

THINKING CULTURALLY, OR SEMANTIC STRUCTURE IN THE BILINGUAL LEXICON: PROCESSES IN USE*

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Following Minimalism, semantic material of a lexical entry is most likely non-existent (Chomsky 1992, 1993, 1995). Based on data drawn from bilinguals in experimental tasks, we assume that lexicons operate independently of each other (Kroll and Stewart 1990). Each linguistic system is fed by a conceptual channel, the visual, the auditory, etc. (Paivio and Desrochers 1984, Jackendoff 1985). A word-association experiment was designed to discover if concrete objects elicit similar (congruent) word-associations in each language than abstract concepts do: data collected from bilingual subjects presented with drawings of simple objects show most of the stimuli produced varying, or incongruent associations, while one produced congruent word-associations. Congruence is interpreted as indicating the lexical architecture of the compound bilingual; however, the data are interpreted to be indicative of sets of default values stored and reproduced in semantic memory (Van Dijk 1987, 1993). Values are accessed via routinized mental space-building instructions (Fauconnier 1990, 1994). Because semantics is difficult to explain by means of logical form or necessary and sufficient truth-conditions, we should consider a theory of meaning which is not only computational but which employs a 'configurational' account (Brugman 1988) of the way people understand, store and produce meaning.

INTRODUCTION

Within our interdisciplinary program at the University of Arizona SLAT, members typically focus upon one of four areas comprising our individual disciplines (second language analysis, pedagogy, processes, and use). A decidedly interdisciplinary approach, incorporating more than one of our SLAT specialization (the kind of which is presented here), is an endeavor that we should all consider as precarious since any venture which investigates "language, mind, and culture" (as does this one) plainly stands "on intellectually perilous ground" (Fauconnier 1994, p. xvii). The hazardous nature of such an approach, according to Fauconnier, stems from the position that researchers must take to reach their conclusions: they not only observe but become the observed, using linguistic and cognitive structures to unravel the mysteries of linguistic and cognitive structures, discovering that their investigation of the cognitive background of everyday speech is indeed at center stage (xvii). The title of this work in progress, 'Thinking Culturally' (a phrase taken from an interview with one of the subjects treated in my experiment), is meant to emphasize the character of such research, to put the spotlight on backstage, to highlight how informants interpret their performance as opposed to the researcher's interpretation of it. This title should conjure in the readers' minds notions of the Whorfian conjecture that thoughts are governed by the linguistic patterns of a given speech community, "the unperceived systematizations... in which are culturally ordained the forms and categories by which the personality not only communicates, but also analyzes nature, notices and neglects types of relationships and phenomena, channels [its] reasoning, and builds the house of [its] consciousness" (Whorf, in Carroll 1956, p. 252). However, I do not necessarily suggest a "linguistic relativity" regularly

*I would first like to thank Dr. Jane Hill for her careful and diligent reading of the paper and her helpful commentary as to where to take the project next, that the issues of deep structure addressed in this paper are not so much related to a minimalist framework as it is to a mental architecture of interactive output modules proposed in Sperber 1994. Next, I would like to thank Dr. Adrienne Lehrer for her support and involvement in the project, especially for her remarks concerning the lexicon in the Minimalist program and her suggestions about models of the bilingual lexicon based upon the construction of semantic fields and frames (Kittay and Lehrer, 1992). Finally, I would like to thank Dr. Renate Schulz for her input after the presentation of this paper before the SLAT colloquium, where she suggested me that we should speak of a dominant lexicon if we are to propose multiple lexicons, a remark which has refocused my conceptualization of the bilingual lexicon as one single structure.

attributed to this notion because Whorf himself was as equally interested in the limits of what language is capable of as well as its full range of possibilities (Lakoff 1987, p. 328-329). Instead, I wish to focus on linguistic manifestations of unreflecting, habitual thought which “engages even our personal reactions in its patterns and gives them certain typical characters” (Whorf, in Carroll 1956, p. 154). Yet, if it is true that a language predisposes its speakers to a particular ‘thought world,’ then should it be that bilingual individuals are compelled to occupy a dual thought-world?

In the study of bilingualism and the preceding stages of acquisition of a second language, we proffer a variety of ways to represent the behavior as well as the putative dual-grammar of the bilingual speaker. However, many second language theorists consider bilingual speakers from specific venues; mainly from the syntactic, but also from the phonological and lexical perspectives presented by linguists as well as non-specialists in their respective fields. Of the three views mentioned above, the lexical presents theorists with the greatest challenge because the formal properties of the lexicon are perhaps the least understood. According to the notions voiced by Chomsky 1993, the nature of a given lexical representation, other than its idiosyncratic phonological material and categorical properties, is poorly understood in terms of its semantic content. (As early as 1977, Chomsky voiced his objection to the incorporation of ‘nonlinguistic’ {read:semantic} factors into grammar: the study of attitudes and beliefs {read:culture} rejects ‘the initial idealization of language’ and reduces it to ‘a chaos not worth studying {see Duranti 1988, p. 212}). If it is true that the semantic information, which is stored in the ideal Cartesian lexicon proposed by Chomsky for the theoretical monolingual speaker, has been for years formally misrepresented, then the nature of semantic structures within the bilingual lexicon should undergo no less than a complete reconsideration. The focus of this study is a state-of-the-art semantics and its application to the bilingual mind, but the consequences of such a study should eventually lead beyond the boundaries of a formal linguistic account since a study of the semantics of natural languages also means a study of cognitive psychology (Jackendoff 1983, p. 3). However, what is perhaps most interesting in terms of second language acquisition is that semantic structures and their processes are largely influenced by the contexts in which they are transmitted and used.

If linguistics and psychology at the level of semantics are in this way so closely related, it might occur that the linguistic structure of meaning can be confused with its encoding and decoding processes. As a means to demonstrate this ‘confusion,’ a word-association game was devised to test for semantic recall in the so-called bilingual mind. The results of the game demonstrate what I initially referred to as a ‘semantic interference’ between lexicons which can occur across two given grammars, and I wish to argue that these interferences as cognitive events (i.e., processes) are not only often confused for semantic structures themselves but may be partially defined by the contexts in which they learned.

If the results of such a study are to be profitable for a linguistic discipline, then the researcher should emphasize the structural aspects of language and its faculty for individual encoding/decoding as well as interactively transferring semantic information (Jackendoff 1983). The best understood formal properties exhibited by bilinguals are primarily syntactic, but the phonological behavior of the bilingual also yields many interesting facets of digrammatical interaction. Treatments of the semantic end of bilingual behavior have traditionally deferred to the lexicon, where many researchers in bilingualism have reported the presence of a dual-system, an organization of sets of corresponding lexical entries in both languages that can be either independent from (coordinate) or interdependent on (compound) each other. These two notions of the bilingual grammar have sprung from the embryonic work of Weinreich (1953), who posited that bilingual speakers came in different sorts, those who fused the meanings of two lexical counterparts into a single concept (the ‘compound’ bilingual) and those who differentiated between the meaning of a lexical item in one language from that of the other (the ‘coordinate’ bilingual). Although the types of bilingualism are not limited to only these two, it seems unquestionably that “for the compound bilingual the languages are interdependent, whereas for the coordinate bilingual, they are independent” (Romaine 1989, p. 77). Although Weinreich meant these categories to be strictly theoretical, research has shown that both forms can be empirically predicted (Romaine 1989, p. 77f.).

EXPERIMENTAL EVIDENCE AND THEORETICAL PROPOSALS

Although several experiments have demonstrated on semantic grounds that bilingual speakers behave predictably in either one of these two modes (depending largely upon the manner in which they acquired both languages as children), it has been shown on syntactic grounds that two languages are acquired by children independently (Bergman 1976). Children who acquire two languages should display coordinate bilingual behavior because each language develops “independently of the other with the same pattern of acquisition as is found in monolingual children learning that language” (Bergman 1976, p. 88). According to Bergman (1976, p. 94), children acquire the linguistic structures of two separate grammars, and all interaction between the grammars is a product of “*patterns in the bilingual community or by deviations in the adult language of the child’s environment from the norm in the monolingual community*” (my italics). Compound bilingualism, therefore, may be construed as not so much a matter of the structure of language as its use; thus, compound bilingualism would be subject to the social and pragmatic aspects of language. If compound bilingualism is empirically demonstrable on semantic grounds, then do we need to relegate semantic information, following Chomsky, to some ‘belief’ module outside proper linguistic structures? Not if we are to preserve the explanatory power of formal semantic properties within a theory of linguistics (Jackendoff 1989).

The problem of incorporating a semantics into linguistic theory is two-fold (Jackendoff 1983, p. 7f.). The first problem is the relationship of semantic information to syntactic form. From a Montagovian standpoint, we might argue that formal semantic properties are applied to syntactic derivations: for every syntactic rule there is a semantic application. Therefore, we should expect very little compound behavior based on semantic grounds from bilinguals since the independent acquisition of syntactic structure (Bergman’s IDH) should be accompanied by the independent acquisition of corresponding semantic structure. The answer to compound bilingual expressiveness may lie in the second problem of incorporating a semantics into linguistic theory, namely the sort of formal properties that compose a ‘meaning.’

Since meaning is traditionally ascribed as some property of a word or sentence (in the age-old Saussurian dichotomy of signifier-signified, or word/sentence-concept), an investigation of meaning is necessarily an inquiry into the nature of the lexicon, where words and their meanings are putatively stored. It follows then that the bilingual who exhibits compound behavior to some extent stores lexical items from the two different grammars in a single compartment, whereas those who exhibit coordinate behavior store them separately in two different lexicons (Hamers and Blanc 1989, p. 96f.; see also Kroll and Stewart 1990). The nature of the independence or interdependence of the lexicon is currently referred to in terms of memory (i.e., conceptual) representations.

Although it appears that, syntactically, a bilingual speaker will discriminate between one language and another, except occasionally when similar syntactic structures are shared between the two languages (Woolford 1983), tests performed upon the semantic knowledge possessed by the bilingual demonstrate that both single- and separate-storage are possible. The claim that lexicons are stored in separate memories is supported by semantic priming tasks which demonstrate different responses to bilingual stimuli (Kroll and Stewart 1990, p. 2). However, similar tasks based on repetitive sequences, which focused upon conceptual attributes, refute dual memory and instead favor some degree of lexical fusion of the two grammars. The seeming contradiction is resolved in Kroll and Stewart (1990, p. 2f.), who propose that surface structure representations of lexical items exist independently of each other while, at some deeper conceptual level, these items may share some common representation. Consequently, it seems necessary to construct a model of the bilingual grammatical system that incorporates linguistic structures that operate according to two different levels of representation.

If we adopted the general principles forwarded by theories of Government and Binding, then we might propose along with Kroll and Stewart that lexical distinctiveness is achieved at surface structure while some common conceptual form that is stored is some form of ‘memory-bank’ in deep structure. Unfortunately, the proposition is more-or-less descriptive within a ‘Minimalist’ framework (Chomsky 1992), where the principles of GB and Barriers (Chomsky

1986) operate without corresponding surface and deep structures; therefore, one would have to question the explanatory adequacy of such a proposal. Moreover, the semantic information found in a given lexical entry, as mentioned earlier, is not a matter of linguistic structures but one of "belief-systems" (Chomsky 1993, and also 1977). A better account of the so-called "belief-systems" proposed for Minimalism would agree that "verbal decoding ends and verbal encoding starts with cognitive structures *functioning at some level different from the linguistic level*, and that verbal behavior can be explained only in its relationship with these cognitive structures" (Hamers and Blanc 1989, p. 84, my italics). The 'meaning' of a word, then, would necessarily be partially comprised by a number of semantic properties at the cognitive level, while at the linguistic level a lexical entry adheres solely to the rules of the grammar.

Since a proposal that implements verbal representations at different levels (i.e., deep and surface structure) fails within the Minimalist approach, the paradox of both a single- and a separate-storage system in the bilingual grammar may be resolved by positing two different representations, one stored verbally and the other non-verbally, by imagery (Hamers and Blanc 1989, p. 101). The two systems operate within the bilingual grammar according to "the nature and organization of their units, the way they process information and the functions they perform in perception, language processing, and cognition" (Hamers and Blanc 1989, p. 101f.). The bilingual, acting upon such a model, has access to two verbal channels and a single non-verbal channel for a given lexical entry. Because it has been empirically demonstrated (see Hamers and Blanc 1989, p. 104f.) that concrete items are more likely to be stored non-verbally, Hamers and Blanc (1989, p. 105) propose that instead of positing two separate language-specific semantic memory devices, there should be instead "a common semantic memory fed by the two separate verbal channels, each one with a surface memory device." This whole structure would then be linked referentially to the non-verbal channel, a significant component to both the common- and specific-verbal memory devices. Although this approach closely follows recent trends in psycholinguistics and information processing, it depends upon what is now considered obsolete 'surface' level representations of language-specific characteristics as well as upon an equally outdated 'deeper level' sustained by both languages in a non-verbal fashion and "organized into concepts and propositional representations" (Hamers and Blanc 1989, p. 105-06).

NEW FRAMEWORK FOR NEW DATA

From a Minimalist perspective, the above mentioned treatment of the so-called *logogens* (verbal representations) and *imagens* (non-verbal representations) is not successful at the explanatory level because we no longer have a surface structure to fill in quirky, language-specific characteristics, like our faculty for metaphor and idiomatic expression (in other words, language use). Equally unsuccessful is a proposal for a 'deep' level representation of conceptual items stored in a common memory device. The need for such a description follows from a number of experiments demonstrating that the processing of the meaning of concrete (i.e., non-verbal) items forms similar patterns and abstract (i.e., verbal) items forms dissimilar patterns. The pilot-experiment presented in this paper shows that, on the contrary, non-verbal images in fact do pattern differently within the bilingual grammar and that this phenomenon is a result of a semantic distinction constructed at an extra-linguistic level of representation (conceptual and/or cultural). Moreover, where non-verbal images pattern alike, I propose a type of 'semantic interference' that results not from an overlap of hybrid structures and constituents, as in Woolford 1983, but from common, 'default' values stored in semantic, or more appropriately social memory (Van Dijk 1987).

The informants chosen for this experiment were speakers of both French and Haitian Creole, which some might argue is a dialect of European French. The relationship between French and Haitian, however, is not one between standard and non-standard dialect, but of two different languages, since Haitian and its related languages (Seychellois, Guadeloupean, Mauritian, etc.) are not mutually intelligible with European French (see Todd 1990). Although an experiment like this might or might not help to show that many of the so-called world's creoles are indeed separate linguistic systems from their European counterparts, it does not involve this dimension of the

creole debate. We shall have to simply assume that Haitian and French are two different grammars and that speakers of both are functionally and structurally bilingual.

Two French-Haitian bilingual speakers were presented with two sets of fifteen non-verbal images and were asked to word-associate (between three-to-five items) in French for the first set and then in Haitian for the second set. (In between sets, informants were given a task to distract their attention from the experiment: Each informant was asked whether the objects shown in the first set would have male or female voices in a children's movie, one in French, the other Haitian, where the objects came alive to sing and dance. The results are reported in an appended section.) Each of the two sets of fifteen contained five of the same objects in order to discover whether non-verbal images patterned alike or differently. The data show that four of the five objects in question patterned more differently than similarly.

Listed below are the English words associated with the set of five common objects, and listed next to each English lexical item are word-associations given in French for each object, followed by those given in Haitian, and then again by those given in both languages:

image presented in <u>ENGLISH</u>	words associated only in <u>FRENCH</u>	words associated only in <u>HAITIAN</u>	words associated only in <u>FRENCH/HAITIAN</u>
<i>table</i>	restaurant gourmet	service lau	mangé couvert table
<i>shoes</i>	espadrille mocassin petit	sortie nettoyer	soulier
<i>flower</i>	été belle	orrosé la cour	jardin
<i>tree</i>	feuille rameau	fruits pied bois	jardin
<i>baby</i>	_____	ti garçon	bébé lait crier pleurer

The data show that these non-verbal images do tend to pattern differently in word-association tasks performed by French/Haitian speakers, which is in contradiction to the predicted result that the non-verbal channel relies on a common-storage module. It is interesting to note, however, that the animate object *baby* did nearly fulfill the expected results.

INTERPRETATION

I must admit that I have no intuitions of Haitian or French to suppose why this animate object behaves differently than the inanimate objects, nor can I posit why the inanimate objects fit the unexpected pattern. However, an account of a semantics that possibly fits the prospects for Minimalism may allow us insight into why meanings are not uniformly associated to non-verbal images by the bilingual speaker.

The false expectation that non-verbal images of concrete items in the world (otherwise known as referents) should share common semantic features is a result of the style of a truth-conditional semantics based on first-order logic, like Montague grammar and other formulaic representations of natural languages. Within such a semantics, objects retain meaning by way of a checklist of necessary and sufficient conditions placed upon the category in which they reside; for instance, the word *table* has its meaning from a checklist of features, such as 'inanimate,' 'furniture,' 'planar,' etc. Therefore, an expression (E) must have some categorical features which allow it to fit into a world composed of referents (R):

E -----> R

Within such a semantics, form and meaning are generated by two separate components, the syntactic and the semantic, respectively. The semantic module reads grammatically generated phrase-markers by allotting context-independent truth conditions to the syntactic module. The ultimate result is a formal one-to-one relation preferred by objectivist accounts, such as that proposed in Minimalism, but which makes no fundamental division between the structured understanding of the world, i.e. expression, and world-as-understood, i.e. referents (Lakoff 1987, p. 213-214). However, if context-independent truth-conditions were actually governing meaning, should the experiment described above have produced near-complete uniformity (like it did for the object *baby*) among all the objects in question? Since near-complete uniformity was not the case for the majority of non-verbal images, should we in turn opt for a semantics which allows us to predict differential patterns and which also conforms to a Minimalist framework?

A semantics that departs from the traditional understanding of (interacting?) linguistic modules suggests that the relationship between expression and referent are indirectly related and linked exclusively by constructions existing at the cognitive level, or C-level (Fauconnier 1990, p. 152f.):

E -----> C -----> R

C-level, a way to distinguish between the structures that define a possible world and that given possible world (Lakoff 1987, p. 213-214), is completely different from the traditional variety of linguistic modules and formal properties because constructions at this level have no underlying form nor representational import: at this level, form and meaning are derived from interconnected domains (cognitive and/or cultural) with their own internal structure, but they are in fact either partially or completely underdetermined linguistic forms; because these constructions are inherently non-truth-conditional, they provide form and meaning with real-world inferences and action patterns (Fauconnier 1990, p. 153-54).

C-level constructions should enhance the formulaic representations of truth-conditional semantics, which has persisted only because it has consistently confused "R" with models and domains that exist at "C"-level which are used to talk about "R" (Fauconnier 1990, p. 153). Rather than a give a detailed account of how C-level "Space Building Instructions" map certain relevant properties of meaning between domains by means of "connectors" (Fauconnier 1990), an example serves as a better demonstration of how a certain C-level construction operates, and this understanding may then be extended to some Haitian/French examples above.

As discussed in Hamers and Blanc (1989, p. 98), a word-association task (designed and reported in Kolars 1963) showed that Spanish/English bilinguals responded differently to the Spanish word *mesa* ('comer' and 'consumir') than to the English word *table* ('wood,' 'furniture,' and 'chair'). The data were interpreted as proof for a separate storage hypothesis since, in a common storage framework, we should find translation equivalents in the corresponding word-associations.

It has been suggested (Perez-Leroux in personal communication) that the difference in associations is *lexically* predicted because the idiomatic expression 'a la mesa' in Spanish motivates a different set of meanings from English, which does not have such an idiomatic expression. A Minimalist framework, however, would not allow such an explanation because it is the nature of lexical representations to be unspecified for meaning, which seems to be cognitive-cultural affair. In stark contrast to traditional semantic representations, the Minimalist position allows us to avoid the critical defect in the truth-conditional approach; i.e. when normally used, a word has a meaning which requires much of its information "to be left out of the lexicon in principle" (Fillmore 1978, p. 151): at C-level, the expression 'a la mesa' is not determined so much by the relevant properties of the object *table* but by some other internal structure closer to *eat*. (Note that I can invite a friend 'a la mesa' and treat her to a hot dog sold by a street vendor and eaten on a park bench, where no properties of 'table' are present; likewise, I cannot invite another friend 'a la mesa' to simply talk about Minimalism even though he and I may be sitting at my kitchen table.) It does not help to assign such differences to *language-specific* characteristics because the differences are non-linguistically, that is *cognitively and culturally* determined by social cognitions (Van Dijk 1987),

and because conventionalized ways of saying things are acquired “independently of the process of learning the grammatical rules of the language” (Fillmore 1978, p. 149).

In a similar instance, a word association task was given to a group of Swedish-Latvian bilinguals (reported in Lehiste 1988), and the researcher suggested that differences in responses originated from an “emotional undertone of associations” (31) with a particular word, ‘red.’ While subjects in large numbers responded to the word ‘red’ with the words ‘house,’ ‘cabin,’ and ‘building’ in Swedish, no Latvian subject signified such an association. The researcher (Ruke-Dravina 1971) explained that red houses and cottages are commonly found in the Swedish landscape but not in the Latvian landscape. In fact, the association appears to be so strong that two young bilinguals gave the responses above in Swedish to Latvian stimuli, leading Lehiste to conclude that “the association appears clearly connected with the Swedish environment in which the young bilinguals had grown up” (31). Thus, it would appear that that part of the information missing from the lexicon is being filled in by other environmental, or cultural factors.

The differences found in the patterning of word-associations to non-verbal images are not a result of formally predictable grammatical constructions, but they are a product of what one informant called “thinking culturally.” The informant told me after the examination that he found himself ‘thinking culturally’ during the series of experiments. Might this explain why he associated the word *nettoyer* “to clean” with the non-verbal image *shoes* and the word *service* “waiter” with the non-verbal image *table* in Haitian but not in French? As I have stated previously, I have neither the intuitions nor the knowledge of either culture to make any conclusive statements about this particular behavior, but if conventional speech and its cognitive understandings are passed on culturally, then can we find a means for making well-motivated claims about the semantic patterns found in the bilingual grammar?

Perhaps more significant is the semantic behavior found among the inanimate objects (*tree*, *flower*, *shoes*, *table*) in this study compared to that of the animate object *baby*, which produced nearly uniform translation equivalents (which I originally believed to be a result of some ‘semantic’ interference but now argue to be a reaction to a set of default values inherent to schemata called social cognitions stored in long term semantic, or social memory as described in Van Dijk 1987 and 1993). Further research on semantic features like animacy and the behavior of objects which possess like features will not yield a great number of regularities of word-associations occurring at C-level unless a given language has some kind of routinized space-building instruction stored in social memory, but these conceptual constructions are only in early exploratory stages and are still not completely understood; thus, steps taken forward in the field should be slow and measured.

CLOSING

The position taken above, a semantics to be incorporated into a Minimalist theory of language, should in no way be construed as a rejection of linguistic structures but rather as an indication that the way these structures are used, particularly in bilingual contexts, may tell us more about their own internal composition: more specifically, this internal composition should be construed more as a configurational construction than a computational construction in that abstract, formulaic symbols are computed in order to build a ‘mental space’ but these symbols do not carry the semantic content, but rather the mental space itself carries the semantic content (Fauconnier 1994). If semantics is to remain an empirically interesting enterprise, it must account for the formulaic, arbitrary generalizations found in the syntax and the lexicon, Jackendoff’s Grammatical Constraint (1983, p. 22). However, a theory of semantics must also require a Cognitive Constraint, or a level of mental representation where semantic information conveyed by language is compatible with the visual system, motor system, etc. (Jackendoff 1983, p. 21-2). The supplementation of semantic structures with conceptual ones, unfortunately, may only be a descriptive bargain since C-level constructions largely depend upon imaginal representations that are in no way the same as mental representations, such as X-bar in syntax or a feature geometry in phonology. If we wish to go beyond merely describing how ‘meanings’ are cognitively constructed, then perhaps we should focus more upon whether or not they behave differently for separate language situations in principled ways.

Imaginal representations are simple depictions of the physical world that may, in some way, resemble well-accepted mental representations (Brugman 1988), and such descriptions are constructed by means of discursive instructions for building spatial relationships (Fauconnier 1990, p. 160) which stand in contrast to the feature-list or propositional representations of truth-conditional semantics (Brugman 1988, p. 9-10). However, these imaginal representations may be governed differently according to which language is used to express them and in which situations they happen to be expressed. The approach suggested, then, is to explore the differing roles played by imaginal representations of concepts from one language and from one situation to the next within a semantics that is incorporated into a configurational, not merely computational, theory of language. The configurations of imaginal representations are argued to be determined by the culture in which they are used (Lakoff and Johnson, 1980).

Allow me to harken back to opening paragraph of this work in progress and remind the readers of my stance towards the relativistic nature of the research program that I am suggesting here. I do not wish to offer program of study that is founded upon cultural relativism or suggests that there is no non-subjective way to reach firm generalizations and identify universal structures. Since I have already touched upon second language analysis, processes and use in this paper, I would like to address SLAT's fourth area of interest, pedagogy, since the classroom is such an important locus for second language phenomena: it is impossible at this level (perhaps any level) to speak of relativism because "cultural relativity stops at the threshold of the teacher's classroom" not because teachers must necessarily represent the target culture or even the educational culture imposed by the institution but because teachers make pedagogical choices (Kramsch 1993, p. 183). In other words, language is not learned in a vacuum but in a particular environment, whether at home or at school, which helps to determine, for instance, if students demonstrate so-called 'compound' or 'coordinate' bilingual behavior (Lambert, Havelka and Crosby 1958). The idea here is that non-linguistic factors play a small but significant role in the acquisition of language, and that not in spite of that fact but because of that fact language is chaos that remains worth studying.

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APPENDIX

Below are listed the results of the distraction task mentioned as part of the experiment conducted for the purposes of this paper:

Informant #1			Informant #2		
<u>French voice</u>	<u>Object</u>	<u>Haitian voice</u>	<u>French voice</u>	<u>Object</u>	<u>Haitian voice</u>
female	dress	female	-----	dress	female
female	tree	male	male	tree	female
male	pants	male	unisex	pants	male
male	hat	male	baby's voice	baby	female
female	baby	female	female	train	male
male	train	female	female	bicycle	female
female	bicycle	female	male	shoes	male
male	shoes	female	female	chair	female
male	chair	female	male	house	female
male	house	female	female	flower	female
female	flower	female	kid's voice	fish	male
female	fish	female	male	shirt	female
female	shirt	male	female	table	female
female	table	female			