengua escrita en la República Dominicana y diccionario de uso, frecuencia y dispersión by González Grullón, Cabanes-Vicedo, and García Bethencourt (1981). As

we show below, there was then a total of four probe words for each prime.

	PRIME	PROBE
Standard Priming Pair	<u>DURO</u>	<u>FIRME</u>
Control	<u>DURO</u>	<u>CITAR</u>
Calque Priming Pair	<u>DURO</u>	<u>DIFICIL</u>
Control	<u>DURO</u>	<u>NINGUNO</u>

Care was taken that no pairs were created in which the prime and the probe were associates of one another for the control pairs. To analyze the results, the mean of the response times to the calque pairs was subtracted from the mean of their control pairs. The result was the priming effect, if any. Then the mean of the response times to the standard pairs was subtracted from the mean of their control pairs. The result was the priming effect, if any. The subtraction was done this way because we were comparing an item for which there was an association (duro-firme) to an item for which there was no association (duro-citar) but which had the same frequency. (As noted in Chapter 3, the more frequently a word is used, the quicker it will be primed). Since both firme and citar had the same frequency, we were cancelling the priming effect due to the frequency of the items and whatever remained

was the priming effect due to the association in the experimental pair duro-firme that did not exist in the control pair duro-citar.

Materials for the 87 calque experimental items, consisting of four probe words for each, made for a total of 348 experimental pairs. Mean frequency and number of letters for the probe words related to the standard sense were 62.5 and 8, respectively. Mean frequency and number of letters for the probe words related to the calqued sense were 63 and 7, respectively. Controls for each related probe word was matched for frequency of use and number of letters. The lists with the priming pairs and their controls together with frequency of use appears in Appendix H.

For presentation purposes, there was a master tape with the recorded 87 primes, calque and filler words, to be heard through earphones and four different lists with the probe words to be presented visually on a computer screen. Four versions of the experiment were constructed so that each prime word would appear in each of the four priming conditions, without being repeated within a version. The resulting experimental and filler pairs used for the priming test appear as four lists in Appendix I.

The primes, 87 calque words and alternating filler words, were recorded on audiotape by the investigator. A 1000-Hz signal was placed on a separate channel of the tape which was inaudible to the subject. The signal at the end of each prime word signaled a diapilot to present the appropriate visual item on the screen --which was one probe word from one of the four lists-- and to start the timing mechanism which measured the response time until the subject named the probe word.

For the probe words, there were four lists to be presented visually. Each list contained one of the four probe words, either the calqued sense associate, or the standard sense associate, or one of their controls. In each list, every experimental condition was rotated so that the subjects would not get two consecutive related pairs. These were always separated by a filler pair. (That is, they would get a calque related pair, a filler, a control pair, a filler, a standard related pair, a filler, and so forth). This precaution was taken to avoid intertrial priming. Each subject went through two lists. At the beginning of the first list, 20 filler pairs were presented to accustom the subject to the rhythm of the experiment. The experimental pairs and fillers for the first list were a total of 192 pairs. The second list had

177 pairs with only three filler pairs at the beginning since the subjects had already been acquainted with the procedure going through the first list. In all, 105 filler pairs were added to the first list heard by the subjects, and 90 filler pairs to the second one. The filler pairs were not arranged randomly, as mentioned above. The filler words were approximately the same varying length and frequency as the experimental items.

Procedure

The subjects were run individually in a forty-five minute session. They were seated in front of a computer screen at a comfortable reading distance in a normally lit room. They were given headphones through which they heard the binaurally presented prime words. Subjects were told that they would hear a word through the headphones and that they were to listen carefully and try to understand the meaning of the word. They were also told that they would see a different word flash on the screen in front of them immediately after they heard the word through the headphones. Subjects were told to say the word out loud as quickly as possible. In sum, the subjects' task was two-fold: (a) to listen to the prime and (b) to read the probe as fast as they could.

Two blocks of almost 200 pairs each were done separated by a ten minute rest. No hint was given that the word pairs might be related, and, in the twenty practice trials given to familiarize the subjects with the experimental procedure, no such relationship existed. After the first five practice trials, the experiment was stopped to check with the subjects whether they had understood the procedure or had any questions.

The reaction time from the moment the word appeared on the screen to the moment the subject began to say the word was captured by a portable Commodore 64 computer apparatus. A proprietary software program, 'RT Lab', controlled all timing and presentations. After the prime was heard, the probe appeared as uppercase white-on-grey letters at the center of the screen for 400 ms. There was no interstimulus interval (ISI=0) between the prime and the probe. The interstimulus interval II, i.e. the time available for the subject to make a response, was 1000 ms.

To illustrate, subjects heard a prime word, e.g. duro. Immediately after, one of the following four probe words: difícil, ninguno, firme, or citar was presented to the subjects, as shown below.

PRIME (heard)	PROBE (seen and read out loud)
<u>DURO</u>	<u>DIFICIL</u>

If the time it took to name the probe related to the calqued sense (difícil) was shorter than its matched control (ninguno), this would be evidence that the calqued sense had been primed, that is, that the calqued sense was accessed at this point. Similarly, if the time it took to name the probe related to the standard sense (firme) was shorter than its matched control (citar), this would be evidence that the standard sense had been primed. That is, that the standard sense was accessed.

Classification of Calques

To better analyze the results and find correlations on the two variables ascribed to the calque words used in the experiment, we divided our calque words depending on their form and meaning. Regarding the form, calque words were divided into phonologically similar to the English model (aplicar/apply) or phonologically different from the English model (duro/hard). In some cases it was difficult to draw the line between these two categories. To settle unclear cases, we followed Pratt's (1980) definition of "semantic calques" (equivalent to our calques

phonologically different from the model), which is based on whether the two forms, the model and the recipient, share the same etymology. For example, mind was considered phonologically different because, unlike that of mente which goes back to Latin mentis, the furthest etymon of mind is Old English gemynd. (Here we follow Pratt's difference between "étimo último", i.e. the furthest etymon, and "étimo mediato", i.e. the most recent one.). In contrast, deprimido was considered phonologically similar because its furthest etymon, like that of depressed, goes back to Latin depressus.

Regarding the meaning, we divided calque words into transparent and opaque. By transparent, we mean those where the presumed newly acquired senses are related to one of the senses available in the standard word. For example, the calqued sense in carta, as in carta de béisbol is modelled on the English sense [baseball card], which --while not the same-- is similar to one of the already existing senses in Spanish carta, as [carta de naipes 'playing cards']. Opaque calque words are those whose calqued senses are not related to any of the senses available in the standard word. For example, the calqued sense in envuelto is modelled on the English sense [involved], which is different from all the existing

senses in standard Spanish envolver. The priming task will help elucidate if the two variables of phonological form and semantic transparency have any effect on the access of calques.

Predictions

The predictions for the standard pairs are:

1. A priming effect, i.e. fast reaction time, for the monolinguals since they have the senses for a standard Spanish lexical item.
2. A smaller priming effect for the bilinguals than for the monolinguals because they are losing the standard senses due to attrition.

The predictions for the calque pairs, the focus of this study, are the following:

1. No priming effect, i.e. slow reaction time, for monolingual speakers, i.e. the subjects who do not have calques as part of their vocabulary.
2. A priming effect , i.e. fast reaction time, for bilinguals. They access the calqued sense, which could

imply its incorporation to the lexical entry in their Spanish items.

According to the calque type, the predictions for the bilinguals are the following:

1. A calque whose phonological form is similar to its English model (e.g. Spanish aplicar/English apply) should show a larger priming effect than the calque whose phonological form is different from its English model (e.g. Spanish correr/English run). The model is not present in the experimental pair, but it could be evoked by the bilingual subject through its meaning. If there is a difference in the priming effect, it would confirm the importance of similarity of phonological forms in accessing the calqued sense. This difference would be consistent with the results found for the lexical access of cognates, which we discuss later on.
2. A transparent calque, whose meaning is related to one of the already existing senses in the standard word that serves as calque (e.g. carta), should show a larger priming effect than the opaque calque, whose meaning is not related to any of the senses in the standard word (e.g. envuelto). If there is a difference in the priming effect, it would reveal that semantic transparency affects

lexical retrieval and that the inclusion of the new sense follows predictable patterns of association.

RESULTS AND DISCUSSION

The results of this research are presented in five parts. The first presents the data obtained from the priming task on all items and subjects and their statistical analyses. The second part presents the responses to calque word usage and acceptability in the rating task. The third part presents the response times to the priming task according to the subjects' ratings of calque word usage and acceptability. These ratings were grouped into: incorporated calques, subdivided into weakly and strongly incorporated, and discarded items. The corresponding three sections present the data on all items for bilingual and monolingual subjects and their statistical analyses. The fourth part presents the response times to the priming task according to four types of calque words, which are different combinations of the phonological form and the semantic transparency of the calque words. These types are explained in more detail in Part IV, where the data on all items by types are presented for bilingual subjects with the corresponding statistical analyses. Part V presents statistical

analyses, t tests, and Pearson correlations of the priming scores from monolinguals and bilinguals with respect to the data gathered from the personal information questionnaire (e.g. sex, age of subjects, knowledge of other languages, etc.).

For all analyses, response times greater than 1 second (1,000 milliseconds) and less than 250 milliseconds were eliminated from the data and scored as errors. These resulted in the dropping of 14 data points. Also if a subject stammered or misread a probe word (e.g. diferenciada instead of diferencia), these incorrect responses were excluded in calculating the means. Error rates were less than 10% of subjects' responses per condition. The correct responses were subjected to standard summary statistic analyses and analyses of variance (ANOVA) performed with items and subjects as random factors. All discussion of results assumes statistical significance at or below the .05 level of probability.

The experimental design included the following three principal factors for the analyses: type of prime, type of probe, and experimental-control. For the type of prime, the analysis involves two levels each of phonological form

and semantic transparency, each then treated separately as well. For the type of probe, the analysis involves two levels, one where the probe is semantically related to the calqued sense and the second one where the probe is semantically related to the standard sense of the prime. A 4 (type of prime) by 2 (type of probe) by 2 (experimental-control) by subjects (24 monolinguals and 32 bilinguals) analysis of variance (ANOVA) was performed for all items and subjects.

PART I: THE OVERALL FINDINGS OF THE PRIMING TASK

For the overall analysis, the experimental design included two principal factors: type of probe (calqued vs. standard sense) and experimental-control. The third factor, type of prime, is included in Part IV, where more specific findings are discussed.

Results Comparing Bilingual and Monolingual Subjects

Overall results for bilingual and monolingual subjects clearly indicate: (1) bilinguals did prime the calqued senses, but monolinguals did not, and (2) standard senses were primed by both groups of subjects. These findings agree overall with our predictions: (1)

bilinguals would access the calqued senses, confirming they had become part of the lexical entry; monolinguals, however, would not access the calqued senses, confirming that they had not, and (2) bilinguals and monolinguals would access the standard senses, even if in different degrees, confirming that they both have them. Monolingual and bilingual results for both calqued and standard senses appear in bar graphs in Tables 7 and 8 (See pages 131-132).

The mean reaction times for all calque pairs (e.g. duro/difícil) and their controls (e.g. duro/ninguno) are presented in Table 9. The means of the data appear first (RT: reaction time in milliseconds), followed by the priming scores (in milliseconds, too) and their statistical significance. The priming scores represent the mean reaction time to each control word minus the reaction time to its paired experimental word.

Table 9.
Priming Task
Bilinguals and Monolinguals on Calque Pairs
(e.g. duro/difícil)

		Mean RT(ms)	Priming Scores (ms)	P Values
Bilinguals	Experimental	478		
	Control	500	22	p<.001
Monolinguals	Experimental	536		
	Control	532	-4	p<.17

Table 7.
Priming Task
Bilinguals' and Monolinguals' Priming Scores
to Calque Pairs (in ms)

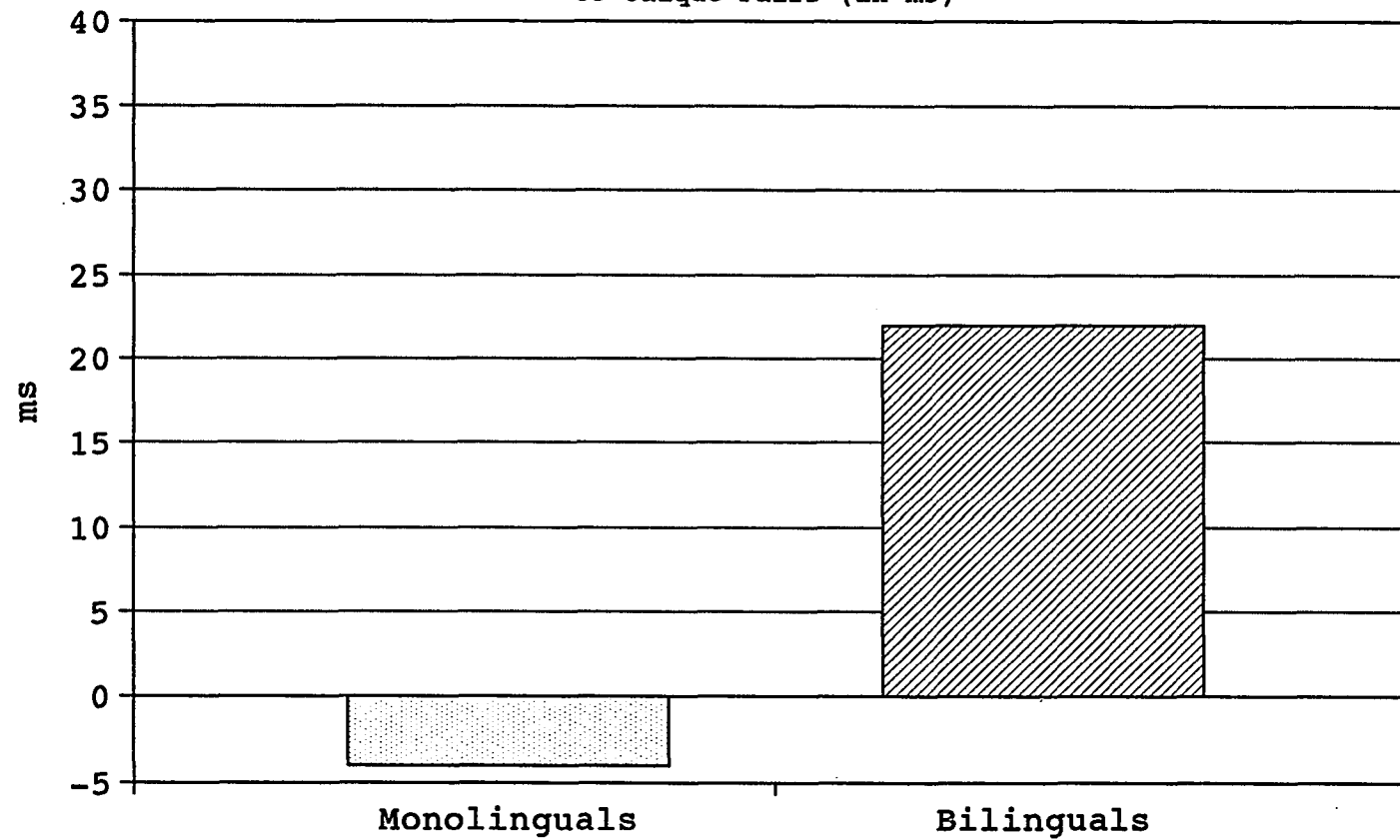
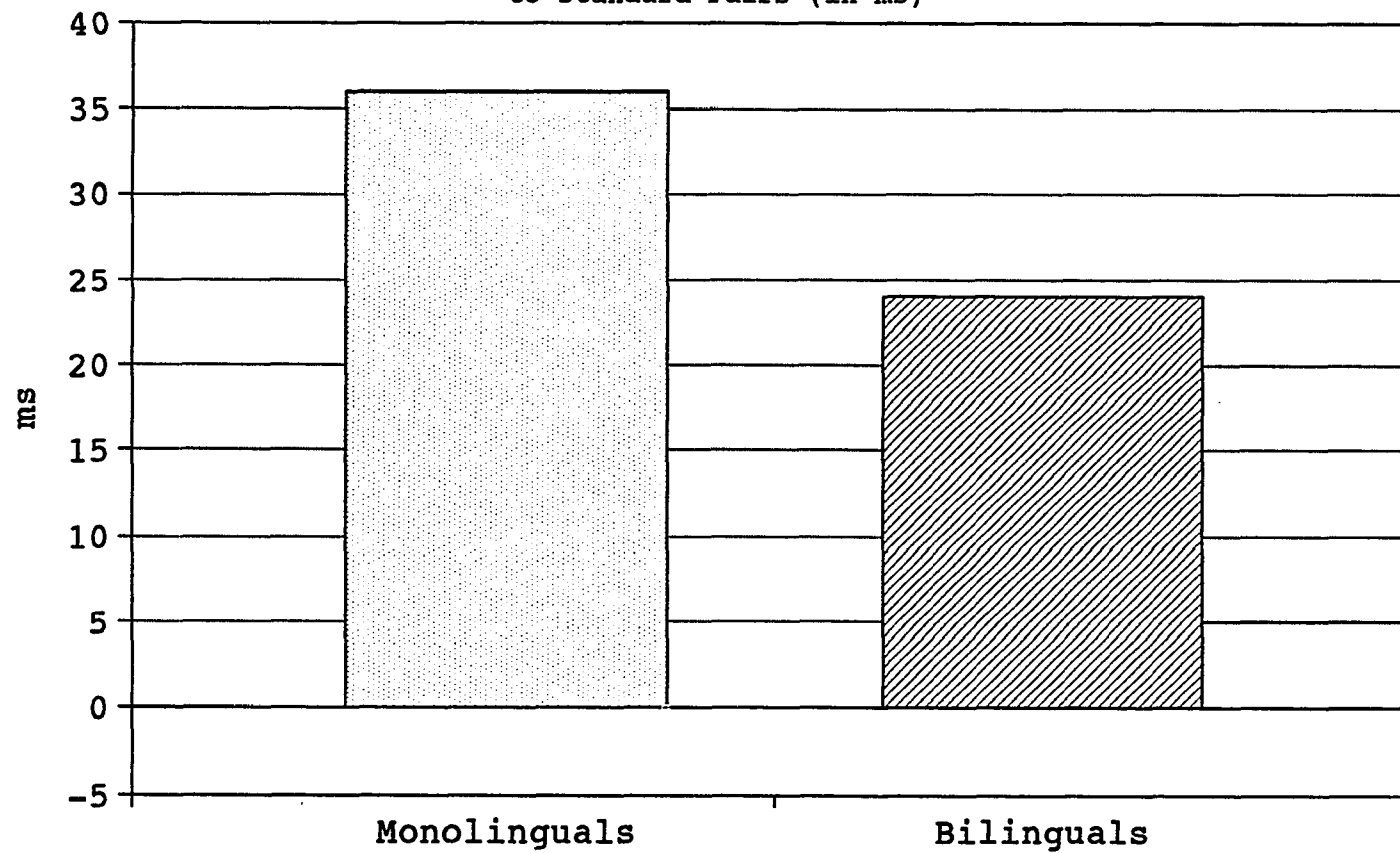


Table 8.
Priming Task
Bilinguals' and Monolinguals' Priming Scores
to Standard Pairs (in ms)



Comparing closely the priming scores for calque pairs, we find a significant facilitation effect for the bilinguals (24 ms.) and no facilitation effect for the monolinguals (4 ms. of inhibition, i.e. -4 ms of priming). The difference in priming scores between bilinguals and monolinguals subjects with respect to calque pairs was significant, with a $t=4.5356$, 41.9 degrees of freedom and a p value of .0001. Overall, these findings agree with our predictions that bilinguals would access the calqued sense whereas monolinguals would not.

Turning to the standard pairs, it can be seen that there was little difference between the bilingual and monolingual subjects. Their mean reaction times (in ms.) for all standard pairs (e.g. duro/firme) and their control (e.g. duro/citar), the priming scores (in ms.) and their statistical significance are presented in Table 10.

Table 10.
Priming Task
Bilinguals and Monolinguals on Standard Pairs
(e.g. duro/firme)

		Mean RT(ms)	Priming Scores(ms)	P Values
Bilinguals	Experimental	477		
	Control	501	24	$p<.0001$
Monolinguals	Experimental	516		
	Control	552	36	$p<.0001$

The analysis of standard pairs alone shows significant priming scores for both subject groups, confirming they both have the standard senses. The monolingual group accessed the standard meanings with 36 ms. of priming, relatively faster than the bilingual group with 24 ms. The difference in priming scores between bilinguals and monolinguals with respect to standard pairs was not significant as expected, with a $t = -.6580$, 52.8 degrees of freedom and a p value of .5134. Both of the monolingual and bilingual groups exhibited significant priming scores, which implies that they have the standard senses. Nonetheless, the slower response times of the bilingual speakers could imply that they are somewhat losing the standard senses due to the inclusion of new ones in their lexical entries.

Results for Bilingual Subjects Alone

Having compared bilinguals and monolinguals, we turn now to the results of bilinguals alone. The overall results indicate semantic facilitation effects for the calque and the standard pairs. It is thus evident that both the calqued sense and the standard sense were accessed, as expected. The mean reaction times calculated across all calque and standard pairs are presented in

Table 11. The means of the data appear first (in ms.), followed by the priming scores (in ms.) and their statistical significance.

Table 11.
Priming Task
Bilinguals on Calque and Standard Pairs

Probe Type		Mean RT(ms)	Priming Scores(ms)	P Values
Calqued Sense	Experimental	478		
	Control	500	22	p<.0001
Standard Sense	Experimental	477		
	Control	501	24	p<.0001

For the calque pairs (e.g. duro/difícil), the results show that there was priming of the calqued sense (22 ms.) when the bilinguals named the calque probe words relative to the naming of the appropriate control words. For example, the probe word difícil was named quicker than its control ninguno. That is, both probes were primed, but the calqued sense was primed faster than its control. The facilitation effect for the calqued sense points to its existence in the lexical entries of bilingual subjects. Statistical analyses support this argument. Overall, the experimental-control main effect was significant across all calque pairs, for items $F(1,86)=33.3800$, $p<.0001$ and for subjects $F(1,31)=13.8667$, $p<.0008$. The significant facilitation effect of the calqued sense by bilinguals is the key finding in this analysis. The calqued senses are primed

for their face validity, i.e. their facilitation effect is proof for the existence of the calqued sense.

Turning to the standard pairs (e.g. duro/firme), the results show that the standard sense was facilitated by naming its associate (firme) faster (24 ms.) than its control word (citar). As expected, the interaction of experimental-control was statistically significant, for items $F(1,86)=35.4782$, $p<.0001$ and for subjects $F(1,31)=12.2416$, $p<.0014$. The mean reaction times calculated across all standard pairs, the priming scores, and their statistical significance are presented in Table 11 above.

Furthermore, the interaction of type of probe (calqued vs. standard sense) x experimental-control was not significant, for items $F(1,86)=.0544$, $p<.8161$ and for subjects $F(1,31)=.0498$, $p<.8249$. That is, the bilinguals' facilitation effect for all calque pairs (22 ms.) did not differ much from their facilitation effect for all standard pairs (24 ms.). The most important finding in this analysis is that calqued senses were reacted to in the same way as stable lexical items. This would confirm the existence of the calqued sense as being incorporated in the Spanish lexicon of bilinguals.

Results for Monolingual Subjects Alone

The analysis on calque pairs indicates no semantic facilitation effect for monolinguals, while standard pairs reveal a significant facilitation effect. It is thus evident that the calqued sense was not accessed, whereas the standard sense was accessed, as expected. The mean reaction times calculated across all calque and standard pairs are presented in Table 12. As in the previous tables, the means of the data appear first (in ms.), and the priming scores (in ms.) second, followed by their statistical significance.

Table 12.
Priming Task
Monolinguals on Calque and Standard Pairs

Probe Type		Mean RT (ms)	Priming Scores (ms)	P Values
Calqued Sense	Experimental	536		
	Control	532	-4	p<.001
Standard Sense	Experimental	516		
	Control	552	36	p<.001

For the calque pairs (e.g. duro/difícil), the results show that there was no facilitation of the calqued sense (4 ms. of inhibition, i.e. -4 ms. of priming), which supports our prediction that monolinguals do not have the calqued sense in their lexical entries. The experimental-control main effect was not significant, for items $F(1,86)=.8000$,

$p < .3736$ and for subjects $F(1,23) = 1.4484$, $p < .2410$. For the standard pairs, on the other hand, the score shows a large semantic facilitation effect for monolinguals (36 ms.). Therefore, the interaction of experimental-control was significant, for items $F(1,86) = 54.4240$, $p < .0001$ and for subjects $F(1,23) = 14.1103$, $p < .0010$. That is, these results point to the fact that monolinguals accessed the standard sense in Spanish words.

When the monolinguals' priming scores for all calque pairs are contrasted with their priming scores for all standard pairs, the data make even more convincing our claim that monolinguals do not have the calqued senses in the Spanish words under study. The facilitation effect for the calque pairs, 4 ms. of inhibition, is starkly different from the facilitation effect for all standard pairs, 36 ms. of priming. Corresponding to these findings, an analysis of variance in the interaction of probe type (calqued sense and standard sense) x experimental-control was significant, for items $F(1,86) = 32.6274$, $p < .0000$ and for subjects $F(1,23) = 15.5523$, $p < .0006$. The different priming scores and the corresponding statistical analyses support our expectation that monolinguals do not have the calqued senses and that only the standard senses are available to them.

The most important finding here is the null effect of the calqued sense for the monolinguals, i.e. the monolingual subjects produced an inhibition effect in accessing the calqued sense. This is an aberrant effect in the wrong direction which shows that the experimental words were accessed slower than the unrelated control words. Unlike the bilinguals, there is no automaticity here; the calqued senses were not automatically accessed, which supports our assumption that monolinguals do not have the calqued senses. As we expected from the monolingual group, this may be due to the confusion that the monolingual subjects experienced in understanding the word but found no semantic relationship that linked it to the prime calque word. An interpretation of this inhibition effect is that confusion leads to interference. This could be explained by Posner and Snyder's (1975) model that predicts that activation automatically spreads from the logogen for the prime duro to the logogen for the probe firme. Inhibition occurs with unrelated logogens because the logogens for duro and difícil are not conceptually linked for the monolinguals as duro and firme. Therefore, the longer search time speaks to the fact that the calque probe difícil does not respond to any of the possible senses in the prime word duro.

A general comment before we leave this section. Even though many facilitation effects were statistically significant throughout the results, the size of these effects were small. Their size can be explained by the finding from several recent lexical processing studies across languages (Chen and Ng 1989; De Groot and Nas 1991; Jin 1990). They found that facilitation effects from translation primes (e.g. author/auteur, from De Groot and Nas) were overall larger than between-language semantically related primes (e.g. author/boek 'book') for bilingual speakers. This is consistent with the small priming scores in the results of our study which dealt with semantically related primes (e.g. correr/ejercicio 'run/exercise'), rather than translation primes (e.g. run/correr).

Phonological Form

Having shown our results by type of subject, we now turn to the results by type of calque. Paired comparison tests for calque pairs were done on phonological form for bilinguals and for semantic transparency for bilinguals and monolinguals. First, we will present the results contrasting the forms phonologically similar to the English model (e.g. aplicación/application) and those

phonologically different from the English model (e.g. duro/hard). From now on, we will use the capitalized phrases "Phonologically Similar" and "Phonologically Different" and their abbreviations PS and PD, respectively, to refer to the two phonological forms. The means of the data, the priming scores, and their statistical significance only for bilingual speakers contrasting the two phonological form variables in calque pairs are presented in Table 13.

Table 13.
Priming Task
Bilinguals on Calque Pairs Contrasting Phonological Form

Prime Type		Mean RT(ms)	Priming Scores(ms)	P Values
PS (N=60) (<u>aplicación</u>)	Experimental	479		
	Control	506	27	p<.0001
PD (N=27) (<u>dura</u>)	Experimental	472		
	Control	489	17	p<.02

As in the overall analysis presented before, main effects for interactions of experimental and control were statistically significant for both types of phonological forms, Phonologically Different, for items $F(1,26)=5.6781$, $p<.0248$, and Phonologically Similar, for items $F(1,59)=28.5334$, $p<.0001$. However, the interaction of experimental-control x phonological form (PS-PD) was not significant, for items $F(1,85)=1.2665$, $p<.2636$ and for subjects $F(1,31)=.0223$, $p<.8822$, even if the facilitation

effect for the Phonologically Similar calques was larger (27 ms.) than the one for those Phonologically Different (17 ms.). Still there is a noticeable difference in priming scores for the two phonological forms, which underscores the importance of similarity of forms in the retrieval of calqued senses. (The monolingual results on phonological form are not presented since we defined phonological form as the relationship established between the calque and the English model, with which we assume the monolingual subjects had no contact).

Semantic Transparency

Further paired comparison tests for calque pairs on semantic transparency reveal no significant difference between priming scores in bilinguals or monolinguals. As stated before, there are two possible semantic relationships between the calqued sense and the existing senses in its recipient word: either the calqued sense is semantically related to one of the senses in the recipient word (e.g. carta as in 'carta de béisbol'), or it is not semantically related to any of the senses in the recipient word (e.g. envuelto as in 'un padre envuelto' with the sense [involved]). The first type was labelled Semantically Transparent (ST), and the second,

Semantically Opaque (SO). The means of the data, the priming scores, and their statistical significance for bilinguals contrasting the two semantic variables in calque pairs appear in Table 14.

Table 14.
Priming Task
Bilinguals on Calque Pairs Contrasting
Semantic Transparency

Prime Type		Mean RT(ms)	Priming Scores(ms)	P Values
SO (N=36) (<u>envuelto</u>)	Experimental	470		
	Control	495	25	p<.001
ST (N=51) (<u>carta</u>)	Experimental	482		
	Control	505	23	p<.001

For bilinguals, the facilitation effect for Semantically Transparent calques was almost as large (23 ms.) as the one for those Semantically Opaque (25 ms.). The interaction of experimental-control x semantic transparency (ST-SO), i.e. the difference in priming scores between the two groups, was not significant, items $F(1,85)=.6649$, $p<.4171$ and subjects $F(1,31)=.5764$, $p<.4535$. Therefore, it can be seen that there was no overall effect of semantic opacity and transparency. Main effects for the experimental-control interaction were statistically significant for both types of semantic variables, for Opaque calque items $F(1,35)=16.8615$, $p<.0002$ and Transparent calque items $F(1,50)=16.7456$, $p<.0002$. The priming scores by the bilingual subjects

contrasting the phonological and semantic variables in all calque pairs are presented graphically in Tables 15 and 16, respectively (See pages 145-146).

Since semantic transparency was defined as the relationship between the new sense and the senses already available in the recipient Spanish word, the monolingual priming scores on this variable could shed light on whether the semantic relationship could or could not be detected by monolinguals. The means of the data, the priming scores, and their statistical significance for monolinguals contrasting the two semantic variables in calque pairs appear in Table 17.

Table 17.
Priming Task
Monolinguals on Calque Pairs Contrasting
Semantic Transparency

Prime Type		Mean RT (ms)	Priming Scores (ms)	P Values
SO (N=36) (<u>envuelto</u>)	Experimental	529		
	Control	528	-1	p<.33
ST (N=51) (<u>carta</u>)	Experimental	541		
	Control	536	-5	p<.79

Both types of semantic transparency were equally inhibited, which shows that it was not easier for monolinguals to prime a Semantically Transparent calque than a Semantically Opaque one. The difference in priming

Table 15.
Priming Task
Bilinguals' Priming Scores
to Calque Pairs
Contrasting Phonological Form (in ms)

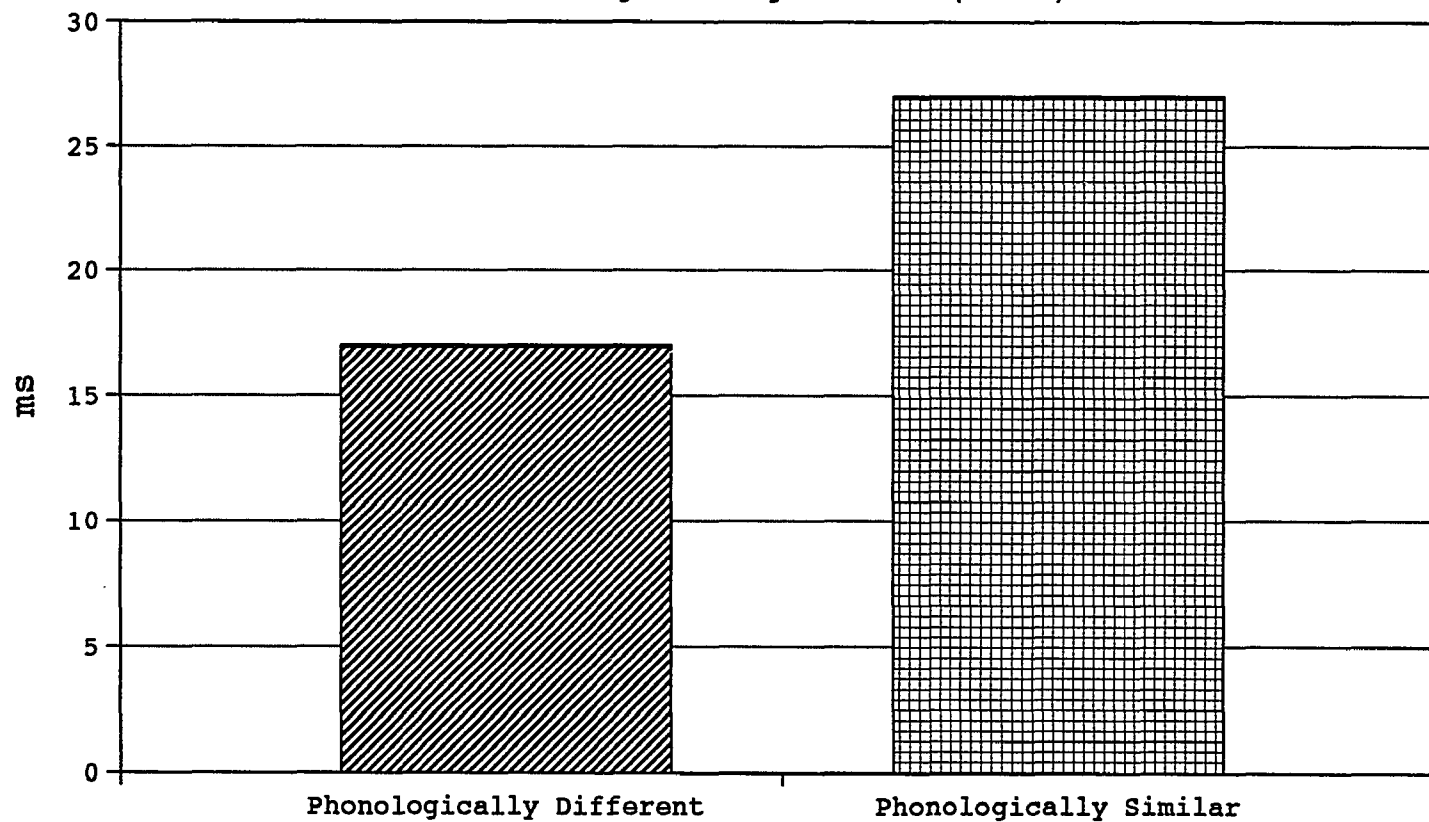
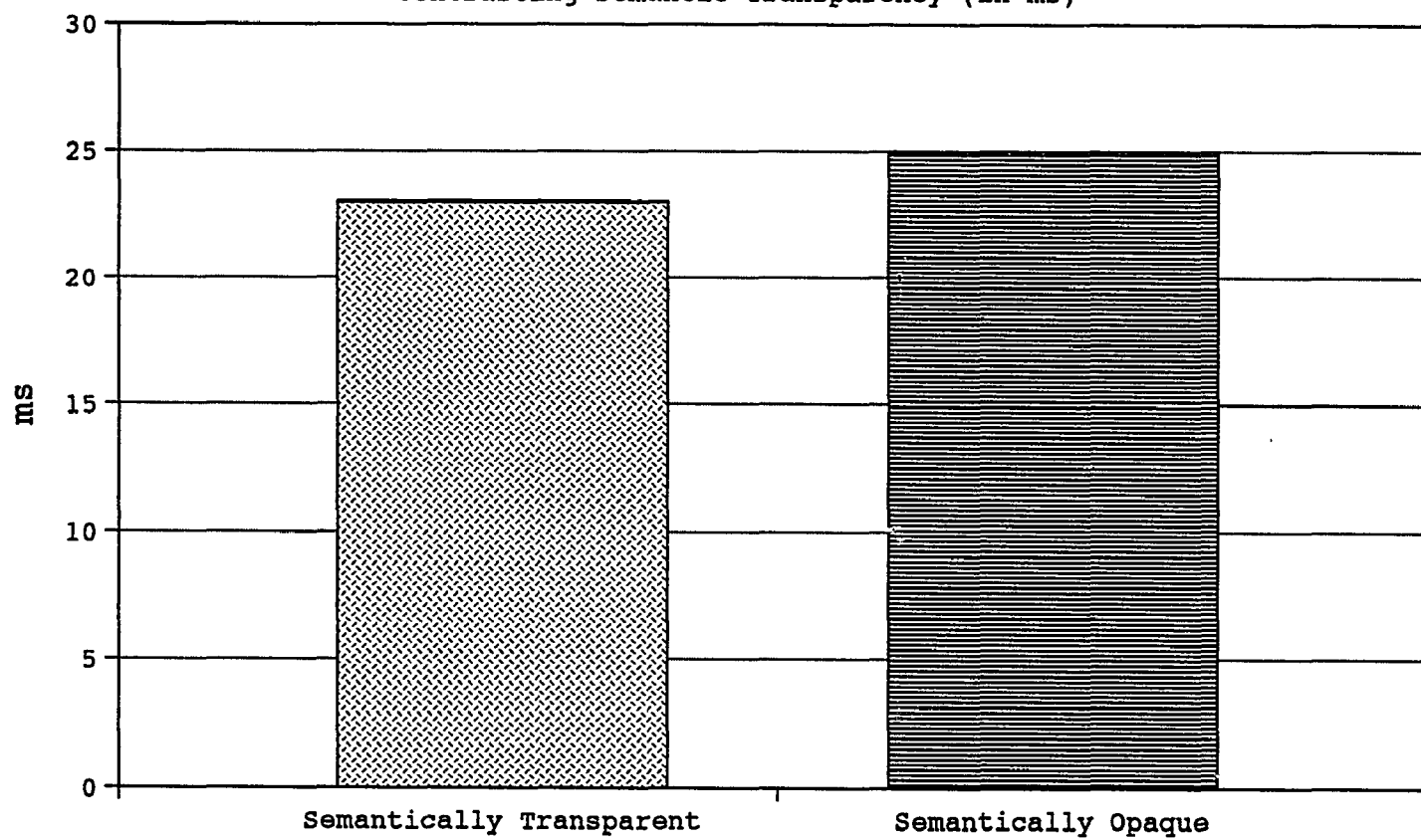


Table 16.
Priming Task
Bilinguals' Priming Scores
to Calque Pairs
Contrasting Semantic Transparency (in ms)



scores between the two types of semantic transparency was not significant, for items $F(1,85)=.1336$, $p<.7156$ and for subjects $F(1,23)=.2006$, $p<.6585$. Therefore, there was no overall effect of opacity and transparency, which was the same pattern of results as for bilinguals. This shows that the presumed semantic link between the calqued sense and the senses in the recipient word was not picked up by either monolinguals or bilinguals, if this semantic relationship exists. We now move on to Part II where the results of the calque ratings by the subjects are presented.

PART II: THE RATING TASK

The rating task was designed to investigate the question whether the subjects actually used the Spanish words with calqued senses for which they had previously been tested in the psycholinguistic experiment.⁴ Our expectation was that bilinguals would rate calques as part

⁴ The rating task, as the calque screening test used in the preparations for the materials, showed unexpected responses from a few subjects who seemed confused and insecure in their ratings because they rated standard words as not used and/or unacceptable in the rating task. This finding supports our decision to have both the priming and rating tasks as part of the study rather than just the rating task, which has been the usual method in sociolinguistic studies.

of their lexical inventory, and that monolinguals would rate them as nonexistent. The results of the rating task served to divide calque words according to how they were rated. Standard summary statistic analyses and analyses of variance were done for each resulting group and are presented in Part III.

METHOD

Subjects

The rating task was administered to both bilinguals and monolinguals who had participated in the priming task. There were 24 monolingual subjects and 32 bilingual subjects.

Materials

In the rating task, the bilingual and monolingual subjects were asked to rate the usage and acceptability of calque words in context. The rating task questionnaire given to the subjects appears in Appendix J. We expected the monolingual speakers to answer they had not heard the underlined word used in that context and to rate calques as odd usages. We expected the bilingual speakers to tell us they had heard the underlined word in that context and to rate calques as current usages.

RESULTS

Of the 87 items judged in the rating task, 39 items were confirmed as "strongly incorporated" calques, 33 items were considered "weakly incorporated", and 15 items were discarded. In order to be considered a Strongly Incorporated calque, more than 50% of the monolingual subjects had to reject the item, and more than 50% of the bilingual subjects had to accept it. Thirty-nine items belong to this group. The number of Strongly Incorporated calques classified according to phonological form and semantic transparency appear in Table 18.

Table 18.
Rating Task
Numbers of Strongly Incorporated Calques by Type

Phonologically Similar	32
Phonologically Different	7
Semantically Transparent	18
Semantically Opaque	21

The striking difference in numbers between Phonologically Similar calques and those Phonologically Different shows the impact of form similarity in the new usages. Semantic transparency, however, did not have an impact on the selection of Strongly Incorporated calques, since their numbers were almost evenly distributed between Semantically Transparent and Semantically Opaque calques.

All 39 Strongly Incorporated calques are listed in Table 19.

Table 19.
Rating Task
Strongly Incorporated Calques

ST, PS -----	SO, PS -----	ST, PD -----	SO, PD -----
admitir	agravada	correr	corta
balance	aplicación	duro	guarda
bloques	atender	paga	mente
conveniencias	calificar		trabajan
elegible	carpeta		
excitantes	casual		
ganar	endosar		
introducir	especiales		
ministro	factoría		
oficina	figuras		
paquete	forma		
registrar	gabinete		
sugestión	principal		
selección	regular		
unión	reportar		
	sensible		
	soportar		

The criterion for the next group, the Weakly Incorporated calques, was the following: 30% to 50% of the monolingual subjects had to reject them, and 30% to 50% of the bilingual subjects had to accept them. The number of Weakly Incorporated calques classified according to phonological form and semantic transparency appear in Table 20.

Table 20.
Rating Task
Numbers of Weakly Incorporated Calques by Type

Phonologically Similar	21
Phonologically Different	12
Semantically Transparent	23
Semantically Different	10

In terms of phonological form, Phonologically Similar calques were almost twice the amount of the Phonologically Different ones. In terms of semantic transparency, Semantically Transparent calques were more than twice the amount of the Semantically Opaque ones. These figures correlate with our expectations that calquing is more likely to occur when calque words are Phonologically Similar and Semantically Transparent. The 33 Weakly Incorporated calques appear in Table 21.

Table 21.
Rating Task
Weakly Incorporated Calques

ST, PS -----	SO, PS -----	ST, PD -----	SO, PD -----
agenda	comercial	atrayente	crecer
anciana	comprensivo	callado	envuelto
alarma	demostración	caminarla	hacerlo
asumir	eventualmente	corren	
cartas	grado	cortes	
colecta	grosería	regresar	
compromiso	proyectos	tomar	
deprimido		perseguir	
distribuidor		punto	
póliza			
referir			
renovada			
renta			
tren			

Sixteen items were not rated as calques. Some (which we will call Class 1) were accepted by the monolinguals and bilinguals, which would mean that these words are part of the inventory of lexical items in the monolingual population at large; and some (which we will call Class 2) were rejected by the bilinguals, as well as the monolinguals, which would mean that bilinguals do not have them in their repertoire. The number of discarded items classified according to phonological form and semantic transparency appear in Table 22.

Table 22.
Rating Task
Numbers of Discarded Items by Calque Type

Class 1	
Phonologically Similar	8
Phonologically Different	3
Semantically Transparent	10
Semantically Opaque	1
Class 2	
Phonologically Similar	-
Phonologically Different	5
Semantically Transparent	-
Semantically Opaque	5

The majority of Class 1 items, i.e. those that were accepted by monolinguals and bilinguals alike, are Phonologically Similar and Semantically Transparent, which implies that these calques are the closest to the standard vocabulary. Class 2 items are all Semantically Opaque and

Phonologically Different, which follows our prediction that these characteristics are the less likely to occur in a calque word. The discarded items are listed in Table 23.

Table 23.
Rating Task
Discarded Items

Class 1		Class 2
-----		-----
abusar	(ST,PS)	descansar
actual	(ST,PS)	levantar
asumir	(ST,PS)	lluvia
batería	(ST,PS)	piso
digital	(ST,PS)	tratar
graduado	(ST,PS)	
retirarse	(ST,PS)	
cobertura	(SO,PS)	
ayudar	(ST,PD)	
fracasar	(ST,PD)	
llamar	(ST,PD)	

In sum, from the responses to the rating task, calques were divided into three groups: Strongly Incorporated, Weakly Incorporated, and discarded items. We now go on to analyze the results of the priming task according to these three groups of rated calque words.

PART III: FINDINGS COMBINING RESULTS OF THE PRIMING AND RATING TASKS

In this section, we look at specific findings correlating the subjects' calque acceptability judgements from the rating task with their priming scores from the

priming task. For the analyses in this section, the experimental design included two factors: type of probe (calqued sense vs. standard sense) and experimental-control. A 2 (type of probe) by 2 (experimental-control) by subjects (24 monolinguals and 32 bilinguals) analysis of variance (ANOVA) was performed for all items. Subject analyses were not run on the data analysed in this section because the items under consideration were too embedded in the data.

A. STRONGLY INCORPORATED CALQUES

The 39 items judged to be Strongly Incorporated Calques in the rating task were pulled out of the results from the priming task and analysed separately.

Results Comparing Bilingual and Monolingual Subjects

As did the results for all tested calque items, results for Strongly Incorporated calques again indicate that calqued senses were primed by bilinguals, but not by monolinguals. The mean reaction times (in ms.) calculated across all calque pairs and their controls, the priming scores (in ms.), and their statistical significance are presented in Table 24.

Table 24.
Priming Task
Bilinguals and Monolinguals on
Strongly Incorporated Calque Pairs

		Mean <u>RT(ms)</u>	Priming <u>Scores (ms)</u>	P Values
Bilinguals	Experimental	476		
	Control	500	24	p<.001
Monolinguals	Experimental	531		
	Control	528	-3	p<.65

Comparing monolinguals with bilinguals on the Strongly Incorporated calque pairs, we find that bilinguals significantly primed the calqued senses (30 ms.), whereas monolinguals did not (3 ms. of inhibition, i.e. -3 ms of priming). An analysis of variance for bilinguals revealed a significant experimental-control effect, for items $F(1,38)=18.1699$, $p<.0001$, while for monolinguals the effect was not significant, for items $F(1,38)=.2003$, $p<.6570$. These results confirm the overall divergent pattern in the facilitation effect for bilinguals and monolinguals.

Results for Bilingual Subjects Alone

The bilingual subjects significantly primed the calque and standard pairs of Strongly Incorporated calques. Mean reaction times for naming the experimental

words and their controls for Strongly Incorporated calques by bilinguals are given in Table 25.

Table 25.
Priming Task
Bilinguals on Strongly Incorporated Calque Pairs

Probe Type		Mean RT(ms)	Priming Scores (ms)	P Values
Calqued Sense (<u>memoria</u>)	Experimental	476		
	Control	500	24	p<.0001
Standard Sense (<u>distancia</u>)	Experimental	484		
	Control	501	17	p<.0001

The bilinguals reacted quite similarly to the Strongly Incorporated calque and standard pairs, as they had done for all calque and standard pairs, since both conditions produced significant priming. This finding confirms the correlation between the consciously reported calque usage by the informants and the items that were chosen for this investigation. An analysis of variance revealed that the experimental-control effect for calque pairs was overall significant, for items $F(1,38)=18.1699$, $p<.0001$. The effect for standard pairs was also significant, for items $F(1,38)=7.9370$, $p<.0076$. The interaction of experimental-control x type of probe (calque and standard sense) was not significant, for items $F(1,38)=.6222$, $p<.4351$, since there was no difference in the way each condition was primed.

If we go further and do paired comparison tests on the phonological form variables in Strongly Incorporated calques, the results again underscore the importance of phonological form in the retrieval of calqued senses. The mean reaction times (in ms.), the priming scores (in ms.), and their statistical significance for this comparison appear in Table 26.

Table 26.
Priming Task
Bilinguals on Strongly Incorporated Calque Pairs
Contrasting Phonological Form

Prime Type		Mean RT(ms)	Priming Scores(ms)	P Values
PS (N=32) (<u>admitir</u>)	Experimental	477		
	Control	507	30	p<.0001
PD (N=7) (<u>corta</u>)	Experimental	467		
	Control	470	3	p<.78

The largest facilitation effect (30 ms.) was for the Phonologically Similar calques, and the smallest one (3 ms.) for the Phonologically Different calques. The interaction of experimental-control x phonological form (PS-PD) was approaching significance, for items $F(1,37)=3.2403$, $p<.0800$. The small number of items in the Phonologically Different group (N=7) may have contributed to the lack of a significant difference between the priming scores of the two phonological forms. The experimental-control effect for PS Strongly Incorporated

calques was significant, for items $F(1,31)=20.9273$, $p<.0001$, while the effect for PD Strongly Incorporated calques was not significant, for items $F(1,6)=.0820$, $p<.7842$. This difference in the statistical significance of the facilitation effect makes it evident again that phonological form plays a role in the access of calque words.

The second variable under consideration, semantic transparency, did not have an effect in the lexical access of Strongly Incorporated calques. The mean reaction times (in ms.), the priming scores (in ms.) and their statistical significance for this comparison appear in Table 27.

Table 27.
Priming Task
Bilinguals on Strongly Incorporated Calque Pairs
Contrasting Semantic Transparency

Prime Type		Mean RT(ms)	Priming Scores(ms)	P Values
SO(N=21) (<u>agravada</u>)	Experimental	470		
	Control	499	29	$p<.04$
ST(N=18) (<u>selección</u>)	Experimental	482		
	Control	502	20	$p<.001$

The Semantically Opaque and Transparent types were similarly primed (29 ms.) and (20 ms.), respectively. Thus, the interaction of experimental-control x semantic

transparency (ST-SO) was not significant, for items $F(1,37)=.5995$, $p<.4437$, as expected from the priming scores. Nonetheless, the experimental-control effect for the ST Strongly Incorporated calques was significant, for items $F(1,17)=4.8445$, $p<.0418$, as well as the effect for SO Strongly Incorporated calques, for items $F(1,20)=14.5045$, $p<.0011$, confirming the similar facilitation effects they both produced.

B. WEAKLY INCORPORATED CALQUES

The 33 items which were rated Weakly Incorporated calques in the rating task were pulled out and analysed separately.

Results Comparing Bilingual and Monolingual Subjects

Overall, results for Weakly Incorporated calques indicate that bilinguals accessed the calqued senses and monolinguals did not, as in previous analyses. Mean reaction times, the priming scores, and their statistical significance for this group of rated calques appear in Table 28.

Table 28.
 Priming Task
 Bilinguals and Monolinguals on
 Weakly Incorporated Calque Pairs

		Mean <u>RT(ms)</u>	Priming <u>Scores(ms)</u>	<u>P Values</u>
Bilinguals	Experimental	477		
	Control	504	27	p<.001
Monolinguals	Experimental	541		
	Control	537	-4	p<.46

As expected from previous results, bilinguals significantly primed the calqued sense (27 ms.), for items $F(1,32)=13.2291$, $p<.0010$. On the other hand, monolinguals did not prime the calqued sense (4 ms. of inhibition, i.e. -4 ms. of priming) with a corresponding experimental-control interaction that was not significant, for items $F(1,32)=.5404$, $p<.4676$. Again there was a facilitation effect by bilinguals and an inhibition effect by monolinguals, a pattern in results that coincides with previous analyses.

Results for Bilingual Subjects Alone

Mean reaction times for naming the experimental words and their controls for Weakly Incorporated calques by bilinguals, the priming scores, and their statistical significance are given in Table 29.

Table 29.
Priming Task
Bilinguals on Weakly Incorporated Calque Pairs

Probe Type		Mean RT(ms)	Priming Scores(ms)	P Values
Calqued Sense (<u>aprender</u>)	Experimental	477		
	Control	504	27	p<.001
Standard Sense (<u>desarrollarse</u>)	Experimental	470		
	Control	496	26	p<.0001

The above results for bilinguals show no difference between their priming scores to Weakly Incorporated calque pairs and the corresponding standard pairs. The statistical analysis confirms our impression. The analysis of variance shows that the experimental-control effects were overall significant for the Weakly Incorporated calque pairs, for items $F(1,32)=13.2291$, $p<.0010$, and the corresponding standard pairs, for items $F(1,32)=33.4368$, $p<.0000$. The interaction of experimental-control x type of probe (calqued and standard sense) was not significant, for items $F(1,32)=.0000$, $p<1.0000$. That is, bilinguals equally accessed both the calqued and standard senses in this classification of rated calque words.

Looking at results of facilitation effects in terms of phonological form and semantic transparency, neither of these variables played a role in the retrieval of Weakly Incorporated calques. The mean reaction times, the priming scores, and their statistical significance for Weakly

Incorporated calques contrasting their phonological form appear in Table 30.

Table 30.
Priming Task
Bilinguals on Weakly Incorporated Calque Pairs
Contrasting Phonological Form

Prime Type		Mean RT(ms)	Priming Scores(ms)	P Values
PD(N=12) (<u>callado</u>)	Experimental Control	469 499	30	p<.0001
PS(N=21) (<u>agenda</u>)	Experimental Control	482 507	25	p<.0001

The facilitation effects for Phonologically Different (30 ms.) and Phonologically Similar (25 ms.) types were about the same. The interaction of experimental-control x phonological form (PD-PS) was not significant, for items $F(1,31)=.0090$, $p<.9249$, since there was almost no difference in the facilitation effects of the two phonological forms. This is the only case where the phonological form of the calque word in relation to its model word (agenda/agenda) as opposed to callado/quiet) evinces no contrast. The experimental-control effect was significant for both Phonologically Different, for items $F(1,11)=66.0378$, $p<.0001$, and Phonologically Similar Weakly Incorporated calques, for items $F(1,20)=22.9946$, $p<.0001$, implying that both phonological calque types were equally accessed.

The mean reaction times, the priming scores, and their statistical significance for Weakly Incorporated calques contrasting semantic transparency appear in Table 31.

Table 31.
Priming Task
Bilinguals on Weakly Incorporated Calque Pairs
Contrasting Semantic Transparency

Prime Type		Mean RT (ms)	Priming Scores (ms)	P Values
ST (N=23) (<u>alarma</u>)	Experimental	481		
	Control	507	26	p<.001
SO (N=10) (<u>grosería</u>)	Experimental	467		
	Control	491	24	p<.001

The facilitation effects for Semantically Transparent (26 ms.) and Semantically Opaque (24 ms.) Weakly Incorporated calques were quite similar, as they had been so far. The interaction of experimental-control x semantic transparency (ST-SO) was not significant, for items $F(1,31)=.0090$, $p<.9249$, which implies that the semantic variable did not affect the retrieval of calque words.

C. DISCARDED ITEMS

This third grouping includes the items not rated as calques in the rating task. Eleven of the items (Class 1) were accepted by monolinguals as already occurring in

standard usage, so that the supposedly new sense was not new after all (e.g. digital as in 'reloj digital'). Five of the items (Class 2) were neither used nor accepted by the bilinguals (e.g. tratar as in 'Traté esos zapatos', meaning 'I tried those shoes'), which could imply that bilinguals do not have these calque words in their vocabulary.

Class 1

Mean reaction times for naming the experimental words and their controls for the discarded Class 1 items by monolinguals and bilinguals are given in Table 32.

Table 32.
Priming Task
Bilinguals and Monolinguals on Discarded Items
Class 1 (e.g. digital)

		Mean RT(ms)	Priming Scores (ms)	P Values
Bilinguals	Experimental	487		
	Control	501	14	p<.19
Monolinguals	Experimental	530		
	Control	542	12	p<.3

There was no significant priming for bilinguals or for monolinguals. We had expected large facilitation effects to correlate with the subjects' ratings that these purportedly new usages were already a part of the standard meanings, but there were none. An analysis of variance

revealed no main effects for the interaction of experimental-control for either bilinguals, for items $F(1,10)=1.9191$, $p<.1961$, or monolinguals, for items $F(1,10)=.8487$, $p<.3786$. The lack of significance could be attributed to the small number of items ($N=11$) in this category. Nonetheless, the priming scores are close enough to imply that both subject groups accessed these calques in a similar way.

Class 2

Mean reaction times for naming the experimental words and their controls for Class 2 items by monolinguals and bilinguals, the priming scores, and their statistical significance are given in Table 33.

Table 33.
Priming Task
Bilinguals and Monolinguals on Discarded Items
Class 2 (e.g. tratar)

		Mean RT(ms)	Priming Scores (ms)	P Values
Bilingual	Experimental	462	8	
	Control	470		
				$p<.62$
Monolinguals	Experimental	539	-21	
	Control	518		
				$p<.48$

There was almost no priming for bilinguals and no priming for monolinguals. Therefore, the calqued senses were not accessed by either subject group. An analysis of variance revealed no main effects for the interaction of

experimental-control for Class 2 items for bilinguals, for items $F(1,4)=.2880$, $p<.62$, or monolinguals, for items $F(1,4)=.6052$, $p<.4800$. These results were expected for Class 2 items, since both bilinguals and monolinguals had rated this group of calques as non-existent. Nonetheless, the slight priming by bilinguals could reflect their relative accessing of these items, at least more so than monolinguals. The small facilitation effect could be explained by the bilinguals' exposure to these calque words, which makes itself evident as a slow permeation of the calqued senses into the Spanish words. This finding supports our claim that the subjects' calque ratings are not completely reliable since they had rejected these calque words. It, therefore, stresses the importance of the priming task as a tool to detect the new calqued senses.

Overall, then, the results for the three groups of rated calques mirrored the results obtained for all calques in that bilinguals primed the calqued senses, while monolinguals did not. In terms of the variables of phonological form and semantic transparency, Strongly Incorporated calques showed a difference between Phonological Similar and Phonologically Different calques and no difference between Semantically Transparent and

Semantically Opaque ones, which were the same findings as for all calque items combined. For the Weakly Incorporated calques, however, there was no difference in the priming scores in terms of phonological form, which could be the key difference between Weakly and Strongly Incorporated calques. Now we move on to a more specific analysis of the results.

PART IV: A SECOND LOOK AT THE PRIMING TASK

The main general findings of the analysis have been discussed above. We turn now to the presentation of more specific results from the priming task in terms of the four types of calque words. As stated before, these types are defined by two variables: phonological form and semantic transparency; with respect to phonological form, the prime is either Phonologically Different (duro/hard) or Phonologically Similar (aplicación/application), while with respect to semantic transparency, the prime is either Semantically Transparent or Semantically Opaque (i.e. related to one of the senses already available in the recipient word as carta in 'carta de béisbol' or unrelated to any of the existing senses of the recipient Spanish word, as envuelto in 'un padre envuelto'). None of these examples, however, is a pure type (i.e. carta is not only

Semantically Transparent but also Phonologically Similar). Below, we give examples of the four resulting combinations.

For this analysis, the experimental design included the following three principal factors: type of prime (4), type of probe (2), and experimental-control (2). For the type of prime, the analyses involve two levels each of phonological similarity and semantic transparency. These two variables make four groups: Semantically Transparent and Phonologically Similar (ST,PS), as excitante in 'Estudio una carrera excitante'; Semantically Opaque and Phonologically Similar (SO,PS), as aplicación in 'Llené la aplicación'; Semantically Transparent and Phonologically Different (ST,PD), as dura in 'una escuela dura'; and Semantically Opaque and Phonologically Different (SO,PD), as guarda in 'Guarda el martes para salir'. For the type of probe, the probe is either semantically related to the calqued sense or to the standard sense of the prime.

Type of Prime	ST,PS	<u>EXCITANTE</u>
	SO,PS	<u>APLICACION</u>
	ST,PD	<u>GUARDA</u>
	SO,PD	<u>DURA</u>
Type of Probe	Calqued Sense	<u>DIFICIL</u>
	Standard Sense	<u>FIRME</u>
Experimental-Control	Experimental	<u>FIRME</u>
	Control	<u>CITAR</u>

A 4 (type of prime) by 2 (type of probe) by 2 (experimental-control) by subjects (24 monolinguals and 32 bilinguals) analysis of variance (ANOVA) was performed for all items and subjects. The results presented alone for monolingual subjects have shown that monolinguals did not produce a facilitation effect for calque pairs, while they did for standard pairs. Therefore, their results will not be included in the coming analysis, which focuses only on bilingual responses to calque pairs.

A. ALL CALQUES

The bilinguals' mean reaction times for the four experimental conditions calculated across all calque pairs are presented in Table 34. The means of the data (in ms.) appear first, followed by the priming scores (in ms.) and their statistical significance. The overall effect for type of prime (the four groups defined above in terms of phonological form and semantic transparency) was significant, for items $F(3,83)=5.9166$, $p<.0010$ and for subjects $F(1,31)=10.6949$, $p<.0026$. That is, the four groups of calques were significantly different from each other, which supports our classification by the variables of phonological form and semantic transparency.

Table 34.
Priming Task
Bilinguals on All Calque Pairs by Prime Type

Prime Type		Mean RT(ms)	Priming Scores(ms)	P Values
SO, PS (N=25) (<u>aplicación</u>)	Experimental Control	474 504	30	p<.0006
ST, PS (N=35) (<u>excitante</u>)	Experimental Control	483 507	27	p<.001
ST, PD (N=16) (<u>duro</u>)	Experimental Control	480 499	19	p<.09
SO, PD (N=11) (<u>guarda</u>)	Experimental Control	461 474	13	p<.09

Looking at the individual results by type, the results for calque pairs revealed semantic facilitation effects in all four conditions with scores in the direction that would be expected to support our thesis that English senses have been incorporated into Spanish words. Only the first two cells (SO,PS and ST,PS) contain results that reach statistical levels of significance, for items $F(1,34)=14.1996$, $p<.0006$ and for items $F(1,24)=14.0916$, $p<.0010$, respectively. The last two cells (ST,PD and SO,PD) were primed but not significantly, for items $F(1,10)=3.3068$, $p<.0990$ and for items $F(1,15)=3.0752$, $p<.0999$. However, the first three cells (SO,PS; ST,PS; and ST,PD) were statistically significant in the subject analysis, for subjects $F(1,31)=22.2612$, $p<.0001$; $F(1,31)=30.7504$, $p<.0001$; and $F(1,31)=4.1743$, $p<.0496$. The last cell (SO,PD) was not significant in the subject

analysis, $F(1,31)=.5395$, $p<.4682$, as it had been for the item analysis.

The priming scores by bilinguals followed an increasing scale for each type of calque and followed our predictions. The type of calque that produced the least amount of priming (13 ms.) was Semantically Opaque and Phonologically Different. The one that followed with a slightly larger facilitation effect (19 ms.) was Semantically Transparent and Phonologically Different. However, the facilitation effects for these two types of Phonologically Different calque words were not statistically significant in the item analysis ($p<.09$). As we expected, the facilitation effect for calques that were Phonologically Similar was larger than the one for calques that were Phonologically Different. One explanation is that the phonetic form in the model facilitates the retrieval of the calqued sense. Semantic transparency, however, did not affect the lexical access of the calqued sense. The Semantically Opaque calques with a Phonologically Similar form had the most priming (30 ms.), when we were expecting that the Semantically Transparent calques would have been the most primed (27 ms.). The difference between them, however, is negligible, and for the analysis, it could be considered almost the same. The

calques that were Semantically Opaque and Phonologically Different produced the least priming (13ms.), as we expected. Since the bilinguals' reactions to Opaque calques appear at both the lowest and highest ends of the response scale, semantic transparency does not seem to play a role in the retrieval of the calqued sense. This more specific analysis confirms previous findings that phonological form plays a role in the retrieval of calques, but semantic transparency does not.

B. STRONGLY INCORPORATED CALQUES

Bilinguals' mean reaction times for naming the experimental words and their controls for Strongly Incorporated calques, the priming scores, and their statistical significance are given in Table 35. An analysis of variance revealed a strong tendency toward a significant effect for type of prime, for items $F(3,35)=2.7217$, $p<.0591$, i.e. the four groups of calques seem to be different from each other.⁵

⁵Subject analyses were not run in this section and the next because the items under consideration were too embedded in the data.

Table 35.
Priming Task
Bilinguals on Strongly Incorporated Calque Pairs
by Prime Type

Prime Type		Mean RT(ms)	Priming Scores(ms)	P Values
SO, PS (N=17) (<u>aplicación</u>)	Experimental	473		
	Control	506	33	p<.001
ST, PS (N=15) (<u>excitante</u>)	Experimental	483	25	p<.01
	Control	508		
ST, PD (N=3) (<u>duro</u>)	Experimental	471	4	p<.85
	Control	475		
SO, PD (N=4) (<u>guarda</u>)	Experimental	463	1	p<.72
	Control	464		

As shown above, the bilinguals' results for Strongly Incorporated calques are not as convincing as when calques were analysed together as a whole, since only two calque types now have a significant facilitation effect. Nonetheless, the results for the grouping of Strongly Incorporated calques clearly shows the importance of a similar phonological form in the access of calqued senses. When the calques were Phonologically Different regardless of their semantic transparency, the facilitation effect was negligible: 1 ms. and 4 ms., respectively, for the Semantically Transparent, for items $F(1,3)=.0395$, $p<.8551$, and the Semantically Opaque calques, for items $F(1,2)=.1699$, $p<.7202$. However, when the calques were Phonologically Similar, there was significant priming for the Semantically Transparent (25 ms.), for items

$F(1,14)=6.9012$, $p<.0199$, and the Semantically Opaque calques (33 ms.), for items $F(1,16)=14.0709$, $p<.0017$. The latter results clearly indicate that, when the calque was Phonologically Similar regardless of semantic transparency, the calqued sense was quickly accessed.

It is interesting to note that the ordering in priming scores for the four calque types is the same for the rated Strongly Incorporated calques as it is for all calques. The priming scores contrasting the four calque types for Strongly Incorporated, Weakly Incorporated, and all calque pairs are represented graphically in Tables 36-38 (See pages 175-177).

C. WEAKLY INCORPORATED CALQUES

Bilinguals' mean reaction times for naming the experimental words and their controls for Weakly Incorporated calques, the priming scores, and their statistical significance are given in Table 39. The analysis of variance shows that the interaction for the four types of primes was significant, for items $F(3,29)=3.5779$, $p<.0258$, which confirms the previous analyses that the four calque types were reacted to differently.

Table 36.
Priming Task
Bilinguals' Priming Scores
to All Calque Pairs
by Prime Type (in ms)

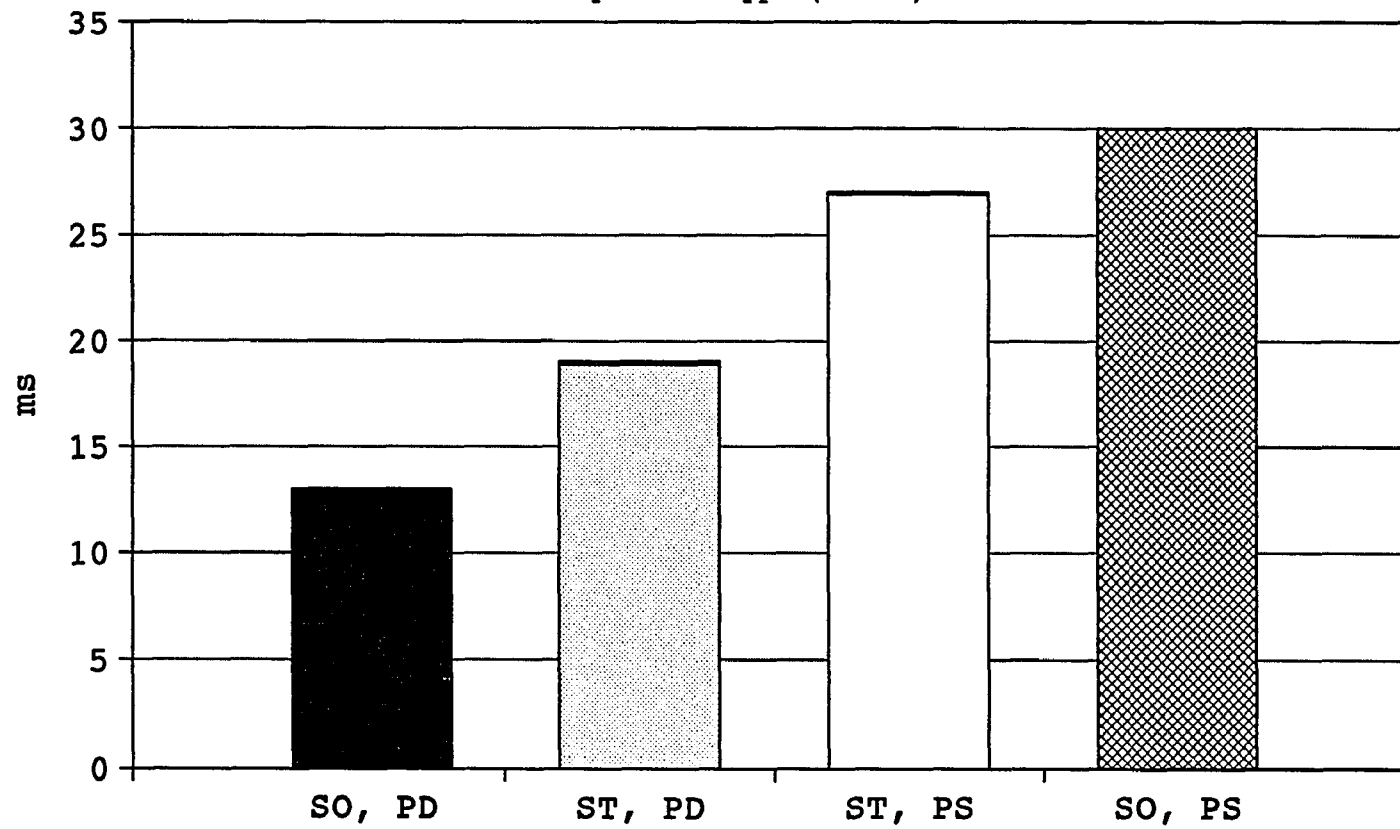


Table 37.
 Priming Task
 Bilinguals' Priming Scores
 to Strongly Incorporated Calque Pairs
 by Prime Type (in ms)

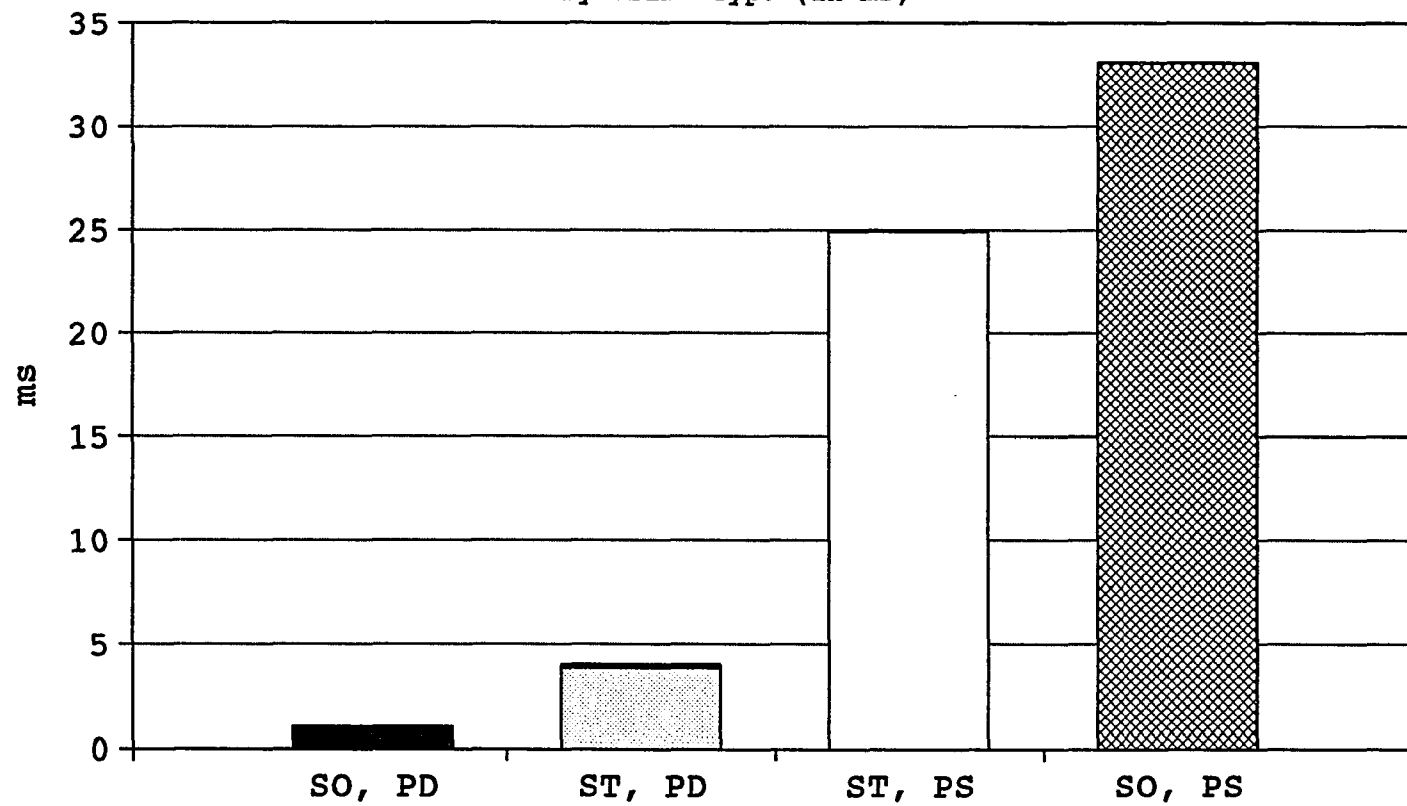


Table 38.
Priming Task
Bilinguals' Priming Scores
to Weakly Incorporated Calque Pairs
by Prime Type (in ms)

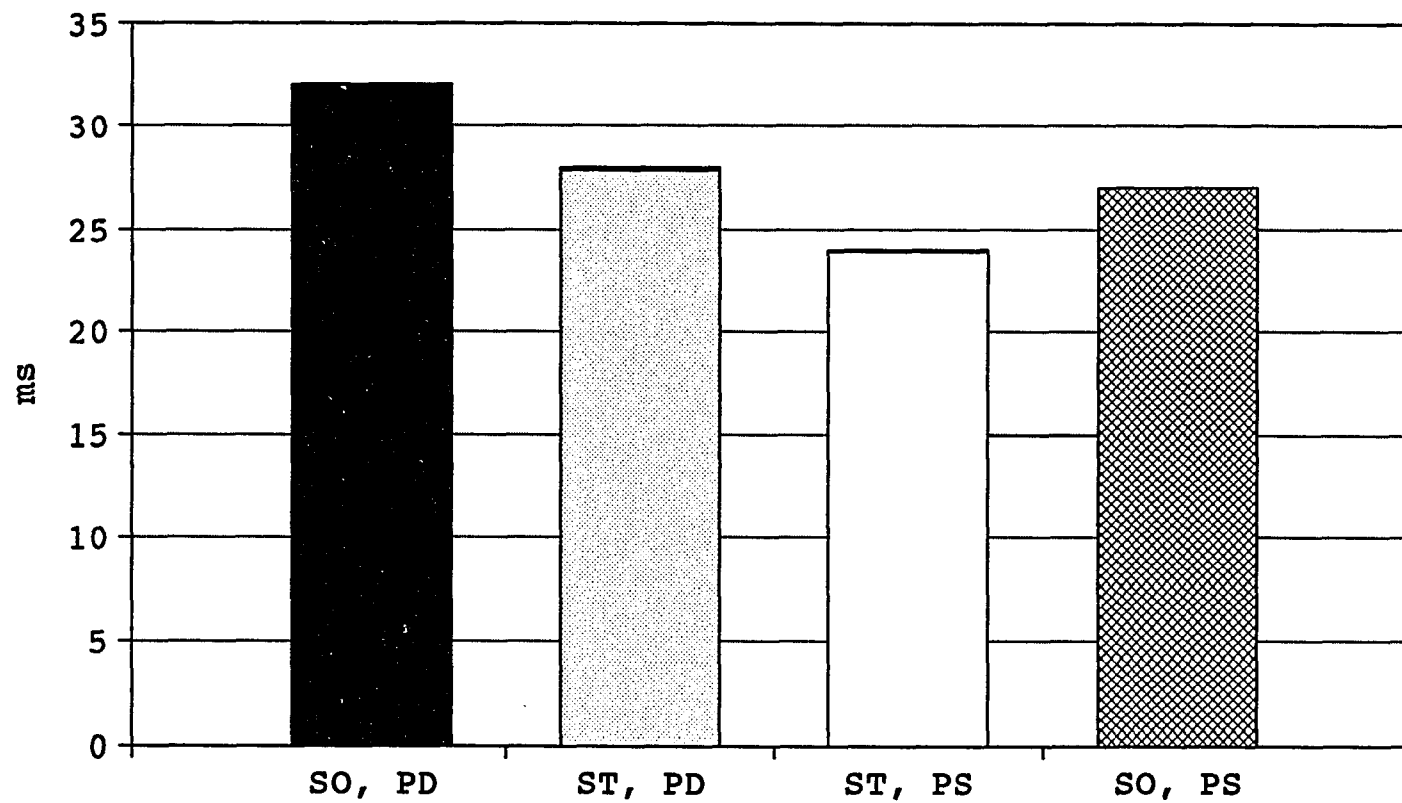


Table 39.
Priming Task
Bilinguals on Weakly Incorporated Calque Pairs
by Prime Type

Prime Type		Mean RT (ms)	Priming Scores (ms)	P Values
SO, PD (N=3) (<u>envuelto</u>)	Experimental	443		
	Control	475	32	p<.001
ST, PD (N=9) (<u>callado</u>)	Experimental	478		
	Control	506	28	p<.08
SO, PS (N=7) (<u>grosería</u>)	Experimental	479		
	Control	506	27	p<.20
ST, PS (N=14) (<u>cartas</u>)	Experimental	484		
	Control	508	24	p<.06

The facilitation effect was statistically significant only for the first calque type, for items $F(1,2)=71.8308$, $p<.0014$. Eventhough the other three priming scores were large, they were not statistically significant, for items $F(1,8)=3.9362$, $p<.0825$; $F(1,6)=2.0027$, $p<.2068$; and $F(1,13)=3.9922$, $p<.0671$. The results for Weakly Incorporated calques indicate that the largest facilitation effect was for Phonologically Different calques. This contradicts the results obtained for Strongly Incorporated calques and all calques combined (See Tables 36-38 for comparison). In the other two cases, Phonologically Similar calques had produced the largest facilitation effect. The pattern in the ordering of Weakly Incorporated calques reflects that neither phonological form nor semantic transparency had an impact on the access

of the calqued senses. Having been rated Weakly Incorporated could point to the fact that the calque types in this group have not settled down. That is, the ordering of calque types that had appeared for the previous two categories (all calques and Strongly Incorporated calques) is not yet in place because they are still in the process of being incorporated into the Spanish lexicon. We now move on to Part V, where information from the Personal Information Questionnaires was analysed in terms of the priming scores from the priming task.

PART V: ANALYSES OF OTHER VARIABLES

This last part presents statistical analyses of the priming scores from the two subject groups and the data gathered from the Personal Information Questionnaires (See Section 1 at the beginning of this chapter). T Tests were run on the personal information data from the bilinguals on the following variables: sex and knowledge of another language other than English with respect to the bilinguals' responses to calque pairs and standard pairs. Also T Tests were run on the personal information data from the monolinguals on the following variables: sex, knowledge of English, and knowledge of another language other than English with respect to the monolinguals'

responses to calque and standard pairs. T values on the bilingual and monolingual's data and their statistical significance appear in Table 40.

Table 40.
T Tests of Priming Scores with
Data from the Personal Information Questionnaires
on All Subjects

BILINGUALS

<u>Calque Pairs</u>	<u>T Values</u>	<u>Degrees of Freedom</u>	<u>P Values</u>
Sex	.2040	30.0	.8398
Knowledge of another language	-.0496	30.0	.9608
<u>Standard Pairs</u>			
Sex	.9815	30.0	.3342
Knowledge of another language	-.6840	30.0	.4993

MONOLINGUALS

<u>Calque Pairs</u>	<u>T Values</u>	<u>Degrees of Freedom</u>	<u>P Values</u>
Sex	.5713	22.0	.5736
Knowledge of another language	.4041	22.0	.6901
Knowledge of English	-.6055	22.0	.5510
<u>Standard Pairs</u>			
Sex	-.3509	22.0	.7290
Knowledge of another language	2.5194	21.6	.0197*
Knowledge of English	-1.1462	22.0	.2640

*This is the only statistically significant t test result.

None of the T Tests run on the bilinguals' and monolinguals' data were statistically significant, except for one: the monolingual subjects who knew another language reacted differently from those who did not, with respect to the priming scores of standard pairs, with a $t=2.5194$, 21.6 degrees of freedom, $p=.0197$. This statistical result upholds the underlying thesis of our study: that a knowledge of another language influences the native language of the speakers. It is interesting to note, however, that the reported weak knowledge of English only did not have an effect on the access of the standard sense by monolinguals. This could be attributed to the subjects' probable better knowledge of the other language(s). In sum, almost all of the variables had no influence on the responses of either subject group.

We also obtained Pearson correlations for both subject groups. For bilinguals, correlations were obtained for calque and standard pairs with age, age of arrival, years of residence in the United States, and use of English at home, at work, and in a social setting. For monolinguals, correlations were obtained for calque and standard pairs with age. The Maximum Likelihood Estimates of each correlation for both subject groups and their statistical significance appear in Table 41.

Table 41.
Pearson Correlations of Priming Scores with Data
from the Personal Information Questionnaires
on All Subjects

BILINGUALS

	<u>Calque Pairs</u>		<u>Standard Pairs</u>	
	$\hat{r}$	P Values	$\hat{r}$	P Values
Age	.22774	.21	.08596	.64
Age of Arrival in the US	.15623	.3932	.25632	.1568
Years of Residence in the US	.16765	.3591	-.02246	.9029
Use of English at Home	-.20333	.2644	-.1208	.51
Use of English at Work	.24022	.2094	.11976	.536
Use of English Socially	.27387	.1293	-.02532	.8906

MONOLINGUALS

	<u>Calque Pairs</u>		<u>Standard Pairs</u>	
	$\hat{r}$	P Values	$\hat{r}$	P Values
Age	-.2213	.2987	-.2213	.2987

*This is the only statistically significant Pearson correlation.

For bilinguals, all the correlations were low and not significant. For monolinguals, however, the correlation for standard pairs with age was low and not significant, but the one for calque pairs with age was significant,

$\hat{\rho} = -.39422$, $p = .0566$. This means that the older the monolingual, the smaller the priming score for calque pairs, as well as the reverse: the younger, the larger. This finding, however, is not of much importance given the lack of priming scores for monolinguals (4 ms. of inhibition for calque pairs). Nonetheless, the correlation in our monolinguals can point to a trend that is supported by the findings of Poplack, Sankoff, and Miller (1988) only found in bilinguals so far: younger speakers had more borrowing rates, i.e. they are more open to language variation than older speakers. While this was the case with their bilinguals, it was not so with our young bilingual speakers, who did not have a quicker response time to calque pairs. Our results can be explained by the fact that our bilinguals were not as young (in their thirty's) as the ones in Poplack, Sankoff, and Miller's study (in their teens and twenty's).

For bilinguals, we had also expected that the amount of exposure to English in the environment (at home, at work, and in a social setting) would have influenced the bilinguals' responses to calque pairs, but it did not. May be they all had the same amount of exposure to English albeit in different environments. We had expected faster response times from bilinguals who had lived in the United

States for a longer period of time. But there was no effect of years of residence, probably because the calquing process does not increase over time; rather once it occurs, it effects a change that is immune to further variation. This idea is confirmed by the findings of Davis, Sánchez-Casas, and García-Albea (in preparation), who found that the semi-bilingual group (native speakers of Spanish who had an intermediate level of English learned at an American university) did not show a facilitation effect even when they knew the translations. The researchers hypothesized that a considerable amount of experience in the language might be required before the appropriate cross-linguistic connections are established. This finding, however, should be correlated with the age of the subjects to examine a possible variation between younger and older subjects.

An analysis of variance (ANOVA) was done on the education level of monolinguals only because 99% of the bilinguals were college graduates. None of the analyses reached significance, for calque pairs $p > .7684$ and for standard pairs $p > .4124$. As expected, there was no effect of educational attainment on the responses to calque and standard pairs for monolinguals. Overall, we can ascertain that we were able to tap the calqued sense without any

variation due to other factors such as age, knowledge of another language, etc.

GENERAL DISCUSSION

The main findings of the study can be summarized briefly:

(a) Comparing bilinguals and monolinguals, bilinguals' reaction times to Spanish words with a calqued sense (duro with the sense [difficult]) were as fast as reaction times to words with a standard sense (duro with the sense [hard]), whereas monolinguals' reaction times to words with a calqued sense were significantly slower than reaction times to words with a standard sense. In other words, the bilinguals showed a facilitation effect to the calqued sense, while the monolinguals did not, as expected.

(b) For bilinguals, reaction times to Phonologically Similar calques (aplicación) were significantly faster than to Phonologically Different ones (duro). That is, the size of the facilitation effect for Phonologically Similar calques was greater than for Phonologically Different ones, as expected.

(c) For bilinguals, there was no consistent pattern of reaction times when calques were grouped according to the semantic transparency of the calqued sense. We had expected that Semantically Transparent calques (carta) would have been accessed faster than Semantically Opaque ones (envuelto), but they weren't. We go on to discuss these findings in detail.

(a) Calqued Senses were Accessed by Bilinguals,
not by Monolinguals

Associative priming or facilitation has been shown to occur in a number of psycholinguistic studies, as reported in Chapter 3. Some of these studies (De Groot and Nas 1991; Chen and Ng 1989; Meyer and Ruddy 1974; Schwanenflugel and Rey 1986) have suggested that the between-language effects are as large as the within-language effects. We did not test between-language effects, as these studies have done. But we did test what we will call a "false" between-language condition. That is, it is not a true between-language condition because the linguistic forms appear in the same language. Nonetheless, the senses are crossing language boundaries. This false between-language condition is tapping the calquing of senses crosslinguistically, albeit staying

within the forms of one language. Then, the finding in our study agrees with the general finding from the studies mentioned above: the effect that tapped the standard sense, i.e. the within-language condition, was as large as the effect that tapped the calqued sense, i.e. the "false" between-language condition in bilinguals, though not, of course, in monolinguals.

Priming or facilitation, as mentioned in Chapter 3, is usually explained in terms of activation spreading automatically from the representation of the prime to that of the probe in the mental lexicon, temporarily lowering the recognition threshold of associatively related words. Basing ourselves on this assumption, the major finding in our study was that the semantic associate of the new sense in the calque pairs was indeed primed by bilinguals, therefore showing that the new sense was accessible, or close by, in the new organization of the bilingual mental lexicon. We can try to explain this finding by looking at current lexical access theories.

Two alternative ways of explaining how the bilingual lexicon might be set up have been recently mentioned in the literature (e.g. Davis, Sánchez-Casas, and García Albea, in preparation): the connectionist hypothesis and

the table look-up hypothesis. In the connectionist model, orthographic and semantic information is organized in a network of interconnected neighborhoods sharing many nodes. In the table look-up model, the orthographic and semantic representation of words is organized in lists within lexical entries. Both models could accommodate the change that has taken place in the Spanish words under study. In terms of the connectionist model, the calqued sense is reassigned to a new neighborhood and new connections are established. In terms of the table look-up model, the calqued sense is either incorporated to an existing lexical entry of similar meaning and orthography so that a common entry underlies both forms (e.g. grosería [insult] and grosería [store] are listed within a single entry); or the new sense comes into the recipient language with its own lexical entry, even though there is one like it already in the lexicon, so that there are two lexical entries (i.e. grosería would bring its form and its new sense, so that there would be two lexical entries, one for grosería [insult] and another one for grosería [store]). If we consider the two language lexicons as being separate, we could postulate that after a sense is accessed once or more times from the other language, the mental lexical representation in the impacted language of the bilingual undergoes a permanent change. However, we

are unable to support one or the other model conclusively with the evidence we have looked at so far. We leave the discussion on the merits of each model for later on, after the analysis for all the results is presented. .

In terms of the different responses to calqued senses by bilinguals and monolinguals, it is important to note that the bilingual undergoes a massive change in his mental lexicon compared with the monolingual, as has been shown by other studies that explore cross-language processing (for example, Davis, Sánchez-Casas, and García Albea, in preparation). Bilinguals may organize mental representations differently from monolinguals, either changing the pathways of access to node neighborhoods as in a connectionist model, or adding a new sense to a lexical entry as in a table look-up model, and to that extent exhibit differences in their mapping of the mental lexicon. Paradis (1980) acknowledges the language influence on cognitive processes as "likely to enrich the bilinguals' mental capacities by giving them more ways to organize their mental representations" than the ones that monolinguals have. A difference in priming scores between the two populations, therefore, is not surprising, with bilinguals showing signs of interinfluence. Since only bilinguals could access the calqued senses, it implies

that the influence of English, the only differing trait between the two subject groups, is responsible for their retrieval of the calqued sense. Furthermore, the fact that monolinguals did not access the calqued senses implies that they do not seem to employ any internal strategy in their Spanish to enable them access to the new senses. Therefore, an external factor seems to be responsible for the changes in the mental lexicon of the bilingual.

The change undergone in the mental lexicon of the bilingual, as exemplified in this study, can be explained as either the rearrangement of pathways in node connections or the addition of a lexical entry in the impacted language. Results showed that the bilinguals were able to access the calqued sense, which was interpreted to mean that either this sense is accessible through newly established node connections or the lexical entry for Spanish words in bilinguals has changed by the addition of the calqued sense. If the calqued sense were not readily accessible or lodged in the lexical entry, it would not have been retrieved given the way the experiment was set up. Our experiment differed in two ways from other semantic priming studies across languages:

- 1.the words in our pairs were in the same language, and
- 2.one of the associations between them was specific to the English-influenced contact Spanish dialect in the United States.

Most psycholinguistic studies that use association priming between languages, as stated in Chapter 3, compare between-language effects and within-language effects. In our study, as mentioned above, we compared a "false" between-language condition and a within-language condition, where both words in the priming pair were in the same language. By having the paired words in the same language, we were verifying whether the Spanish words under consideration had acquired an English-calqued sense that had become a stable part of the language in the bilingual, rather than how the calquing of the new sense into the standard lexical entry had taken place. Specifically, if we had designed a cross-language pair where the words appeared in two languages, e.g. duro/difficult, we would have tested how the transfer of a calqued sense takes place, rather than focusing on the finished product. By having the English model as the prime in a "true" between-language condition, we would have been able to verify the direct semantic link with the original

form. At this point, we can merely speculate that a network of cross-linguistic interconnections in the bilingual probably retrieves the meaning across languages and is responsible for interinfluence at the lexical level. Such cross-linguistic access may happen every time the calque word is used. Use and exposure to the calque strengthens the mental connections and enhances the system's response the next time the calque is encountered, until a final change in the mental representation of the bilingual takes place. This is an interesting avenue for future research, which could also look at the possible mechanisms responsible for the calquing process. Either phonological form, semantic transparency, or both might be the underlying factors that trigger this phenomena. Some of the questions to ask (García Albea, personal communication) could be: Which are the points of coincidence in the two languages (e.g. similar phonological form, similar meaning, etc.) that activate the calquing process? Which are the necessary conditions (e.g. polysemy in the model word of the source language, but not in the recipient language word) for the calquing process to take place? In our study, we focused on the verification of the existence of the calqued sense regardless of the reasons that gave rise to the calque word. By having the words of the priming pairs in the same

language, we kept the language stable (all were Spanish words) and only varied the semantic links to focus on the new calqued sense.

The second difference with other studies lies in the choice of associations. Semantic priming studies, to our knowledge, have used associations that are not language specific, i.e. the associations are acceptable in both languages. However, one of the associations in the pairs for our study, as in duro/difícil, is acceptable only in the English-influenced contact Spanish dialect, not in standard Spanish. Thus, for our purposes, we narrowed the scope of associations to those that could only be attributed to English influence, clearly pinpointing to the source of the calqued sense.

(b) Access of Calqued Senses was Influenced by
Phonological Form

The second major finding of this study was that calques with phonologically similar forms to the English model were retrieved faster than those with forms phonologically different from the model. One of the factors responsible for this result can be drawn from psycholinguistic studies on cognate words (e.g. Davis,

Sánchez-Casas, and García Albea, in preparation; De Groot and Nas 1991; Mildred 1986; Sánchez-Casas, Davis, and García Albea, in press), whose evidence could be correlated and applied to calque words. These studies had a different pattern of results for translation cognates (e.g. rich/rico) and noncognates (e.g. moon/luna). A parallel can be drawn between their findings and ours, having in mind that cognate words could work in the same way as our Phonologically Similar calques, and noncognate words, as our Phonologically Different calques.

The studies on cognate and non-cognate priming attributed the large cognate priming effect in rich/rico to the fact that cognates (equated to our Phonologically Similar forms, e.g. aplicación/application) are in some way intimately connected due to their form similarity. They either share one common pattern of nodes or are listed within a joint entry. So both meanings are primed when one is, since they are either in the same neighborhood or are lodged in the same form. The small facilitation effect for non-cognates in moon-luna (equated to our Phonologically Different forms, e.g. duro/difícil) is attributed to their having a separate pattern of connections or being listed separately. This scenario might require some additional inferential process to

access the meaning (e.g. translation), which would account for the longer reaction time. However, we need to note that the priming pairs in these cognate studies were different from ours in that theirs included the model (e.g. familia/family) and ours did not (e.g. aplicación/pedido). This was so because we wanted to compare the bilingual group with the monolingual group, which could not have been possible if the pairs had been in two different languages. A future study could look at how the similarity of phonological forms helps in the calquing process by priming cross-language pairs (e.g. aplicación/application) with bilinguals only.

(c) Access of Calqued Senses was not Influenced by Semantic Transparency

Contrary to our predictions, semantic transparency did not affect the access of calqued senses. Transparent calques were not easier to access than Opaque calques. According to Davis, Sánchez-Casas, and García Albea's (in preparation) speculation, the learning procedure which strengthens the association of the orthographic and semantic patterns might be limited to similar orthographic forms which map onto similar semantic ones. In our case, Phonologically Similar calques did show a significant

facilitation effect, as we discussed above. Semantically Transparent calques, however, should have produced a larger facilitation effect than the Semantically Opaque calques due to the additive effects of form similarity and semantic transparency. But similarity of meaning did not speed up the retrieval of the calque word, even when the calque forms were Phonologically Similar.

There are two possible explanations. One explanation is based on doubting a clear distinction between semantic transparency and opacity in our calque words. That is, can we ascertain that "carta de béisbol" ('baseball card') is more closely related to the meaning in "carta de naipes" ('playing cards') than "padre envuelto" ('involved parent') and "paquete envuelto" ('wrapped package')? Probably the same kind of relationship that exists in the group that we labelled Semantically Transparent also exists in the Semantically Opaque one and that is why there was almost no difference in response times between the two groups. One of the relationships that could be similar is the metaphorical extension in duro to the sense [difficult], which could be parallel to the one in envuelto to the sense [involved]. In a future analysis could calques with this type of metaphorical extension could be compared to a second group of calques where no

such meaning relationship exists (e.g. grosería [store]). The doubts here expressed about the distinction between Semantically Transparent and Opaque calques are supported by the data on monolinguals when we contrasted their results for semantic transparency in the calque pairs. The fact that Semantically Transparent calques did not produce more priming than Semantically Opaque ones could imply that there seems to be no possible semantic connection between the new sense and the senses already in existence in the recipient words because monolinguals did not pick it up.

The other explanation to account for the lack of contrast between the Semantically Opaque and Semantically Transparent calques is based on a possible bilingual strategy to keep the two languages separate. It seems bilinguals are not establishing a semantic link between the new sense and the senses already available in the recipient form, somehow isolating the new sense from the rest of the senses in the recipient word. We explain this idea further below.

In sum, the priming technique was successful in providing evidence that the bilinguals have a calqued sense in some of their Spanish words, while monolinguals

do not. The priming study also showed that the phonological form variable, but not the semantic transparency one, facilitated the priming effect in bilinguals.

Synthesizing the major results of our study in light of the two models used to explain cross-language access, the connectionist and the table look-up, our investigation seems to provide supporting evidence mostly for the second model. Our goal, though, is not to decide which model is the "correct" one, but rather which model yields the clearest picture of bilingual priming and sheds light on the relevant principles for the lexical access of calque words. Since there were no additive effects of form and meaning similarity, the evidence tends to support the table look-up view. That semantic transparency did not produce more priming than semantic opacity may point to a further distinction within the table look-up model: the existence of two lexical entries for calque words. Since transparency did not affect the speed in the access of calques, the senses are probably neither interconnected nor listed within the same lexical entry. The remaining alternative within the table look-up model is that each form has its own lexical entry, as it would appear in a dictionary when a word has different grammatical

categories. For example, anciana has two lexical entries, one as a noun and another one as an adjective. If two lexical entries do exist, we can use the explanations based on a theory of lexical access to move on to the field of language contact and the levels of interinfluence presented in Chapter 2. There we can find a parallel to the idea that each form has its own lexical entry in the borrowing process, where meaning and form presumably go together, i.e. when the meaning is borrowed, the form is borrowed as well. This would mean that a calque is not a calque but a borrowing!

Given this surprising turn of events, we will now analyze the findings according to the levels of interinfluence presented in Chapter 2. The fact that calque words were primed indicates that interinfluence does exist. But we now need to discuss what type of interinfluence it is: borrowing or calquing. From the start of this investigation, we realized that there were not many Phonologically Different calques, and even fewer Semantically Opaque ones. The number of items we could find per calque type exemplified our predictions: in terms of form, the largest number was for the Phonologically Similar and the smallest for the Phonologically Different; in terms of meaning, the largest number was for the

Semantically Transparent and the smallest for the Semantically Opaque. When phonological form was the priming variable in the analysis, the number of items correlated with the findings, because calques of the aplicación type produced more priming than calques of the duro type. Even though both effects were significant, the difference between them may indicate that aplicación is more like a borrowing than a calque due to its form similarity to the English model word application, a phonological relationship which might be responsible for the larger size of the priming effect. The true calques like duro are few and hard to find and, as the study showed, produced less priming. For now we know that aplicación and duro are different. They could fall into the classification we established for calques, for which we had expected differing results, or each could fall into the levels of borrowing and calquing, respectively. A future avenue of research could compare priming times between words like aplicación and words like rufo (from English roof), an unequivocal borrowing, in order to verify whether aplicación is closer to rufo than to duro and also decide which level of interinfluence each belongs to.

The last main finding in (c) above, the variable of semantic transparency, could have a pivotal role in providing a further piece to the puzzle. The fact that semantic transparency did not play a role in the speed of calque access could mean that bilinguals are treating the new sense as isolated from those already available in the language. They are not using the extension of meaning strategy to access carta faster than envuelto. Rather than accessing quicker those calques that are Semantically Transparent, bilinguals somehow build a barrier in that semantic relationship. A plausible explanation is that the new sense in 'carta de béisbol' is still foreign and considered separate from the sense in 'carta de naipes', even though they are semantically related. Since the new sense is isolated from the rest of the senses under the form carta, the expected avenues of association fail to apply. It thus appears that bilinguals try to maintain a relative autonomy of their languages by not mixing language codes. In this case, the new sense is still coded L2. This idea is indirectly supported by Mahecha's (1990) finding that bilinguals produce perceptible cues to signal they are about to change codes, which shows that bilingual speakers are treating both languages as separate. Analysis supporting a different set up for the new sense could be drawn from the lexical access discussion above. Again

extending the lexicographers' idea of different dictionary entries for each word function, we could postulate that the form for the lexical entry in 'carta de béisbol' is different from the form for the lexical entry in 'carta de naipes', i.e. each lexical entry requires a different form, even though they may have the same orthography. Then, the inclusion of the new sense but its lack of a semantic relationship with the existing senses in the recipient word could be explained by the existence of two lexical entries rather than one. If the differentiation between Semantically Transparent and Semantically Opaque is valid, different dynamics from the normal ones, i.e. the ones that would apply within one language, are at play in the semantic variable. The data on semantic transparency could be interpreted to show that bilinguals seem more constrained in their use of inherent avenues of linguistic relationship when a foreign element is brought into their language. If this is the case, their treatment of the new sense, i.e. to keep distinguishing it from the native linguistic features, prevents a total convergence of the two semantic systems and creates a state of coexistence.

Summarizing, we had proposed in Chapter 1 that calque words would reveal a merging of semantic systems at the

lexical level, extending Weinreich's (1953) suggestion that in language contact situations the semantic systems of a bilingual merge into a single system. Our analysis has shown that the bilingual does indeed merge the two languages by including a new sense in the recipient language. The degree of that convergence, however, is not clear.

Conclusion

The aim of this study was to gain insight into the organization of the mental lexicon in English-Spanish bilinguals by comparing within one language, Spanish, semantic facilitation effects between English-based calque and standard Spanish words, acknowledging the effects of the influence from a second language, in this case English, to a first language, Spanish. We compared the priming results of Spanish/English bilinguals living in a highly bilingual environment to non-contact Spanish monolinguals living in a monolingual environment. The major focus of this study was on a possible semantic priming effect across languages that appears hidden in calques.

We began Chapter 1 by asking two questions regarding the psycholinguistic reality of calque words. For the sake of convenience, they are listed again below:

- a. Do calque words contain senses which are psychologically linked to the senses of the model English word, confirming that their semantic representation is different from that of the equivalent lexical item in the non-contact speaker?
- b. Do calque words exist as stable lexical items in the speech of bilingual contact speakers?

Regarding question (a), the significant priming effect obtained for bilinguals, but not for monolinguals, provide fairly strong support for our claim that bilinguals have acquired a new sense, linked to the sense in the model English word, that has not been acquired by monolinguals. That is, the mental representation of the lexical entry for some Spanish words has changed in bilinguals through the addition of a new sense. This finding was corroborated through the responses to the rating task. Consequently, the results of the priming and rating tasks are consistent with our proposition that the

inclusion of a new sense in a standard word has changed the lexical organization of English-Spanish bilinguals.

Regarding question (b), the similar size of priming effects in calque and standard pairs reveal that calque words are stable members of the inventory of lexical items in the Spanish of bilinguals. Our study has helped us go from the impression of the existence of calqued senses to the verification that these have become internalized by the bilingual. Romaine (1989:4) stated that in "situations of intense language contact it is possible for a third system to emerge which shows properties not found in either of the input languages". For our purposes, this third system includes calques and other levels of linguistic interinfluence. We were able to provide concrete evidence of a new "property", the calquing of senses, in one of the languages of the bilingual. It would be interesting to explore other characteristics that could have been incorporated into languages in contact using psycholinguistic testing to confirm they have become internalized. In this way, the "third" system that arises could be better described. Our investigation on calqued senses revealed that this third system is not a total convergence of the first two systems. The degree of their

convergence remains to be seen, the subject for a future study.

As with any research endeavor, there were some limitations with our study. We only looked at Spanish/English bilinguals and standard Spanish monolinguals. But there is a very interesting third group of speakers which we left out. Future studies could explore whether bilinguals pass on calqued senses to monolinguals, who in turn might internalize those calqued senses and make them a part of their lexicon as well. As stated in Chapter 1, language contact researchers (e.g. Gingrás 1974; Mackey 1968; Stewart, personal communication) argue that speakers of the contact variety, without being bilinguals themselves, adopt linguistic features in their native language modelled on bilinguals. One of these features is the calquing of L2 senses in their L1. Speakers have to be bilingual in order to create calque words, but do not have to be bilingual in order to use them. A similar study like the one in this dissertation could include monolingual speakers of the contact variety and could verify whether they too have acquired a calqued sense in their Spanish words. Last but not least, and with its shortcomings, this study confirmed the viability of the priming technique to investigate

calque words, a linguistic product of a language contact situation. Thus, this technique holds a promising future to probe various aspects of language interinfluence.

GLOSSARY

activo 'active'
afecto 'affection'
alquiler 'rent'
amigo 'friend'
atrayernte 'attractive'
atractiva 'attractive'
caballos 'horses'
cadena 'chain'
carrera 'race'
chicos 'children'
cocinar 'cook'
comida 'food'
corren 'run'
cubierto 'covered'
demostración 'demonstration'
deprimido 'depressed'
duran 'last'
envuelto 'involved'
esclavos 'slaves'
ganancia 'gain'
gentío 'crowd'
habilidad 'ability'
heladera 'refrigerator'
hermosa 'beautiful'
inflación 'inflation'
inversión 'investment'
manifestación 'demonstration'
muebles 'furniture'
mujer 'woman'
negocios 'business'
padre 'parent'
paquete 'package'
pérdida 'loss'
prisión 'prison'
rápido 'quickly'
regalo 'gift'
renta 'rent'
prisioneros 'prisoners'
trenes 'trains'
velorio 'wake'
zapatos 'shoes'

APPENDICES

APPENDIX A

Usage Questionnaire for the Choice of Calques

Below appears the list of calques in context, followed by the informant's responses. The informant had to respond whether the underlined words in the given contexts were used correctly or incorrectly. That is, whether that word could be used or not in that context. Sentences 1-47 have calques phonologically similar to the English model. Sentences 48-89 have calques phonologically different from the English model.

Dígame si el uso de la palabra subrayada es correcto ó incorrecto en estas oraciones:

1. Los diarios de hoy sacaron la noticia en primera plana. Después de haber sido un hombre y padre ejemplar abusó de la hija y la dejó embarazada. Incorrecto
2. En Nueva York el valor actual de las casas es mucho menor de lo que uno paga por ellas. Pero Nueva York se ha convertido en una ciudad muy cara porque los especuladores invierten el dinero en propiedades que están sobrevaluadas. Correcto
3. Aprenda alemán en 30 días. Para información adicional, llame a nuestras oficinas al teléfono 236-1924. Correcto
4. Ya estaba muerto cuando lo admitieron al hospital. La ambulancia no llegó a tiempo para que los médicos lo salvaran. Incorrecto
5. Mi jefe insultó a la secretaria. Se sintió tan agravada que renunció en el acto y se fue de la oficina dando un portazo. Incorrecto
6. Todas las noches mi marido pone la alarma a las seis. Pero a veces no la oímos y seguimos durmiendo. Incorrecto
7. Los que vivían juntos sin estar casados no podían cobrar la pensión del marido si se moría. Así se hacía según la ley anciana. Ahora el congreso la anuló y está escribiendo una nueva. Incorrecto

8. El joven llenó la aplicación para el trabajo pero cuando llegó a la oficina la secretaria le dijo que ya habían tomado a alguien. Incorrecto
9. María nunca tiene tiempo para descansar. Trabaja durante el día y atiende cursos en la universidad durante la noche. Incorrecto
10. Las conclusiones de mi trabajo no fueron acertadas porque la información que me dieron en la biblioteca estaba desactualizada. Pero como no lo sabía asumí que era la correcta. Incorrecto
11. La iglesia queda como a ocho bloques de mi casa. Incorrecto
12. A Pedrito le gusta coleccionar cartas para tener un álbum con todas las fotos de los jugadores de fútbol, pero le faltan algunas para completar la colección. Incorrecto
13. De tanto que la pisaron hubo que sacar la carpeta del piso. Pero los vecinos de abajo se quejaron por el ruido y hubo que comprar una nueva. Incorrecto
14. Mi mamá todavía colecta el desempleo. Tuvo un accidente que le inutilizó una mano pero le gustaría volver a trabajar. Incorrecto
15. Me gusta ver televisión, pero no tolero los comerciales. Siempre aparecen en el momento más interesante del programa. Incorrecto
16. Estos departamentos tienen las conveniencias que Ud busca. Tienen hasta lavaplatos y microndas. Incorrecto
17. La ciudad de Nueva York ha sufrido cortes federales que han obligado al gobierno a cerrar oficinas y reducir la ayuda a los pobres. Incorrecto
18. La gente se juntó en la calle y se hizo una demonstración espontánea para protestar la detención de personas inocentes. Incorrecto
19. Juana se perdió porque las direcciones decían que tenía que doblar a la izquierda y se confundió y dobló a la derecha. Tuvo que llamar por teléfono y la amiga la fue a buscar. Incorrecto
20. Si Ud llena los siguientes requisitos es elegible para asistir a la universidad. Incorrecto

21. Los grupos liberales endosaron la elección del presidente. Incorrecto

22. Se reunió la facultad y decidió aceptar la proposición del decano. Incorrecto

23. El déficit del gobierno federal es gigantesco. Las figuras son muy elevadas pero nadie parece asustarse. Incorrecto

24. Hay que llenar una forma para abrir una cuenta en el banco. Incorrecto

25. Se cayó el gabinete de la cocina al suelo y se rompieron todos los platos y vasos. Incorrecto

26. Hace mucho que no la veía. Ha ganado mucho peso y le cuesta mucho subir las escaleras. Incorrecto

27. En la fiesta de Fermín había muchas personas que no conocía. Por suerte fui con una amiga que conocía a la mayoría y me introdujo a Juan, con el que estoy saliendo. Incorrecto

28. El aviso en el diario decía que por arreglarte el auto ese taller de mecánicos hace un descuento del diez por ciento en partes y labor. Incorrecto

29. Estuve en Italia y no me pincharon. Los italianos tienen fama de ser muy atrevidos con las manos. Pero yo por suerte me salvé. Incorrecto

30. La universidad tiene una póliza muy estricta. No acepta estudiantes con malas notas. Incorrecto

31. La gente pobre vive en unos proyectos del otro lado de la ciudad. Son muy peligrosos porque hay mucho tráfico de drogas y de vez en cuando matan a alguno en tiroteos. Incorrecto

32. Martín se cansó y dijo que ese era el punto. Ya lo había explicado varias veces y no lo quería repetir más. Incorrecto

33. Hoy en día hay mucho consumo de drogas en las escuelas. Los casos más graves se refieren al director de la escuela para que tome medidas más severas. Incorrecto

34. El otro día Jaime fue a la farmacia a comprar un buen desodorante. Le dieron uno regular pero el quería uno con perfume. Incorrecto

35. Si querés tener mucho espacio y comodidad a la vez, podés comprar una casa vieja y renovarla. Yo vivo en un departamento renovado que parece nuevo y además tengo habitaciones grandes y techos altos. Incorrecto

36. Lo que yo pago para comprar mi departamento es lo mismo que mi amiga Adriana paga para rentar un departamento que es la mitad del mío. Incorrecto

37. Liliana es secretaria. Le va a reportar a su jefe que un colega la insultó. No tolerará que la traten de esa manera. Incorrecto

38. Es un hombre muy rudo. Cuando te llama a su oficina no te hace sentar ni te ofrece un café cuando pide uno. Correcto

39. Apresúrese para ver nuestra más variada selección. Tenemos las mejores telas y los más variados diseños. Incorrecto

40. Mario es un niño muy sensible. Primero hace sus tareas y después sale a jugar. Incorrecto

41. Yo no trabajo. Mi marido me soporta con su salario y puedo ir a la universidad. Incorrecto

42. Siempre llegas tarde a la oficina. Tengo una sugestión para hacerte. Adelanta tu reloj diez minutos así tu jefe no se enoja. Incorrecto

43. Todos los días pasa lo mismo. El otro empleado está supuesto a contestar las cartas. Y yo atiendo el teléfono. Pero termino haciendo las dos cosas. Yo no quiero hacer su trabajo. Incorrecto

44. La enfermera dijo que el tiempo para hacer todas estas preguntas no es ahora. Tienes que esperar que vea a todos los pacientes del piso y después te podrá escuchar. Incorrecto

45. Fui a la zapateria y traté varios zapatos. Todos me gustaban. Al final elejé unos color amarillo. Incorrecto

46. Marta está en la unión desde que entró a trabajar para la compañía. Y está contenta con su decisión porque le ha mejorado el salario. Incorrecto

47. Me quedaré un rato así podemos visitar. Hacía mucho que no te veía y tengo muchas cosas para contarte. Correcto

48. Llegó muy tarde la noche anterior. Durmió muy mal porque lo llamaron varias veces por teléfono y esta mañana se quedó dormido. Lo despertaron cuando llamaron del trabajo para ver que le había pasado. Correcto

49. Esta es muy buena época para comprar. Hay muchas liquidaciones atravesantes especialmente de artículos del hogar. Incorrecto

50. La empleada no tuvo tiempo de preguntar si podía ayudarlo. El señor escogió lo que quería comprar enseguida. Incorrecto

51. El juicio fue interminable. El día que el abogado descansó el caso, el juez dio un suspiro de alivio. Incorrecto

52. Juana y Pedro estaban llorando. El maestro les dio un examen muy difícil y sacaron malas notas. Correcto

53. La conferencia sobre enfermedades infecciosas comenzó ayer. El organizador de la conferencia habló más de una hora y después le dió el piso al Premio Nobel de Medicina que habló cinco minutos. Incorrecto

54. Por lo general el barrio donde vivo es callado. Pero a veces se oyen las peleas de mis vecinos que me despiertan a cualquier hora. Incorrecto

55. Quiero que me ayudes y camines al niño a la escuela. Estoy muy cansada y prefiero quedarme en la cama. Incorrecto

56. Puedes dejarle ese sobre en su caja en la universidad. Tiene el número 23 y dice Profesor Ramirez. Incorrecto

57. En esa escuela los niños han crecido mucho. Aprendieron cosas nuevas y repasaron cosas que tenían olvidadas. Incorrecto

58. Un amigo llamó de Europa varias veces y no me consiguió. Decidió venirse igual y tuvo que esperar tres horas en la puerta porque yo no sabía que venía. Correcto

59. A mi padre le gusta la política. Pero corrió para gobernador y perdió. Incorrecto

60. Hoy los trenes no corren porque hay huelga de ferroviarios. Incorrecto

61. Mi papá siempre me pregunta con quien fui de vacaciones. Le digo y al poco tiempo se olvida. Tiene muy corta memoria. No es de viejo, siempre fue así. Incorrecto

62. Después de la última crisis económica mi barrio se vino abajo. Ahora hay varios barrios deprimidos en la zona. Las casas están sin pintar y el pasto sin cortar. Incorrecto

63. La escuela cerca del parque es muy dura. Los alumnos tienen que estudiar mucho para pasar de grado. Incorrecto

64. Las ventas de fin de año duran mucho tiempo; si tenés suerte quizás encuentres algo. Correcto

65. Cuando uno entraba las paredes de la casa enseñaban manchas viejas de comida. Estaba todo tan sucio que no me la podía imaginar limpia. Correcto

66. En la escuela de Jaime los padres están muy envueltos. La quieren convertir en la mejor de la ciudad. Incorrecto

67. Hace mucho que no escucho nada de mi hermano. Si no me habla por teléfono en una semana, lo llamaré yo. Correcto

68. Este fin de semana voy a estar fuera de la ciudad. Me voy a Boston por unos días. Correcto

69. Delia, quiero que guardes el martes para salir a cenar y luego al cine. Incorrecto

70. Hoy te toca a tí hacer la cocina. Yo cociné y puse la mesa. Y los niños levantaron los platos de la mesa. Incorrecto

71. Por suerte José hizo buenas notas en la escuela. Tiene una vida muy sacrificada. Trabaja de día y estudia de noche. Incorrecto

72. Ofrecemos cursos de computación. Para inscribirse haga contacto con nuestra oficina de admisión. Incorrecto

73. Tomás era muy mal alumno pero hace mejor en la escuela desde que la madre lo ayuda con las tareas escolares. Incorrecto

74. He leído esta frase mil veces y no hace sentido. ¿Qué quieres decir? Correcto

75. Estoy muy triste porque no hice el equipo. El entrenador pensó que no estaba en buen estado atlético. Incorrecto

76. Hay muchos problemas en la escuela. El director va a llamar a una reunión de padres y maestros esta semana porque hay muchos problemas en la escuela. Incorrecto

77. Ahora estoy ocupada. Te llamo para atrás cuando termine de atender a mi cliente. Incorrecto

78. Las amigas de Claudia prepararon una lluvia de regalos para Verónica que está embarazada. Han invitado a todas sus amigas, aún las del colegio secundario. Incorrecto

79. Para cambiar la mente de Frankenstein hay que hablarle mucho. Es muy terco ese monstruo. Incorrecto

80. Llene el cupón mostrado al pie de esta página y recibirá un regalo gratis. Correcto

81. Lo último que necesito es un resfrío. Tengo mucho trabajo en casa y en la oficina. Correcto

82. Cuando el soldado volvió dejó palabra en la casa de la novia para encontrarse con ella esa misma noche. Incorrecto

83. Estoy sin un peso. Invertí todo lo que tenía en una empresa que parecía immejorable. No paga correr riesgos con estas empresas nuevas. Incorrecto

84. Nancy, mi compañera de trabajo, quiere perder peso. Está muy gorda y la ropa no le entra. Correcto

85. Mis padres me dijeron que no tengo que regresar la pegada. El otro día me pegaron y mis amigos me dijeron que era un cobarde porque no peleé. Incorrecto

86. Cuando llegó a la puerta del edificio se dio cuenta de que no trabajaba el ascensor. Tuvo que subir por las escaleras. Se lamentó de no hacer ejercicios más seguidos porque llegó extenuado. Incorrecto

87. Lo lamento. No trabaja esa solución. Tienes que volver a hacer las cuentas y encontrar el error. Incorrecto

88. Todos los días el profesor toma asistencia cuando llega a la clase. Correcto

89. Lo invitaron a una fiesta en la casa del gobernador. Tomó ventaja de esa oportunidad para conocer a gente influyente. Incorrecto

APPENDIX B
Worksheet for the Choice of Association Pairs

Escriba las palabras que se le ocurran (por lo menos dos) relacionadas con las palabras que están a continuación:

1.calificar	43.endosar
2.duro	44.contemplar
3.una oficina	45.asumir
4.agravada	46.cadena
5.digital	47.callado
6.introducir	48.cambio
7.grado	49.compartir
8.perseguir	50.corren
9.carpeta	51.corta
10.un balance	52.llamar
11.abusar	53.guarda
12.cobertura	54.duran
13.un principal	55.deprimido
14.levantar	56.atrayente
15.póliza	57.correr
16.registrarse	58.dura
17.la alarma	59.casual
18.cartas	60.descansar
19.batería	61.perder
20.ministro	62.trabajar
21.lluvia	63.paquete
22.comprensivo	64.retirarse
23.cartón	65.el piso
24.agenda	66.pagar
25.colectar	67.eventualmente
26.ganar	68.la mente
27.introducir	69.grosería
28.excitante	70.tomar
29.bloque	71.tratar
30.renta	72.comercial
31.graduado	73.gabinete
32.referir	74.regular
33.anciana	75.reportar
34.renovado	76.sensible
35.abusada	77.soportar
36.admitir	78.unión
37.una aplicación	79.punto
38.atender	80.rudo
39.demostración	81.admitir
40.figuras	82.conveniencias
41.una forma	83.cortes
42.proyectos	84.elegible

85.actual
86.sugestión
87.selección
88.direcciones
89.pinchar
90.tiempo
91.visitar
92.anterior
93.dar
94.caja
95.crecer
96.conseguir
97.corta
98.enseñar
99.envuelto
100.escucho
101.paga
102.palabra
103.ayudar
104.caminar
105.regresar
106.hacer

APPENDIX C List of Association Pairs

The pairs are listed according to the four categories used to analyse the results of the experiment and in two columns corresponding to the associations in contact Spanish and those in standard Spanish. The coding symbols at the top of the page identify the associative relationship between the prime and the probe word for the experimental pairs, as described in Chapter 4. These symbols appear with the standard pairs, but apply to both experimental pairs.

Coding Symbols:

Assoc. High Associate

Syn Synonym

ST Syntagmatic Association

Semantically Transparent and Phonologically Similar

Contact Spanish	Standard Spanish	
1. abusar/violar	abusar/maltratar	<u>Syn</u>
2. actual/real	actual/presente	<u>Syn</u>
3. admitir/hospital	admitir/mentira	ST
4. agenda/plan	agenda/citas	<u>Assoc</u>
5. anciana/antigua	anciana/vieja	<u>Syn</u>
6. alarma/despertador	alarma/peligro	<u>Syn</u>
7. asumir/creer	asumir/aceptar	<u>Syn</u>
8. balance/resto	balance/equilibrio	<u>Syn</u>
9. batería/linterna	batería/auto	<u>Assoc</u>
10. bloque/cuadra	bloque/piedra	<u>Syn</u>
11. cartas/futbolista	cartas/correo	<u>Assoc</u>
12. colecta/desempleo	colecta/donación	<u>Syn</u>
13. compromiso/arreglo	compromiso/obligación	<u>Syn</u>
14. conveniencias/casa	conveniencias/viaje	<u>Assoc</u>
15. deprimido/arruinado	deprimido/triste	<u>Syn</u>
16. digital/números	digital/dedos	<u>Syn</u>
17. distribuidor/proveedor	distribuidor/motor	<u>Syn</u>
18. elegible/calificado	elegible/accesible	<u>Syn</u>
19. excitante/apasionante	excitante/sensual	<u>Syn</u>
20. gana/engorda	gana/triunfa	<u>Syn</u>
21. graduado/secundario	graduado/	
22. introducir/saludar	universitario	<u>Assoc</u>
23. ministro/iglesia	introducir/exponer	<u>Syn</u>

24. oficina/médico	ministro/presidente	<u>Assoc</u>
25. paquete/viaje	oficina/gerente	<u>Assoc</u>
26. póliza/gobierno	paquete/bulto	<u>Syn</u>
27. referir/enviar	póliza/seguro	<u>Assoc</u>
28. registrarse/universidad	referir/contar	<u>Syn</u>
29. renovado/arreglado	registrarse/hotel	<u>Assoc</u>
30. renta/alquiler	renovado/descansado	<u>Syn</u>
31. retirarse/jubilarse	renta/impuesto	<u>Syn</u>
32. selección/telas	retirarse/irse	<u>Syn</u>
33. sugestión/consejo	sugestión/hipnosis	<u>Syn</u>
34. tren/subterráneo	selección/fútbol	<u>Assoc</u>
35. unión/sindicato	tren/ferrocarril	<u>Syn</u>
	unión/matrimonio	<u>Syn</u>

Semantically Opaque and Phonologically Similar

Contact Spanish	Standard Spanish	
1. agravada/enojada	agravada/peor	<u>Syn</u>
2. aplicación/pedido	aplicación/uso	<u>Syn</u>
3. atender/ir	atender/cuidar	<u>Syn</u>
4. calificar/habilitar	calificar/evaluar	<u>Syn</u>
5. carpeta/alfombra	carpeta/expediente	<u>Syn</u>
6. casual/informal	casual/accidental	<u>Syn</u>
7. cobertura/seguro	cobertura/chocolate	<u>Assoc</u>
8. comercial/televisión	comercial/banco	<u>Assoc</u>
9. comprensivo/estudio	comprensivo/padre	<u>Assoc</u>
10. demostración/protesta	demostración/afecto	<u>Assoc</u>
11. endosar/apoyar	endosar/firmar	<u>Syn</u>
12. especial/tienda	especial/queso	<u>Assoc</u>
13. eventualmente/adelante	eventualmente/	
14. factoría/producción	posibilidad	<u>Syn</u>
15. figuras/cifras	factoría/comercio	<u>Assoc</u>
16. forma/solicitud	figuras/cuadro	<u>Assoc</u>
17. gabinete/cocina	forma/silueta	<u>Syn</u>
18. grado/nota	gabinete/ministerio	<u>Assoc</u>
19. grosería/negocio	grado/diploma	<u>Syn</u>
20. principal/escuela	grosería/insulto	<u>Syn</u>
21. proyectos/pobres	principal/préstamo	<u>Assoc</u>
22. regular/normal	proyectos/futuro	<u>Assoc</u>
23. reportar/informar	regular/mediocre	<u>Syn</u>
24. sensible/responsable	reportar/proporcionar	<u>Syn</u>
25. soportar/mantener	sensible/emotivo	<u>Syn</u>
	soportar/aguantar	<u>Syn</u>

Semantically Transparent and Phonologically Different

Contact Spanish	Standard Spanish	
1. atrayente/barato	atrayente/hermosa	<u>Syn</u>
2. ayudar/vender	ayudar/colaborar	<u>Syn</u>
3. callado/barrio	callado/hombre	ST
4. caminarla/nena	caminarla/calle	ST
5. corren/funcionan	corren/saltan	<u>Syn</u>
6. corta/memoria	corta/distancia	ST
7. cortes/presupuesto	cortes/tijera	<u>Assoc</u>
8. fracasar/desaprobar	fracasar/fallar	<u>Syn</u>
9. guarda/fecha	guarda/dinero	ST
10. llamar/convocar	llamar/gritar	<u>Syn</u>
11. mente/opinión	mente/inteligencia	<u>Assoc</u>
12. perseguir/continuar	perseguir/acechar	<u>Syn</u>
13. punto/cuestión	punto/coma	<u>Assoc</u>
14. regresar/devolver	regresar/volver	<u>Syn</u>
15. tomar/ventaja	tomar/helado	ST
16. trabaja/funciona	trabaja/labura	<u>Syn</u>

Semantically Opaque and Phonologically Different

Contact Spanish	Standard Spanish	
1. correr/elección	correr/ejercicio	<u>Assoc</u>
2. crecer/aprender	crecer/desarrollarse	<u>Syn</u>
3. descansar/terminar	descansar/reposar	<u>Syn</u>
4. duro/difícil	duro/firme	<u>Syn</u>
5. envuelto/activo	envuelto/cubierto	<u>Syn</u>
6. hacerlo/equipo	hacerlo/experimento	ST
7. levantar/mencionar	levantar/elevar	<u>Syn</u>
8. lluvia/regalos	lluvia/agua	<u>Assoc</u>
9. pagar/merecer	pagar/desembolsar	<u>Syn</u>
10. piso/discusión	piso/pasos	<u>Assoc</u>
11. tratar/ponerse	tratar/intentar	<u>Syn</u>

Este cuestionario forma parte de un estudio sobre el uso del español en los Estados Unidos de Norteamérica. Por favor indique la respuesta adecuada.

1. Sexo ☐ Hombre
 ☐ Mujer
2. Edad años
3. Lugar de nacimiento (País)

4. Lugar de nacimiento de sus padres
_____ Madre
_____ Padre
5. Nivel de escolaridad alcanzado
☐ No terminé escuela primaria
☐ Terminé escuela primaria
☐ Terminé escuela secundaria
☐ Terminé la universidad
6. Profesión ☐ Ama de casa
 ☐ Estudiante
 ☐ Maestro(a)
 ☐ Obrero(a) ó empleado(a)
 ☐ Profesional
 ☐ Otra

7. Lee y escribe en español ____ Bien ó muy bien

____ Más ó menos

8. Sabe otro idioma ¿Cuál? _____

Bien ó muy bien ____

Más ó menos ____

APPENDIX E
Alphabetical List of Calques Used in the Study

Calques are grouped by phonological form and identified by the part of speech (N=Noun, Adj=Adjective, V=Verb, Adv=Adverb).

Phonologically Similar to the Model:

1.abusar	(V)
2.actual	(Adj)
3.admitir	(V)
4.agenda	(N)
5.agravada	(Adj)
6.alarma	(N)
7.anciana	(Adj)
8.aplicación	(N)
9.asumir	(V)
10.atender	(V)
11.balance	(N)
12.baterías	(N)
13.bloques	(N)
14.calificar	(V)
15.carpeta	(N)
16.cartas	(N)
17.casual	(Adj)
18.cobertura	(N)
19.comprensivo	(Adj)
20.compromiso	(N)
21.colectar	(V)
22.comerciales	(N)
23.conveniencias	(N)
24.demostración	(N)
25.deprimido	(Adj)
26.digital	(Adj)
27.distribuidor	(N)
28.elegible	(Adj)
29.endosar	(V)
30.envuelto	(Adj)
31.especiales	(Adj)
32.eventualmente	(Adv)
33.excitante	(Adj)
34.factoría	(N)
35.figuras	(N)
36.forma	(N)
37.fracasar	(V)
38.gabinete	(N)
39.grado	(N)
40.graduado	(Adj)

41.grosería	(N)
42.introducir	(V)
43.ministro	(N)
44.oficina	(N)
45.paquete	(N)
46.póliza	(N)
47.principal	(N)
48.proyectos	(N)
49.referir	(V)
50.registrarse	(V)
51.regular	(Adj)
52.renovado	(Adj)
53.renta	(N)
54.reportar	(V)
55.retirarse	(V)
56.selección	(N)
57.sensible	(Adj)
58.soportar	(V)
59.sugestión	(N)
60.tren	(N)
61.unión	(N)

Phonologically Different from the Model:

1.atrayente	(Adj)	24.regresar	(V)
2.ayudar	(V)	25.tomar	(V)
3.callado	(Adj)	26.trabaja	(V)
4.caminarla	(V)	27.tratar	(V)
5.corren	(V)		
6.correr	(V)		
7.corta	(Adj)		
8.cortes	(N)		
9.crecer	(V)		
10.descansar	(V)		
11.duro	(Adj)		
12.fracasar	(V)		
13.guarda	(V)		
14.gana	(V)		
15.hacerlo	(V)		
16.levantar	(V)		
17.llamar	(V)		
18.lluvia	(N)		
19.mente	(N)		
20.paga	(V)		
21.perseguir	(V)		
22.piso	(N)		
23.punto	(N)		

APPENDIX F
The Calque Screening Test

CUESTIONARIO DE USO

A continuación ofrecemos varios ejemplos. Por favor léalos y conteste sí ó no a las tres preguntas que se hacen sobre cada ejemplo, marcando su respuesta con un círculo. Queremos saber la frecuencia del uso de las palabras subrayadas. Dé la primera respuesta que se le ocurra. No lo piense mucho.

Haga los dos primeros ejemplos y deténgase. Vamos a discutirlos juntos antes de seguir con el resto para ver si tiene alguna pregunta.

<u>Ejemplo</u>	¿Ha oído la palabra		¿Considera su uso parte	
	<u>subrayada?</u>		<u>integral del español?</u>	
Manuel busca un departamento <u>furnido</u> . No tiene dinero para comprarse muebles ahora.	Sí	No	Sí	No
Gutierrez vive en una casa de ensueño. Ojalá yo tuviera la misma suerte para hacer buenos <u>negocios</u> .	Sí	No	Sí	No
1. Se descargaron las <u>baterías</u> de la linterna.	Sí	No	Sí	No
2. Después de haber sido un padre ejemplar, <u>abusó</u> de la hija y la dejó embarazada.	Sí	No	Sí	No
3. Pagamos poco de alquiler, pero el costo <u>actual</u> es mucho mayor.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
4. Las <u>paredes</u> necesitan pintura.	Sí	No	Sí	No
5. Tuve que poner una <u>carpetas</u> en el piso. Los vecinos de abajo se quejaron de las pisadas de los chicos.	Sí	No	Sí	No
6. Aunque faltan tres días todavía no han fijado la <u>agenda</u> de la reunión.	Sí	No	Sí	No
7. El jefe insultó a su secretaria. Ella se sintió tan <u>agravada</u> que renunció en el acto.	Sí	No	Sí	No
8. Puso la <u>alarma</u> para despertarse a las 7.	Sí	No	Sí	No
9. Así se hacía según la ley <u>anciana</u> .	Sí	No	Sí	No
10. Mi mamá tuvo un accidente y no puede trabajar. Por eso <u>colecta</u> desempleo.	Sí	No	Sí	No
11. Llené la <u>aplicación</u> para un trabajo.	Sí	No	Sí	No
12. Como yo no sabía que la información estaba desactualizada, <u>asumí</u> que estaba al día.	Sí	No	Sí	No
13. El avión <u>hizo</u> un aterrizaje de emergencia.	Sí	No	Sí	No
14. Mi hijo <u>atiende</u> la escuela que está enfrente.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
15. El <u>balance</u> de su cuenta se lo damos a fin de mes, si es que no lo gastó antes.	Sí	No	Sí	No
16. Camino dos <u>bloques</u> y estoy en el trabajo.	Sí	No	Sí	No
17. Yo <u>califico</u> para esa beca.	Sí	No	Sí	No
18. A Pablito le gusta coleccionar <u>cartas</u> de jugadores de fútbol.	Sí	No	Sí	No
19. Lo llamaron y dijo que no <u>podía</u> venir.	Sí	No	Sí	No
20. Este seguro tiene mejor <u>cobertura</u> en el hospital.	Sí	No	Sí	No
21. Me gusta ver televisión pero no tolero los <u>comerciales</u> .	Sí	No	Sí	No
22. Julieta vive en una casa <u>renovada</u> con habitaciones grandes y techos altos.	Sí	No	Sí	No
23. El gobierno está haciendo un estudio <u>comprensivo</u> de los problemas económicos que afligen al país.	Sí	No	Sí	No
24. Para llegar a un <u>compromiso</u> , ambas partes van a tener que conceder algo.	Sí	No	Sí	No
25. El tren llegó a <u>horario</u> .	Sí	No	Sí	No

Ejemplo	¿Ha oído la palabra		¿Considera su uso parte	
	subrayada?		integral del español?	
26. Este departamento tiene las <u>conveniencias</u> que buscamos como lavaplatos y lavadero.	Sí	No	Sí	No
27. El presidente se vio obligado a echar a muchos empleados por <u>cortes</u> en el presupuesto.	Sí	No	Sí	No
28. La gente se juntó en la calle y se hizo una <u>demonstración</u> espontánea para protestar la detención de personas inocentes.	Sí	No	Sí	No
29. Los relojes <u>digitales</u> son muy precisos.	Sí	No	Sí	No
30. El <u>distribuidor</u> no trajo la mercadería pedida.	Sí	No	Sí	No
31. Ud. es <u>elegible</u> para este trabajo. Cumple con todos los requisitos.	Sí	No	Sí	No
32. En las últimas elecciones el partido liberal <u>endosó</u> los candidatos del partido de los trabajadores.	Sí	No	Sí	No
33. Ayer <u>llegó</u> mi suegra.	Sí	No	Sí	No
34. Esa tienda tiene <u>especiales</u> muy buenos de fin de semana.	Sí	No	Sí	No
35. <u>Eventualmente</u> construiremos una habitación más en el fondo para mi segundo hijo.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
36. Ud puede hacer carreras <u>excitantes</u> en esta universidad.	Sí	No	Sí	No
37. Los obreros de esa <u>factoría</u> se quejan por el ambiente insalubre.	Sí	No	Sí	No
38. Las <u>figuras</u> de la deuda externa son muy elevadas, pero nadie en el gobierno parece asustarse.	Sí	No	Sí	No
39. Se cayó el <u>gabinete</u> de la cocina y se rompieron todos los platos.	Sí	No	Sí	No
40. Saqué muy buen <u>grado</u> en el examen final.	Sí	No	Sí	No
41. Llene esta <u>forma</u> para abrir una cuenta en el banco.	Sí	No	Sí	No
42. Hernán es <u>graduado</u> de la escuela de la esquina.	Sí	No	Sí	No
43. El gobierno supo <u>reprimir</u> la rebelión.	Sí	No	Sí	No
44. Compré pan y jamón en la <u>grocería</u> de al lado.	Sí	No	Sí	No
45. Tengo que hacer dieta porque <u>gané</u> mucho peso.	Sí	No	Sí	No
46. En la fiesta te voy a <u>introducir</u> a mi mejor amiga.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
47. El <u>ministro</u> de esa iglesia es muy buena persona.	Sí	No	Sí	No
48. Tengo que ir a la <u>oficina</u> del doctor esta tarde.	Sí	No	Sí	No
49. Estas <u>vacaciones</u> las pasaré en la playa.	Sí	No	Sí	No
50. A partir de ahora ese asunto será <u>perseguido</u> dentro de la legalidad vigente.	Sí	No	Sí	No
51. La universidad tiene una <u>póliza</u> muy estricta. No acepta estudiantes con malas notas.	Sí	No	Sí	No
52. La <u>última</u> película que vi no me gustó.	Sí	No	Sí	No
53. El <u>principal</u> de la escuela de mis hijos quiere hablar conmigo.	Sí	No	Sí	No
54. La gente pobre vive en <u>proyectos</u> en las ciudades.	Sí	No	Sí	No
55. Martín dijo que ya había explicado el <u>punto</u> . Se cansó y dijo que no lo quería repetir más.	Sí	No	Sí	No
56. Los casos de consumo de drogas se <u>refieren</u> al rector de la universidad.	Sí	No	Sí	No

Ejemplo	¿Ha oído la palabra		¿Considera su uso parte	
	subrayada?		integral del español?	
57. El martes me <u>registré</u> en la universidad.	Sí	No	Sí	No
58. Jaime fue a la farmacia a comprar un buen desodorante. Le dieron uno <u>regular</u> pero él quería uno con perfume.	Sí	No	Sí	No
59. Mi <u>hija</u> habla dos idiomas.	Sí	No	Sí	No
60. Todos los visitantes deberán <u>reportar</u> al director.	Sí	No	Sí	No
61. A Adriana apenas le alcanza para pagar la <u>renta</u> del departamento con lo que gana.	Sí	No	Sí	No
62. Mi papá se <u>retiró</u> cuando cumplió los sesenta.	Sí	No	Sí	No
63. El <u>paquete</u> de hotel y avión para Río es muy barato.	Sí	No	Sí	No
64. Apresúrese para la más variada <u>selección</u> .	Sí	No	Sí	No
65. Yo no trabajo. Mi marido me <u>soporta</u> con lo que gana.	Sí	No	Sí	No
66. <u>Cerramos</u> la boca cuando comemos.	Sí	No	Sí	No
67. Tengo una <u>sugestión</u> para hacerte. Vestite mejor que dás lástima.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
68. El parlante anunció que los <u>trenes</u> no funcionaban porque el personal del subterráneo está de huelga.	Sí	No	Sí	No
69. Marta está en la <u>unión</u> y tiene muchos beneficios. Puede usar los hoteles para veranear por poca plata.	Sí	No	Sí	No
70. Esta época es muy buena para comprar. Hay muchas liquidaciones <u>atrayentes</u> .	Sí	No	Sí	No
71. Los trenes no <u>corren</u> hoy.	Sí	No	Sí	No
72. La empleada no tuvo tiempo de preguntar si podía <u>ayudarlo</u> . El señor escogió lo que quería comprar enseguida.	Sí	No	Sí	No
73. El barrio donde vivo es <u>callado</u> .	Sí	No	Sí	No
74. Estaba muy <u>cansado</u> después del viaje.	Sí	No	Sí	No
75. Tiene muy <u>corta</u> memoria.	Sí	No	Sí	No
76. En esa escuela los chicos han <u>crecido</u> mucho. Aprendieron muchas cosas nuevas.	Sí	No	Sí	No
77. Hay varios barrios <u>deprimidos</u> en la zona.	Sí	No	Sí	No
78. El día que el abogado <u>descansó</u> el caso, el juez dio un suspiro de alivio.	Sí	No	Sí	No

Ejemplo	¿Ha oído la palabra subrayada?		¿Considera su uso parte integral del español?	
79. Quiero que <u>camines</u> a la nena hasta la escuela.	Sí	No	Sí	No
80. Los chicos <u>jugaban</u> en el agua.	Sí	No	Sí	No
81. En la escuela de Jaime todos los padres están muy <u>envueltos</u> . Quieren convertirla en la mejor del lugar.	Sí	No	Sí	No
82. Florencia <u>fracasó</u> en el curso de ingreso.	Sí	No	Sí	No
83. <u>Guarda</u> el martes para salir a cenar y luego al cine.	Sí	No	Sí	No
84. Voy a una escuela que tiene fama de ser muy <u>dura</u> .	Sí	No	Sí	No
85. Traté pero no <u>hice</u> el equipo.	Sí	No	Sí	No
86. Después tendremos que <u>levantar</u> el tema con ellos.	Sí	No	Sí	No
87. Hay muchos problemas en el trabajo. El jefe va a <u>llamar</u> a una reunión para discutirlos.	Sí	No	Sí	No
88. <u>Corrió</u> para gobernador en las últimas elecciones, pero no ganó.	Sí	No	Sí	No
89. Las amigas de Claudia le hicieron una <u>lluvia</u> de regalos porque está embarazada.	Sí	No	Sí	No

Ejemplo	¿Ha oído la palabra subrayada?		¿Considera su uso parte integral del español?	
90. Para cambiar <u>la mente</u> de Frankenstein hay que hablarle mucho. Es muy terco ese monstruo.	Sí	No	Sí	No
91. No <u>paga</u> correr riesgos.	Sí	No	Sí	No
92. Antes de darle el <u>piso</u> a mi colega, el Senador Perez, quisiera hacer un último comentario.	Sí	No	Sí	No
93. Me <u>gusta</u> contarle cuentos a mis sobrinos.	Sí	No	Sí	No
94. Yo recibí muchos golpes pero no pude <u>regresar</u> ni uno.	Sí	No	Sí	No
95. Lo lamentamos pero los ascensores no <u>trabajan</u> hoy.	Sí	No	Sí	No
96. Tomó <u>ventaja</u> de esa oportunidad para conocer a gente influyente.	Sí	No	Sí	No
97. Fui a la zapatería y <u>traté</u> varios zapatos pero ninguno me quedó bien.	Sí	No	Sí	No
98. Federico es un chico muy <u>sensible</u> . Primero hace sus tareas y después sale a jugar.	Sí	No	Sí	No
99. Estaba muerto cuando lo <u>admitieron</u> al hospital.	Sí	No	Sí	No
100. Podés venir a la fiesta con ropa <u>casual</u> .	Sí	No	Sí	No

APPENDIX G

Personal Information Questionnaire for Bilingual Subjects

Este cuestionario forma parte de un estudio sobre el uso del español en los Estados Unidos de Norteamérica. Por favor indique la respuesta adecuada.

1. Sexo _____ Hombre

 _____ Mujer

2. Edad _____ años

3. Lugar de nacimiento (País)

4. Lugar de nacimiento de sus padres (País)

_____ Madre

_____ Padre

5. ¿A qué edad llegó a este país? _____

6. Años de residencia en los Estados Unidos _____

7. ¿Cuántas veces salió de los EEUU y por cuánto tiempo?

8. Nivel de escolaridad alcanzado y en que país

_____ Terminé escuela primaria _____

_____ Terminé escuela secundaria _____

_____ Terminé la universidad _____

_____ Postgrado _____

8. Profesión

_____ Profesional _____ Ama de casa

_____ Obrero(a) ó empleado(a) _____ Estudiante

_____ Maestro(a) _____ Otra

9. Sabe otro idioma además del inglés

¿Cuál? _____ Más ó menos _____

Bien ó muy bien _____

10. Entiende y habla en inglés

_____ Bien ó muy bien

_____ Más ó menos

_____ No

11. Lee y escribe en inglés

_____ Bien ó muy bien

_____ Más ó menos

_____ No

12. Lee y escribe en español

_____ Bien ó muy bien

_____ Más ó menos

13. Uso del español en el hogar

_____ siempre ó casi siempre

_____ de vez en cuando

_____ casi nunca ó nunca

14. Uso del español en el trabajo

_____ siempre ó casi siempre

_____ de vez en cuando

_____ casi nunca ó nunca

15. Uso del español en actividades sociales

_____ siempre ó casi siempre

_____ de vez en cuando

_____ casi nunca ó nunca

16. Frecuencia con que Ud. lee revistas, periódicos o libros en español

_____ siempre ó casi siempre

_____ de vez en cuando

_____ casi nunca ó nunca

17. ¿Cuál es su opinión?

_____ En los EEUU es importante saber inglés pero no español

_____ En los EEUU es importante saber inglés y español

_____ En los EEUU es importante saber español pero no inglés

APPENDIX H

Experimental and Control Pairs Used in the Priming Task

Below we list the experimental priming pairs (tapping the calqued and standard senses) with their respective control pairs. The frequency of use for each experimental probe word appears after the control probe word. The parts of speech of the priming pairs are also identified (N=Noun, Adj=Adjective, V=Verb, Adv= Adverb).

Semantically Transparent and Phonologically Similar

Calque Pairs		Standard Pairs	
abusar(V) /violar(V)		abusar(V) /maltratar(V)	
abuse/rape		abuse/mistreat	
abusar/diario	20	abusar/favorable	8
abuse/daily		abuse/favorable	
actual (Adj) /real (Adj)		actual (Adj) /presente (Adj)	
actual/real		actual/present	
actual/miel	76/77 ¹	actual/aquellos	43/4
actual/honey		actual/those	
admitir(V) /hospital (N)		admitir(V) /mentira (N)	
admit/hospital		admit/lie	
admitir/fabricar	49	admitir/avanzar	37
admit/produce		admit/go forward	
agenda (N) /plan (N)		agenda (N) /citas (N)	
agenda/plan		agenda/appointments	
agenda/dado	92	agenda/rezar	16
agenda/dice		agenda/pray	
anciana (Adj) /antigua (Adj)		anciana (Adj) /vieja (Adj)	
ancient/antique		old/old	
anciana/relieve	31	anciana/local	29
ancient/relief		old/local	

¹ When we could not find an equivalent control word in terms of frequency and number of letters, we used the closest one available. For example, miel had 77 of frequency while actual had 76. They differed by one frequency point, but both were words with four letters.

alarma (N) /despertador (N)		alarma (N) /peligro (N)	
alarm/alarm clock		alarm/danger	
alarma/corporación	9	alarma/relieve	31
alarm/corporation		alarm/relief	
asumir (V) /creer (V)		asumir (V) /aceptar (V)	
assume/believe		assume/accept	
asumir/ellos	423/18	asumir/nuestro	110/2
assume/they		assume/ours	
balance (N) /resto (N)		balance (N) /equilibrio (N)	
balance/left over		balance/equilibrium	
balance/acaso	31	balance/denominado	7
balance/may be		balance/denominated	
batería (N) /linterna (N)		batería (N) /auto (N)	
battery/flashlight		battery/car	
batería/tragedia	106	batería/vaca	29
battery/tragedy		batería/cow	
bloque (N) /cuadra (N)		bloque (N) /piedra (N)	
block/block		block/stone	
bloque/ironía	7	bloque/llorar	69
block/irony		block/cry	
cartas (N) /futbolista (N)		cartas (N) /correo (N)	
letters/futbolplayer		letters/post office	
cartas/mueblerías	63	cartas/limpia	10
letters/furniture stores		letters/clean	
colecta (N) /desempleo (N)		colecta (N) /donación (N)	
collection/unemployment		collection/donation	
colecta/jovencito	49	colecta/aviación	53
collection/youngster		collection/aviation	
compromiso (N) /arreglo (N)		compromiso (N) /obligación (N)	
compromise/agreement		obligation/obligation	
compromiso/álgebra	6	compromiso/reaccionar	17
compromise/algebra		obligation/to react	
conveniencias (N) /casa (N)		conveniencias (N) /viaje (N)	
conveniencias/kitchen		advantages/trip	
conveniencias/gran	431	conveniencias/fruta	110/1
conveniencias/great		conveniencias/fruit	

deprimido (Adj) /arruinado (Adj)		deprimido (Adj) /triste (Adj)	
depressed/ruined		depressed/sad	
deprimido/recóndito	7	deprimido/millón	84
depressed/hidden		depressed/million	
digital (Adj) /números (N)		digital (adj) /dedos (N)	
digital/numbers		digital/fingers	
digital/novelas	160	digital/reina	31
digital/novels		digital/queen	
distribuidor (N) /proveedor (N)		distribuidor (N) /motor (N)	
distributor/wholesaler		distributor/motor	
distribuidor/intoxicar	8	distribuidor/malas	444
distributor/intoxicate		distributor/bad	
elegible (Adj) /calificado (Adj)		elegible (Adj) /accesible (Adj)	
ellegible/qualified		ellegible/accesible	
elegible/crepúsculo	10	elegible/olvidarse	39
ellegible/dusk		ellegible/forget	
excitante (Adj) /apasionante (Adj)		excitante (Adj) /sensual (Adj)	
exciting/causing enthusiasm		exciting/arousing	
excitante/inhabilitar	2	excitante/militar	34
exciting/disqualify		exciting/military	
gana (V) /engorda (V)		gana (V) /triunfa (V)	
gain/ gain weight		win/win	
gana/tirador	18	gana/sonrisa	52
win/shooter		win/smile	
graduado (Adj) /secundario (Adj)		graduado (Adj) /universitario (Adj)	
graduate/from high school		graduate/from the university	
graduado/igualmente	13	graduado/consecuencias	34
graduate/equally		graduate/consequences	
introducir (V) /saludar (V)		introducir (V) /exponer (V)	
introduce/greet		introduce/present	
introducir/espalda	38	introducir/llanura	35
introduce/back		introduce/plains	
ministro (N) /iglesia (N)		ministro (N) /presidente (N)	
minister/church		minister/president	
ministro/sistema	85/6	ministro/diferencia	52/3
minister/system		minister/difference	

oficina (N) /médico (N)		oficina (N) /gerente (N)	
office/doctor		office/chairman	
oficina/soltar	17	oficina/firmeza	7
office/let go		office/firmness	
paquete (N) /viaje (N)		paquete (N) /bulto (N)	
package/trip		package/piece of luggage	
paquete/tocar	110	paquete/ancha	7
package/touch		package/wide	
póliza (N) /gobierno (N)		póliza (N) /seguro (N)	
policy/government		policy/insurance	
póliza/entonces	323/0	póliza/apenas	32
policy/then		policy/barely	
referir (V) /enviar (V)		referir (V) /contar (V)	
refer/send		narrate/narrate	
referir/animal	108	referir/sangre	151/2
refer/animal		refer/blood	
registrarse (V) /universidad (N)		registrarse (V) /hotel (N)	
register/university		register/hotel	
registrarse/agricultura	201	registrarse/subir	83
register/agriculture		register/go up	
renovado (Adj) /arreglado (Adj)		renovado (Adj) /descansado (Adj)	
renovated/fixed		renovated/rested	
renovado/rastrillo	85	renovado/tembloroso	23
renovated/rake		renovated/trembling	
renta (N) /alquiler (N)		renta (N) /impuesto (N)	
rent/rent		revenue/tax	
renta/capturar	11	renta/político	96
rent/capture		rent/politician	
retirarse (V) /jubilarse (V)		retirarse (V) /irse (V)	
retire/leave the job		retire/leave	
retirarse/inhóspito	3	retirarse/pido	321/2
retire/inhospitable		retire/ask	
selección (N) /telas (N)		selección (N) /fútbol (N)	
selection/fabrics		selection/soccer	
selección/lecho	10	selección/aislar	6
selection/bed		selection/isolate	
sugestión (N) /consejo (N)		sugestión (N) /hipnosis (N)	
suggestion/counsel		suggestion/hipnosis	
sugestión/caballo	70	sugestión/divorcio	13
suggestion/economical		suggestion/divorce	

tren (N) /subterráneo (N)		tren (N) /ferrocarril (N)	
train/subway		train/railway	
tren/cordialidad	8	tren/comprensión	9
train/cordiality		train/understanding	
unión (N) /sindicato (N)		unión (N) /matrimonio (N)	
union/trade union		union/marriage	
unión/excelente	35	unión/habitación	56
union/excellent		union/room	

Semantically Opaque and Phonologically Similar

Calque Pairs

Standard Pairs

agravada (Adj) / enojada (Adj)		agravada (Adj) / peor (Adj)	
aggravated / angry		aggravated / worse	
agravada / festejo	7	agravada / dato	232/6
aggravated / festivity		aggravated / data	
aplicación (N) / pedido (N)		aplicación (N) / uso (N)	
application / request		application / paint	
aplicación / ribera	10	aplicación / sus	50/4
application / riverbank		application / his	
atender (V) / ir (V)		atender (V) / cuidar (V)	
attend / go		attend / take care	
atender / ni	101/7	atender / sereno	34
attend / neither		attend / serene	
calificar (V) / habilitar (V)		calificar (V) / evaluar (V)	
qualify / to have the credentials		grade / give a grade	
calificar / banquetes	30	calificar / humilde	25
qualify / banquets		qualify / humble	
carpeta (N) / alfombra (N)		carpeta (N) / expediente (N)	
carpet / carpet		folder / dossier	
carpeta / callejón	9	carpeta / nacimiento	15
carpet / dark street		carpet / birth	
casual (Adj) / informal (Adj)		casual (Adj) / accidental (Adj)	
casual / informal		casual / accidental	
casual / jubiloso	14	casual / amenazante	10
casual / jubilant		casual / menacing	
cobertura (N) / seguro (N)		cobertura (N) / chocolate (N)	
coverage / insurance		cover / chocolate	
cobertura / idioma	32	cobertura / domicilio	9
coverage / language		cover / address	
comercial (N/Adj) / televisión (N)		comercial (Adj) / banco (N)	
commercial / television		commercial / bank	
comercial / lentamente	22	comercial / hogar	67
commercial / slowly		commercial / home	

comprensivo (Adj) / estudio (N)		comprensivo (Adj) / padre (N)	
comprehensive/study		understanding/father	
comprensivo/clásico	147	comprensivo/nuevo	329
comprehensive/classic		comprehensive/continue	
demonstración (N) / protesta (N)		demonstración (N) / afecto (N)	
demonstration/protest		show/affection	
demonstración/misterio	21	demonstración/marino	12
demonstration/mystery		demonstration/marine	
endosar (V) / apoyar (V)		endosar (V) / firmar (V)	
endorse/support		endorse/sign	
endosar/humana	55	endosar/sierra	27
endorse/human		endorse/hill	
especial (N) / tienda (N)		especial (N) / queso (N)	
special/store		special/cheese	
especial/latino	31	especial/vocal	21
special/latin		special/vocal	
eventualmente (Adv) / adelante (N)		eventualmente (Adv) / posibilidad (N)	
eventually/ahead		eventually/possibility	
eventualmente/medallón	13	eventualmente/interesante	28
eventually/medal		eventually/interesting	
factoría (N) / producción (N)		factoría (N) / comercio (N)	
factory/production		factory/commerce	
factoría/admiración	22	factoría/elegante	38
factory/admiration		factory/elegant	
figuras (N) / cifras (N)		figuras (N) / cuadro (N)	
figures/numbers		figures/picture	
figuras/misión	31	figuras/asunto	70
figures/mission		figures/matter	
forma (N) / solicitud (N)		forma (N) / silueta (N)	
form/application form		form/silhouette	
forma/religioso	28	forma/rescate	11
form/religious		form/rescue	
gabinete (N) / cocina (N)		gabinete (N) / ministerio (N)	
cabinet/kitchen		cabinet/ministry	
gabinete/pureza	23	gabinete/periodista	32
cabinet/purity		cabinet/journalist	

grado (N) /nota (N)		grado (N) /diploma (N)	
grade/number grade		grade/diploma	
grado/huir	61/3	grado/delirar	6
grade/escape		grade/to be delirious	
grosería (N) /negocio (N)		grosería (N) /insulto (N)	
grocery/store		insult/insult	
grosería/terreno	67	grosería/mejoría	7
grocery/terrain		insult/improvement	
principal (N) /escuela (N)		principal (N) /préstamo (N)	
principal/school		principal/loan	
principal/moderno	99/100	principal/accentuar	8
principal/modern		principal/accentuate	
proyectos (N) /pobres (N)		proyectos (N) /futuro (N)	
projects/the poor		projects/the future	
proyectos/bosque	43	proyectos/pecado	38
projects/wood		projects/sin	
regular (Adj) /normal (Adj)		regular (Adj) /mediocre (Adj)	
regular/average		regular/mediocre	
regular/chofer	35	regular/herencia	13
regular/driver		regular/inheritance	
reportar (V) /informar (V)		reportar (V) /proporcionar (V)	
report/inform		report/give	
reportar/inocente	18	reportar/afirmaciones	31
report/inocent		report/affirmations	
sensible (Adj) /responsable (Adj)		sensible (Adj) /emotivo (Adj)	
sensible/responsible		sensible/emotional	
sensible/transportar	17	sensible/modular	10
sensible/transport		sensible/modular	
soportar (V) /mantener (V)		soportar (V) /aguantar (V)	
support/provide		support/put up with	
soportar/mercados	121/2	soportar/well-timed	7
support/markets		support/opportune	

Semantically Transparent and Phonologically Different

Calque Pairs		Standard Pairs	
atrayernte (Adj) /barato (Adj)		atrayernte (Adj) /hermosa (Adj)	
attractive/cheap		attractive/beautiful	
atrayernte/máximo	10	atrayernte/extremo	32
attractive/maximum		attractive/extreme	
ayudar (V) /vender (V)		ayudar (V) /colaborar (V)	
help/sell		help/collaborate	
ayudar/estado	201	ayudar/modificar	11
help/state		help/modify	
callado (Adj) /barrio (N)		callado (Adj) /hombre (N)	
silent/neighborhood		silent/man	
callado/quemar	29	callado/porque	941
silent/burn		silent/why	
caminarla (V) /nena (N)		caminarla (V) /calle (N)	
walk her/child		walk it/street	
caminarla/unas	83	caminarla/nadie	235/6
walk her/some		walk it/nobody	
corren (V) /funcionan (V)		corren (V) /saltan (V)	
run/function		run/jump	
corren/compartir	34	corren/tirano	42
run/share		run/tyrant	
corta (Adj) /memoria (N)		corta (Adj) /distancia (N)	
short/memory		short/distance	
corta/enterar	41	corta/semillante	45/6
short/find out		short/similar	
cortes (N) /presupuesto (N)		cortes (N) /tijera (N)	
cuts/budget		cuts/scissors	
cortes/transportar	17	cortes/pálido	166
cuts/transport		cuts/pale	
fracasar (V) /desaprobar (V)		fracasar (V) /fallar (V)	
fail/fail exams		fail/not meet expectations	
fracasar/escabullir	4	fracasar/lujoso	94
fail/escape		fail/luxurious	

guarda (V) / fecha (N)		guarda (V) / dinero (N)	
save/date		save/money	
guarda/capaz	50	guarda/ocupar	156
save/moral		save/occupy	
llamar (V) / convocar (V)		llamar (V) / gritar (V)	
call/summon		call/scream	
llamar/complejo	8	llamar/cámara	56
call/complex		call/hall	
mente (N) / opinión (N)		mente (N) / inteligencia (N)	
mind/opinion		mind/intelligence	
mente/llamado	87	mente/maravillosos	46/7
mind/calling		mind/marvelous	
perseguir (V) / continuar (V)		perseguir (V) / acechar (V)	
pursue/follow up		persecute/be on the lurk	
perseguir/servicios	155/9	perseguir/caricia	9
pursue/services		persecute/caress	
punto (N) / cuestión (N)		punto (N) / coma (N)	
point/issue		period/comma	
punto/sociedad	92	punto/cola	9
point/society		period/line	
regresar (V) / devolver (V)		regresar (V) / volver (V)	
return/give back		return/come back	
regresar/policial	28	regresar/buenos	355/61
return/police		return/good	
tomar (V) / ventaja (N)		tomar (V) / helado (N)	
take/advantage		have/ice cream	
tomar/residir	23	tomar/atinar	5
take/reside		take/to guess	
trabaja (V) / funciona (V)		trabaja (V) / labura (V)	
works/functions		works/works ²	
trabaja/división	34	trabaja/brotar	15
works/division		works/sprout	

² Since labura is a slang word and did not appear in the frequency dictionary, we used the frequency of the word it is derived from laborar.

Semantically Opaque and Phonologically Different

Calque Pairs		Standard Spanish	
correr(V) /elección(V) run/run in an election correr/solución run/solution	22	correr(V) /ejercicio(V) run/exercise correr/frecuente run/frequent	19
crecer(V) /aprender(V) grow/learn crecer/instinto grow/instinct	57	crecer(V) /desarrollarse(V) grow/develop crecer/planteamiento grow/statement	9
descansar(V) /terminar(V) rest/finish descansar/próximos rest/next	95	descansar(V) /reposar(V) rest/repose descansar/profeta rest/profet	11
duro(Adj) /difícil (Adj) hard/difficult duro/ninguno hard/none	119	duro(Adj) /firme (Adj) hard/firm duro/citar hard/cite	23
envuelto (Adj) /activo (Adj) involved/active envuelto/sábado involved/Saturday	14	envuelto (Adj) /cubierto (Adj) wrapped/covered envuelto/instalar wrapped/install	19
hacerlo (V) /equipo (N) make it/team hacerlo/cuenta make it/account	98	hacerlo (V) /experimento (N) make it/experiment hacerlo/diplomático make it/diplomat	10
levantar (V) /mencionar (V) raise/mention levantar/almirante raise/admiral	26	levantar (V) /elevar (V) raise/lift levantar/origen raise/origin	49
lluvia (N) /regalos (N) shower/gifts lluvia/archivo shower/archives	7	lluvia (N) /agua (N) shower/water lluvia/edad shower/age	104

pagar (V) /merecer (V)		pagar (V) /desembolsar (V)	
pay/merit		pay/disimburse	
pagar/respiro	17	pagar/perpetrador	1
pay/breath		pay/perpetrator	
piso (N) /discusión (N)		piso (N) /pasos (N)	
floor/discussion		floor/steps	
piso/alrededor	19	piso/chica	30
floor/around		floor/girl	
tratar (V) /ponerse (V)		tratar (V) /intentar (V)	
try on/try on		try/try	
tratar/atraído	7	tratar/discurso	70/1
try on/attracted		try/speech	

APPENDIX I

Four Lists of Experimental, Control, and Filler Pairs
Used in the Priming Task

Below we list the four lists of priming pairs used in the priming task. The abbreviation after each experimental and control pairs identifies them as either belonging to the Spanish of the contact variety (related rny/control cny) or the standard (related rsp/control cny). Those pairs without an abbreviation are fillers. Each subject went through two of the lists, either List 1 and 1B or List 2 and 2B.

List 1

1. travesura/galería		33. verano/caja	
2. golear/valorizar		34. lluvia/edad	csp
3. vida/golpe		35. pileta/coliflor	
4. goloso/corrupto		36. piso/discusión	rny
5. tormenta/gato		37. cerrado/planta	
6. cosecha/virtud		38. pagar/respiro	cny
7. disimular/favorecer		39. contenta/no	
8. relación/cosquillas		40. tratar/intentar	rsp
9. pavada/decente		41. árbol/imaginar	
10. costa/orquesta		42. abusar/favorable	csp
11. viril/cosido		43. maestra/infinito	
12. decepcionado/pavo		44. actual/real	rny
13. payaso/tero		45. libro/circular	
14. matinal/disminuir		46. admitir/fabricar	cny
15. dócil/gestionar		47. comida/obstinarse	
16. soplar/favor		48. agenda/citas	rsp
17. consagración/carrito		49. humo/peine	
18. dieciocho/simple		50. anciana/local	csp
19. atún/prensa		51. pluma/cocina	
20. correr/elección	rny	52. alarma/despertador	rny
21. paz/gota		53. raya/aparecido	
22. crecer/instinto	cny	54. asumir/ellos	cny
23. examen/basura		55. también/pelo	
24. descansar/reposar	rsp	56. balance/equilibrio	rsp
25. lista/maceta		57. sucio/potasio	
26. duro/citar	csp	58. batería/vaca	csp
27. dominó/lengua		59. ropa/angustia	
28. envuelto/activo	rny	60. bloque/cuadra	rny
29. engañar/campera		61. dulce/fugaz	
30. hacerlo/cuenta	cny	62. cartas/mueblerías	cny
31. frío/reloj		63. anís/duna	
32. levantar/elevar	rsp	64. conveniencias/viajersp	

65. célula/papel		112. atrayente/hermosa	rsp
66. colecta/aviación	csp	113. portero/revista	
67. alegre/contra		114. ayudar/modificar	csp
68. compromiso/arreglo	rny	115. recordar/perdido	
69. energía/cementerio		116. callado/barrio	rny
70. cortes/transportar	cny	117. escalar/propiedad	
71. luchar/gradual		118. caminarla/unas	cny
72. digital/dedos	rsp	119. higo/paisaje	
73. gramo/lejos		120. corren/saltan	rsp
74. distribuidor/malas	csp	121. gesto/hueco	
75. diversión/presumir		122. corta/semejante	csp
76. elegible/calificado	rny	123. gimnasia/idea	
77. prestar/corazón		124. deprimido/arruinado	rny
78. excitante/inhabilitar	cny	125. hueso/país	
79. fijo/contestar		126. fracasar/escabullir	cny
80. gana/triunfa	rsp	127. fichar/bovino	
81. extrañar/oscurio		128. guarda/dinero	rsp
82. graduado/consecuencias	csp	129. duchar/horizontal	
83. montarse/escarbar		130. llamar/cámara	csp
84. introducir/saludar	rny	131. botas/fiebre	
85. babosa/monumento		132. mente/opinión	rny
86. ministro/iglesia	cny	133. fideo/avión	
87. noche/encarecer		134. regresar/policial	cny
88. oficina/gerente	rsp	135. acomodar/paréntesis	
89. campo/tabla		136. tomar/helado	rsp
90. paquete/ancha	csp	137. pensamiento/escaparse	
91. mágico/preocupado		138. trabaja/brotar	csp
92. póliza/gobierno	rny	139. drogarse/cantar	
93. resbalar/mostrar		140. agravada/enojada	rny
94. referir/animal	cny	141. color/dentista	
95. bolsillo/torre		142. aplicación/ribera	cny
96. registrarse/hotel	rsp	143. compañero/pasto	
97. disparo/sábana		144. atender/cuidar	rsp
98. renovado/tembloroso	csp	145. mareado/intolerante	
99. torpe/disperso		146. calificar/humilde	csp
100. renta/alquiler	rny	147. loción/picaporte	
101. fiel/cóndor		148. carpeta/alfombra	rny
102. retirarse/inhóspito	cny	149. patada/reducción	
103. señalar/jurar		150. casual/jubiloso	cny
104. sugestión/hipnosis	rsp	151. retorcer/plantear	
105. disponible/jurídico		152. cobertura/chocolate	rsp
106. selección/aislar	csp	153. mitad/amigo	
107. fugitivo/relámpago		154. comercial/hogar	csp
108. tren/subterráneo	rny	155. ciruela/lápiz	
109. perfumado/fastidioso		156. comprensivo/estudio	rny
110. unión/excelente	cny	157. esconderse/mojarse	
111. fiesta/renuncia			

158. demostración/misterio
cny
159. exhibir/nacer
160. endosar/firmar rsp
161. mundo/hongos
162. especial/vocal csp
163. furioso/natural
164. eventualmente/
adelante rny
165. crédito/expresión
166. factoría/admiración
cny
167. frazada/neptuno
168. figuras/cuadro rsp
169. nombre/franela
170. forma/rescate csp
171. explosivo/convalecer
172. gabinete/cocina rny
173. negar/inventar
174. grado/huir cny
175. frecuentar/abeja
176. grosería/insulto rsp
177. controversia/luna
178. perseguir/caricia csp
179. convenir/preocuparse
180. proyectos/pobres rny
181. anotar/sorbo
182. principal/moderno cny
183. injusticia/calvo
184. punto/coma rsp
185. entrega/soprano
186. regular/herencia csp
187. entierro/junta
188. reportar/informar rny
189. captura/esterilidad
190. sensible/transportar
cny
191. feo/grave
192. soportar/aguantar rsp

List 1B

1. monstruo/traducir		46. cartas/futbolista	rny
2. extinguir/franco		47. amarillo/regadera	
3. hacha/naranja		48. conveniencias/gran	cny
4. correr/frecuente	csp	49. bestia/jarra	
5. girasol/inválido		50. colecta/donación	rsp
6. crecer/aprender	rny	51. betún/jarabe	
7. hacia/guante		52. compromiso/reaccionar	csp
8. descansar/próximos	cny	53. ganador/triángulo	
9. iluminar/gatear		54. cortes/presupuesto	rny
10. duro/firme	rsp	55. tribunal/barro	
11. gitano/mármol		56. digital/novelas	cny
12. envuelto/instalar	csp	57. reír/incorporar	
13. idealista/escarabajo		58. distribuidor/motor	rsp
14. hacerlo/equipo	rny	59. fallo/azufre	
15. éxito/pintar		60. elegible/olvidarse	csp
16. levantar/almirante	cny	61. descongelar/trébol	
17. glotón/jurídico		62. excitante/apasionante	rny
18. lluvia/agua	rsp	63. azafata/farol	
19. huída/dedal		64. gana/tirador	cny
20. piso/chica	csp	65. episodio/vacío	
21. floral/membrillo		66. graduado/universitario	rsp
22. pagar/merecer	rny	67. cielo/banana	
23. húmedo/desarmado		68. introducir/llanura	csp
24. tratar/atraído	cny	69. morir/cartera	
25. esculpir/prisa		70. ministro/iglesia	rny
26. abusar/maltratar	rsp	71. desayunar/interpretar	
27. maullar/defender		72. oficina/soltar	cny
28. actual/aquellos	csp	73. bebible/tonto	
29. mineral/declaración		74. paquete/bulto	rsp
30. admitir/hospital	rny	75. ropero/navegar	
31. festival/bajo		76. póliza/apenas	csp
32. agenda/dado	cny	77. mano/edificio	
33. ser/castigar		78. referir/enviar	rny
34. anciana/vieja	rsp	79. aire/pantalón	
35. irritar/plural		80. registrarse/agricultura	cny
36. alarma/relieve	csp	81. vidrio/lechuga	
37. hilo/además		82. renovado/descansado	rsp
38. asumir/creer	rny	83. pájaro/tornillo	
39. mientras/colorado		84. renta/político	csp
40. balance/acaso	cny	85. beber/revoltoso	
41. fondo/celoso		86. retirarse/jubilarse	rny
42. batería/auto	rsp		
43. flotar/ciclo			
44. bloque/llorar	csp		
45. desplante/dictar			

87. lija/mosca		136. cobertura/idioma	cny
88. sugestión/caballo	cny	137. aéreo/lastimada	
89. ridículo/sentar		138. comercial/banco	rsp
90. selección/fútbol	rsp	139. laurel/arena	
91. pie/velero		140. comprensivo/nuevo	csp
92. tren/comprensión	csp	141. estampilla/cuna	
93. comer/destrozar		142. demostración/protesta	rny
94. unión/sindicato	rny	143. recio/parto	
95. otro/bandera		144. endosar/humana	cny
96. atrayente/máximo	cny	145. presión/cobarde	
97. alimento/enfrente		146. especial/queso	rsp
98. ayudar/colaborar	rsp	147. sordo/tragar	
99. cama/fé		148. eventualmente/ interesante	csp
100. callado/porque	csp	149. óptico/masita	
101. cambio/salvar		150. factoría/producción	rny
102. caminarla/nena	rny	151. sogá/caramelo	
103. mezclado/firmado		152. figuras/misión	cny
104. corren/compartir	cny	153. vasija/estricto	
105. necesario/parecido		154. forma/silueta	rsp
106. corta/distancia	rsp	155. mensajero/oso	
107. piedra/nariz		156. gabinete/periodista	csp
108. deprimido/millón	csp	157. embargo/recelo	
109. autor/pulso		158. grado/nota	rny
110. fracasar/desaprobar	rny	159. mellizo/olivo	
111. comunidad/pato		160. grosería/terreno	cny
112. guarda/capaz	cny	161. nueve/magistral	
113. girar/cordillera		162. perseguir/acechar	rsp
114. llamar/gritar	rsp	163. procesión/farmacéutico	
115. tuya/lila		164. proyectos/pecado	csp
116. mente/maravillosos	csp	165. mula/asimismo	
117. obsesión/coco		166. principal/escuela	rny
118. regresar/devolver	rny	167. filtro/escalera	
119. método/sepulcro		168. punto/sociedad	cny
120. tomar/residir	cny	169. pescar/lente	
121. máxima/trozo		170. regular/mediocre	rsp
122. trabaja/labura	rsp	171. marisco/lógico	
123. ciencia/tropa		172. reportar/afirmaciones	csp
124. agravada/dato	csp	173. gala/plantel	
125. impuro/torno		174. sensible/responsable	rny
126. aplicación/pedido	rny	175. ofender/colchón	
127. zona/silla		176. soportar/mercados	cny
128. atender/ni	cny	177. gracias/fin	
129. rival/azúcar			
130. calificar/evaluar	rsp		
131. soldar/fresco			
132. carpeta/nacimiento	csp		
133. social/naúfrago			
134. casual/informal	rny		
135. todo/sal			

List 2

1. travesura/galería		45. libro/circular	
2. golear/valorizar		46. admitir/mentira	rsp
3. vida/golpe		47. comida/obstinarse	
4. goloso/corrupto		48. agenda/rezar	csp
5. tormenta/gato		49. humo/peine	
6. cosecha/virtud		50. anciana/antigua	rny
7. disimular/favorecer		51. maestra/infinito	
8. relación/cosquillas		52. alarma/corporación	cny
9. pavada/decente		53. sucia/potasio	
10. costa/orquesta		54. asumir/aceptar	rsp
11. viril/cosido		55. alegre/contra	
12. decepcionado/pavo		56. balance/denominado	csp
13. payaso/tero		57. raya/aparecido	
14. matinal/disminuir		58. batería/linterna	rny
15. dócil/gestionar		59. también/pelo	
16. soplar/favor		60. bloque/ironía	cny
17. consagración/carrito		61. dulce/fugaz	
18. dieciocho/simple		62. cartas/correo	rsp
19. atún/prensa		63. duna/anís	
20. correr/solución	cny	64. conveniencias/fruta	csp
21. paz/gota		65. célula/papel	
22. crecer/desarrollarse		66. colecta/desempleo	rny
	rsp	67. luchar/gradual	
23. examen/basura		68. compromiso/álgebra	cny
24. descansar/profeta	csp	69. energía/cementerio	
25. lista/maceta		70. cortes/tijera	rsp
26. duro/difícil	rny	71. ropa/angustia	
27. dominó/lengua		72. digital/reina	csp
28. envuelto/sábado	cny	73. gramo/lejos	
29. frío/rosa		74. distribuidor/proveedor	
30. hacerlo/experimento	rsp		rny
31. engañar/campera		75. diversión/presumir	
32. levantar/origen	csp	76. elegible/crepúsculo	cny
33. pileta/coliflor		77. prestar/corazón	
34. lluvia/regalos	rny	78. excitante/sensual	rsp
35. verano/caja		79. montarse/escarbar	
36. piso/alrededor	cny	80. gana/sonrisa	csp
37. árbol/imaginar		81. extrañar/oscuro	
38. pagar/desembolsar	rsp	82. graduado/secundario	rny
39. contenta/no		83. babosa/monumento	
40. tratar/discurso	csp	84. introducir/espalda	cny
41. cerrado/planta		85. fijo/contestar	
42. abusar/violar	rny	86. ministro/presidente	rsp
43. pluma/cocina		87. noche/encarecer	
44. actual/miel	cny	88. oficina/firmeza	csp

89. resbalarse/mostrar		138. trabaja/funciona	rny
90. paquete/viaje	rny	139. barba/cantar	
91. bolsillo/torre		140. agravada/festejo	cny
92. póliza/entonces	cny	141. color/dentista	
93. mágico/preocupado		142. aplicación/uso	rsp
94. referir/contar	rsp	143. compañero/pasto	
95. campo/tabla		144. atender/sereno	csp
96. registrarse/subir	csp	145. mareado/intolerante	
97. disparo/sábana		146. calificar/habilitar	rny
98. renovado/arreglado	rny	147. loción/picaporte	
99. torpe/disperso		148. carpeta/callejón	cny
100. renta/capturar	cny	149. patada/reducción	
101. fiel/cóndor		150. casual/accidental	rsp
102. retirarse/irse	rsp	151. retorcer/plantear	
103. fiesta/renuncia		152. cobertura/domicilio	csp
104. sugestión/divorcio	csp	153. exhibir/nacer	
105. disponible/jurídico		154. comercial/televisión	rny
106. selección/telas	rny	155. ciruela/lápiz	
107. fugitivo/relámpago		156. comprensivo/clásico	cny
108. tren/cordialidad	cny	157. mojarse/esconder	
109. escala/propiedad		158. demostración/afecto	rsp
110. union/matrimonio	rsp	159. mitad/amigo	
111. señalar/jurar		160. endosar/sierra	csp
112. atrayente/extremo	csp	161. mundo/hongos	
113. perfumado/fastidioso		162. especial/tienda	rny
114. ayudar/vender	rny	163. furioso/natural	
115. recordar/perdido		164. eventualmente/ medallón	cny
116. callado/quemar	cny	165. crédito/expresión	
117. portero/revista		166. factoría/comercio	rsp
118. caminarla/calle	rsp	167. explosivo/convalecer	
119. higo/paisaje		168. figuras/asunto	csp
120. corren/tirano	csp	169. negar/inventar	
121. gesto/hueco		170. forma/solicitud	rny
122. corta/memoria	rny	171. frazada/neptuno	
123. gimnasia/idea		172. gabinete/pureza	cny
124. deprimido/recóndito	cny	173. nombre/franela	
125. hueso/país		174. grado/diploma	rsp
126. fracasar/fallar	rsp	175. frecuentar/abeja	
127. fichar/bovino		176. grosería/mejoría	csp
128. guarda/ocupar	csp	177. controversia/luna	
129. duchar/horizontal		178. perseguir/continuar	rny
130. llamar/convocar	rny	179. convenir/si	
131. botas/fiebre		180. proyectos/bosque	cny
132. mente/llamado	cny		
133. fideo/lobo			
134. regresar/volver	rsp		
135. acomodar/puntual			
136. tomar/atinar	csp		
137. pensamiento/escaparse			

- 181. anotar/sorbo
- 182. principal/préstamo rsp
- 183. calvo/injusticia
- 184. punto/cola csp
- 185. entrega/soprano
- 186. regular/normal rny
- 187. entierro/junta
- 188. reportar/inocente cny
- 189. estéril/captura
- 190. sensible/emotivo rsp
- 191. feo/grave
- 192. soportar/oportuna csp

List 2B

1. monstruo/traducir		46. cartas/limpia	csp
2. extinguir/franco		47. amarillo/regadera	
3. hacha/naranja		48. conveniencias/casa	rny
4. correr/ejercicio	rsp	49. jarra/bestia	
5. girasol/inválido		50. colecta/jovencito	cny
6. crecer/planteamiento	csp	51. betún/jarabe	
7. hacia/guante		52. compromiso/obligación	rsp
8. descansar/terminar	rny	53. ganador/triángulo	
9. iluminar/gatear		54. cortes/pálido	csp
10. duro/ninguno	cny	55. tribunal/barro	
11. gitano/mármol		56. digital/números	rny
12. envuelto/cubierto	rsp	57. reír/incorporar	
13. escarabajo/idealista		58. distribuidor/intoxicar	cny
14. hacerlo/diplomático	csp	59. fallo/azufre	
15. éxito/pintar		60. elegible/accesible	rsp
16. levantar/mencionar	rny	61. descongelar/trébol	
17. glotón/jurídico		62. excitante/militar	csp
18. lluvia/archivo	cny	63. azafata/farol	
19. huída/dedal		64. gana/engorda	rny
20. piso/pasos	rsp	65. episodio/vacío	
21. membrillo/floral		66. graduado/igualmente	cny
22. pagar/perpetrador	csp	67. morir/cartera	
23. húmedo/desarmado		68. introducir/exponer	rsp
24. tratar/ponerse	rny	69. cielo/banana	
25. esculpir/prisa		70. ministro/diferencia	csp
26. abusar/diario	cny	71. desayunar/interpretar	
27. maullar/defender		72. oficina/médico	rny
28. actual/presente	rsp	73. tonto/bebible	
29. mineral/declaración		74. paquete/tocar	cny
30. admitir/avanzar	csp	75. ropero/navega	
31. bajo/festival		76. póliza/seguro	rsp
32. agenda/plan	rny	77. edificio/mano	
33. ser/castigar		78. referir/sangre	csp
34. anciana/relieve	cny	79. aire/pantalón	
35. plural/irritar		80. registrarse/universidad	rny
36. alarma/peligro	rsp	81. vidrio/lechuga	
37. hilo/más		82. renovado/rastrillo	cny
38. asumir/nuestro	csp	83. pájaro/tornillo	
39. mientras/colorado		84. renta/impuesto	rsp
40. balance/resto	rny	85. lija/mosca	
41. fondo/celoso		86. retirarse/pido	csp
42. batería/tragedia	cny	87. beber/revoltosa	
43. flotar/ciclo			
44. bloque/piedra	rsp		
45. desplante/dictar			

88. sugestión/consejo	rny	137. aéreo/tímida	
89. velero/piedad		138. comercial/lentamente	cny
90. selección/lecho	cny	139. laurel/arena	
91. ridículo/sentar		140. comprensivo/padre	rsp
92. tren/ferrocarril	rsp	141. estampilla/cuna	
93. comer/destrozar		142. demostración/marino	csp
94. unión/habitación	csp	143. recio/parto	
95. cambio/salvar		144. endosar/apoyar	rny
96. atrayente/barato	rny	145. presión/cobarde	
97. cama/fé		146. especial/latino	cny
98. ayudar/estado	cny	147. sordo/tragar	
99. alimento/enfrente		148. eventualmente/ posibilidad	rsp
100. callado/hombre	rsp	149. anteojos/masita	
101. otro/bandera		150. factoría/elegante	csp
102. caminarla/nadie	csp	151. sogá/caramelo	
103. firmada/mezclado		152. figuras/cifras	rny
104. corren/funcionan	rny	153. vasija/estricto	
105. necesario/parecido		154. forma/religioso	cny
106. corta/enterar	cny	155. mensajero/oso	
107. piedra/nariz		156. gabinete/ministerio	rsp
108. deprimido/triste	rsp	157. procesión/farmacéutico	csp
109. autor/pulso		158. grado/delirar	
110. fracasar/lujoso	csp	159. mellizo/olivo	
111. comunidad/pato		160. grosería/negocio	rny
112. guarda/fecha	rny	161. nueve/magistral	
113. girar/cordillera		162. perseguir/servicios	cny
114. llamar/complejo	cny	163. embargo/recelo	
115. tuya/lila		164. proyectos/futuro	rsp
116. mente/inteligencia	rsp	165. mula/asimismo	
117. obsesión/coco		166. principal/accentuar	csp
118. regresar/buenos	csp	167. filtro/escalera	
119. método/sepulcro		168. punto/cuestión	rny
120. tomar/ventaja	rny	169. pescar/compás	
121. máxima/rozo		170. regular/chofer	cny
122. trabaja/división	cny	171. marisco/lógico	
123. ciencia/tropa		172. reportar/proporcionar	rsp
124. agravada/peor	rsp	173. gala/plantel	
125. impuro/torno		174. sensible/modular	csp
126. aplicación/sus	csp	175. ofender/colchón	
127. zona/silla		176. soportar/mantener	rny
128. atender/ir	rny	177. gracias/fin	
129. rival/azúcar			
130. calificar/banquetes	cny		
131. soldar/fresco			
132. carpeta/expediente	rsp		
133. social/naúfrago			
134. casual/amenazante	csp		
135. todo/sal			
136. cobertura/seguro	rny		

APPENDIX J
The Rating Task

CUESTIONARIO DE USO

A continuación ofrecemos varios ejemplos. Por favor léalos y conteste sí ó no a las dos preguntas que se hacen sobre cada ejemplo, marcando su respuesta con un círculo. Queremos saber la frecuencia del uso de las palabras subrayadas. Dé la primera respuesta que se le ocurra. No lo piense mucho. Las respuestas varían con cada individuo. Algunos contestarán sí a todas ó no a todas; sí a algunas y no a otras.

Haga los tres primeros ejemplos y deténgase. Vamos a discutirlos juntos antes de seguir con el resto para ver si tiene alguna pregunta.

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
Manuel busca una casa <u>furnida</u> . No tiene dinero para comprarse muebles ahora.	Sí	No	Sí	No
Juana se perdió porque las <u>direcciones</u> decían que tenía que doblar a la izquierda. Pero se confundió y dobló a la derecha. Llamó por teléfono y la amiga la fue a buscar.	Sí	No	Sí	No
Gutierrez vive en una casa de ensueño. Ojalá yo tuviera la misma <u>suerte</u> para hacer buenos negocios.	Sí	No	Sí	No
1. Se descargaron las <u>baterías</u> de la linterna.	Sí	No	Sí	No

Ejemplo	¿Ha oído la palabra subrayada?		¿Considera su uso parte integral del español?	
2. Después de haber sido un padre ejemplar, <u>abusó</u> de la hija y la dejó embarazada.	Sí	No	Sí	No
3. Esa casa se vende por poco dinero pero hay que hacerle muchos arreglos. El costo <u>actual</u> va a ser mucho mayor.	Sí	No	Sí	No
4. Las <u>paredes</u> necesitan pintura.	Sí	No	Sí	No
5. Los vecinos de abajo se quejaron tanto de nuestras pisadas que tuve que poner una <u>carpetita</u> en el piso.	Sí	No	Sí	No
6. Aunque faltan sólo tres días todavía no han fijado la <u>agenda</u> de la reunión del directorio.	Sí	No	Sí	No
7. El jefe insultó a su secretaria. Ella se sintió tan <u>agravada</u> que renunció en el acto.	Sí	No	Sí	No
8. Antes de acostarse puso la <u>alarma</u> para despertarse a las 7.	Sí	No	Sí	No
9. Así se hacía según la ley <u>anciana</u> .	Sí	No	Sí	No
10. Mi mamá tuvo un accidente y no puede trabajar. Por eso <u>colecta</u> el desempleo.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
11. Llené la <u>aplicación</u> para un trabajo y ese mismo día me llamaron.	Sí	No	Sí	No
12. Como yo no sabía que la información estaba desactualizada, <u>asumí</u> que estaba al día.	Sí	No	Sí	No
13. El avión <u>hizo</u> un aterrizaje de emergencia.	Sí	No	Sí	No
14. Mi hijo de 5 años <u>atiende</u> la escuela que está enfrente.	Sí	No	Sí	No
15. El <u>balance</u> que le queda en la cuenta se lo damos a fin de mes, si es que no lo gastó antes.	Sí	No	Sí	No
16. Me queda cerca el trabajo. Camino dos <u>bloques</u> y ahí estoy.	Sí	No	Sí	No
17. Yo <u>califico</u> para esa beca. Reuno todos los requisitos necesarios.	Sí	No	Sí	No
18. A Pablito le gusta coleccionar <u>cartas</u> con jugadores de fútbol y pegarlas en el album.	Sí	No	Sí	No
19. Lo llamaron y dijo que no <u>podía</u> venir.	Sí	No	Sí	No
20. Este seguro tiene mejor <u>cobertura</u> en el hospital.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
21. Me gusta ver televisión pero no tolero los <u>comerciales</u> .	Sí	No	Sí	No
22. Julieta vive en una casa <u>renovada</u> con habitaciones grandes y techos altos.	Sí	No	Sí	No
23. El gobierno hizo un estudio tan amplio y <u>comprendivo</u> que abarcó todos los problemas económicos del país.	Sí	No	Sí	No
24. Para llegar a un <u>compromiso</u> , ambas partes van a tener que conceder algo.	Sí	No	Sí	No
25. El tren llegó a <u>horario</u> .	Sí	No	Sí	No
26. Esta casa tiene lavaplatos y lavadero. Son las <u>conveniencias</u> que buscamos.	Sí	No	Sí	No
27. El presidente se vio obligado a echar a muchos empleados por <u>cortes</u> en el presupuesto.	Sí	No	Sí	No
28. La gente se juntó en la calle y se llevó a cabo una <u>demonstración</u> espontánea para protestar la detención de personas inocentes.	Sí	No	Sí	No
29. Los relojes <u>digitales</u> son muy precisos.	Sí	No	Sí	No
30. Estas <u>vacaciones</u> las pasaré en la playa.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
31. El <u>distribuidor</u> no trajo la mercadería pedida.	Sí	No	Sí	No
32. Como Ud. cumple con todos los requisitos, es <u>elegible</u> para este trabajo.	Sí	No	Sí	No
33. En las últimas elecciones el partido liberal <u>endosó</u> a los candidatos del partido de los trabajadores.	Sí	No	Sí	No
34. Ayer <u>llegó</u> mi suegra.	Sí	No	Sí	No
35. Esa tienda tiene <u>especiales</u> muy buenos de fin de semana.	Sí	No	Sí	No
36. <u>Eventualmente</u> construiremos una habitación más en el fondo para mi segundo hijo. Sin duda el año próximo.	Sí	No	Sí	No
37. Ud puede hacer carreras <u>excitantes</u> en esta universidad.	Sí	No	Sí	No
38. Los obreros de esa <u>factoría</u> se quejan por el ambiente insalubre.	Sí	No	Sí	No
39. Las <u>figuras</u> de la deuda externa son muy elevadas, pero nadie en el gobierno parece asustarse.	Sí	No	Sí	No

Ejemplo	¿Ha oído la palabra subrayada?		¿Considera su uso parte integral del español?	
40. Se cayó el <u>gabinete</u> de la cocina y se rompieron todos los platos.	Sí	No	Sí	No
41. Saqué muy buen <u>grado</u> en el examen final.	Sí	No	Sí	No
42. Llene esta <u>forma</u> para abrir una cuenta en el banco.	Sí	No	Sí	No
43. La escuela secundaria formó una comisión integrada por profesores, alumnos y <u>graduados</u> .	Sí	No	Sí	No
44. El gobierno supo <u>reprimir</u> la rebelión.	Sí	No	Sí	No
45. Compré pan y jamón en la <u>grocería</u> de al lado.	Sí	No	Sí	No
46. Tengo que hacer dieta porque <u>gané</u> mucho peso.	Sí	No	Sí	No
47. En la fiesta te voy a <u>introducir</u> a mi mejor amiga.	Sí	No	Sí	No
48. El <u>ministro</u> de esa iglesia es muy buena persona.	Sí	No	Sí	No
49. Tengo que ir a la <u>oficina</u> del médico esta tarde.	Sí	No	Sí	No
50. A partir de ahora ese asunto será <u>perseguido</u> dentro de la legalidad vigente.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra</u> <u>subrayada?</u>		<u>¿Considera su uso parte</u> <u>integral del español?</u>	
51. La universidad no acepta estudiantes con malas calificaciones porque tiene una <u>póliza</u> muy estricta.	Sí	No	Sí	No
52. La <u>última</u> película que vi no me gustó.	Sí	No	Sí	No
53. El <u>principal</u> de la escuela de mis hijos quiere hablar conmigo.	Sí	No	Sí	No
54. En las grandes ciudades la gente pobre vive en los <u>proyectos</u> .	Sí	No	Sí	No
55. Martín dijo que ya había explicado el <u>punto</u> . Se cansó y dijo que no lo quería repetir más.	Sí	No	Sí	No
56. Los casos de profesores que se ausentan se <u>refieren</u> al rector de la universidad.	Sí	No	Sí	No
57. El martes me <u>registré</u> en la universidad.	Sí	No	Sí	No
58. Jaime fue a la farmacia a comprar un buen desodorante. Le dieron uno tamaño grande, pero él quería tamaño <u>regular</u> .	Sí	No	Sí	No
59. Mi <u>hija</u> habla dos idiomas.	Sí	No	Sí	No
60. Todos los visitantes deberán <u>reportar</u> al director.	Sí	No	Sí	No

Ejemplo	¿Ha oído la palabra subrayada?	¿Considera su uso parte integral del español?
61. Con lo que gana apenas le alcanza para pagar la <u>renta</u> del lugar donde vive ahora.	Sí No	Sí No
62. Mi papá se <u>retiró</u> cuando cumplió los sesenta.	Sí No	Sí No
63. El <u>paquete</u> de hotel y avión para Río es muy barato.	Sí No	Sí No
64. Apresúrese para la más variada <u>selección</u> .	Sí No	Sí No
65. Yo no trabajo. Mi marido me <u>soporta</u> con lo que gana.	Sí No	Sí No
66. <u>Cerramos</u> la boca cuando comemos.	Sí No	Sí No
67. Tengo una <u>sugestión</u> para hacerle. Vístase mejor que da lástima.	Sí No	Sí No
68. Los <u>trenes</u> del subterráneo están en malas condiciones.	Sí No	Sí No
69. Marta está en la <u>unión</u> y tiene muchos beneficios. Por ejemplo, los <u>médicos</u> son gratis.	Sí No	Sí No
70. Esta época es muy buena para comprar. Hay muchas liquidaciones <u>atrayentes</u> .	Sí No	Sí No
71. Los trenes no <u>corren</u> hoy.	Sí No	Sí No

Ejemplo	¿Ha oído la palabra subrayada?		¿Considera su uso parte integral del español?	
72. La empleada no tuvo tiempo de preguntar si podía <u>ayudarlo</u> . El señor escogió lo que quería comprar enseguida.	Sí	No	Sí	No
73. El barrio donde vivo es <u>callado</u> .	Sí	No	Sí	No
74. Estaba muy <u>cansado</u> después del viaje.	Sí	No	Sí	No
75. Tiene muy <u>corta</u> memoria. Se olvida enseguida de todo.	Sí	No	Sí	No
76. Como aprendieron muchas cosas nuevas, los chicos han <u>crecido</u> mucho en esa escuela.	Sí	No	Sí	No
77. Hay varios barrios <u>deprimidos</u> en la zona. Algunas casas están semidestruídas y a otras les falta pintura.	Sí	No	Sí	No
78. El día que el abogado <u>descansó</u> el caso, el juez dio un suspiro de alivio.	Sí	No	Sí	No
79. Quiero que <u>camines</u> a Mercedes hasta la escuela.	Sí	No	Sí	No
80. Los amigos de Elsa <u>jugaban</u> en el agua, pero ella no.	Sí	No	Sí	No
81. En la escuela de Jaime todos los padres están muy <u>envueltos</u> . Quieren convertirla en la mejor del lugar.	Sí	No	Sí	No

<u>Ejemplo</u>	<u>¿Ha oído la palabra subrayada?</u>		<u>¿Considera su uso parte integral del español?</u>	
82. Florencia <u>fracasó</u> en el curso de ingreso.	Sí	No	Sí	No
83. <u>Guarda</u> el martes para salir a cenar y luego al cine.	Sí	No	Sí	No
84. Voy a una escuela que tiene fama de ser muy <u>dura</u> .	Sí	No	Sí	No
85. Me presenté a las pruebas pero me descalificaron porque estoy muy gordo. Me dijeron que no <u>haría</u> el equipo.	Sí	No	Sí	No
86. Después tendremos que <u>levantar</u> el tema con ellos.	Sí	No	Sí	No
87. Hay muchos problemas en el trabajo. El jefe va a <u>llamar</u> a una reunión para discutirlos.	Sí	No	Sí	No
88. <u>Corrió</u> para gobernador en las últimas elecciones, pero no ganó.	Sí	No	Sí	No
89. Las amigas de Claudia le quieren celebrar una <u>lluvia</u> de regalos este sábado porque está embarazada.	Sí	No	Sí	No
90. Mamá es muy terca. Para cambiarle <u>la mente</u> hay que hablarle mucho.	Sí	No	Sí	No

Ejemplo	¿Ha oído la palabra subrayada?		¿Considera su uso parte integral del español?	
91. No <u>paga</u> correr riesgos. Después salgo perdiendo.	Sí	No	Sí	No
92. Antes de darle el <u>piso</u> a mi colega, el Senador Perez, quisiera hacer un último comentario.	Sí	No	Sí	No
93. Me <u>gusta</u> contarle cuentos a mis sobrinos.	Sí	No	Sí	No
94. Yo recibí muchos golpes pero no pude <u>regresar</u> ni uno.	Sí	No	Sí	No
95. Lo lamentamos pero los ascensores no <u>trabajan</u> hoy.	Sí	No	Sí	No
96. Tomó <u>ventaja</u> de esa oportunidad para conocer a gente influyente.	Sí	No	Sí	No
97. Fui a la zapatería y <u>traté</u> varios zapatos pero ninguno me quedó bien.	Sí	No	Sí	No
98. Federico hace sus tareas y después sale a jugar. Es un niño muy <u>sensible</u> .	Sí	No	Sí	No
99. Estaba muerto cuando lo <u>admitieron</u> en el hospital.	Sí	No	Sí	No
100. Podés venir a la fiesta con ropa <u>casual</u> .	Sí	No	Sí	No

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