Syntactic structure and social function of code-switching

Chapter · January 1981

CITATIONS
143

READS
784

1 author:

Shana Poplack
University of Ottawa
117 PUBLICATIONS **5,782** CITATIONS

SEE PROFILE

Latino Language and Communicative Behavior

editor: Richard P. Durán

Volume 6 in ADVANCES IN DISCOURSE PROCESSES
Series editor: Roy O. Freedle, *Educational Testing Service*

ISBN: 0-89391-038-4

ABLEX Publishing Corporation
355 Chestnut Street
Norwood, New Jersey 07648

10 Syntactic Structure and Social Function of Codeswitching[1]

Shana Poplack
Center for Puerto Rican Studies
City University of New York

Long-term ethnographic observation of a block in El Barrio, one of the oldest continuous Puerto Rican communities in the United States, has suggested that residents can be divided into networks whose membership is defined, among other things, by their public use of language (Pedraza, 1978). Some of these networks are observed to use predominantly Spanish; others, predominantly English; and still others, a mixture of the two, codeswitching.

Codeswitching constitutes an integral part of community discourse norms on 102d Street: everybody appears to do it to some extent, although it is so rare in the speech of some speakers that it escapes observation altogether and can be located only through painstaking transcription of recorded speech. On the other hand, it is so frequent in the speech of others that the observer's impression is that it is a constant phenomenon. The occurrence of codeswitching depends, among other things, on the norms or perceived norms of the speech situation, the bilingual ability or perceived bilingual ability of the speaker and the hearer, and as I will demonstrate, on the ethnicity or group membership of the interlocutor.

This study describes the linguistic configuration of codeswitching and suggests a framework which relates its occurrence to a well-documented (e.g.,

[1]This study is a result of many discussions with the Language Policy Task Force of the Center for Puerto Rican Studies. My thanks to Pedro Pedraza and Felix Toledo, who participated in the data collection and transcription; and especially to John Attinasi for comments and suggestions from the earliest stages of this work. This paper has also benefited greatly from comments by Bill Labov, Don Hindle, and Susan Thomas.

Gumperz, 1971, Valdés-Fallis, 1976) function of switching: that of an ethnic identity marker.

Gumperz (1970:136) has suggested that as a behavioral strategy, codeswitching is similar to the use of polite and familiar address pronouns in that Spanish forms used among members convey secondary meanings of solidarity and confidentiality. This study investigates empirically both differential frequencies of codeswitching with a member of the same ethnic group and a nonmember, and different configurations of the switches in these two situations.

CODESWITCHING

There is some disagreement in the literature as to what constitutes a "true" instance of code-switching. For the purposes of this study, I define a *switch* according to degree of adaptation to the other language. At one extreme is complete adaptation of items from one language (L_1) to the phonology and morphology of the other (L_2). Examples of items I am considering fully integrated into L_2 can be found in 1:

1a. *Vendré* **straight** [ʔ tre] *del trabajo pa'l bloque.* (I'll come straight to the block from work.) (Bla, 137)[2]
1b. *Yo* **jangueo** [haŋ'geo] *en la ciento quince.* (I hang out on 115th Street.) (B5b, 50)
1c. *Tabanos una nota bien* **jevi** [he'βi]. (We were into a heavy vibe) (Bla, 336)

If these forms followed only Puerto Rican Spanish phonological patterns (as in *straight,* which follows the attested Caribbean process of glottalization most common in word-internal position: [es'tre → tre]), morphological patterns (as in *jangueo*), or syntactic patterns (as in *jevi* which follows Spanish rules of adjective placement) they were not here considered instances of codeswitching, nor included in the present analysis. At the other extreme is the complete lack of adaptation of patterns from one language to the patterns of the other, which I am calling *codeswitching,* as in 2.

2. 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.) (C17, 49)

[2]Items in parentheses refer to tape and switch number.

At the discourse level, instances in which the speaker simultaneously switched codes at a turn boundary while participants and social setting remained constant, were also included in the analysis, and considered as switches in the code of the discourse.

Not all varieties of Latino codeswitching are structurally equivalent however. As Pfaff (1976) has suggested for the Chicano speech community, there appear to be several types of switching behaviors which may be characterized by use of differential proportions of switchable categories, and whose occurrence is presumably constrained by the presence of certain extralinguistic factors.

One type of codeswitching that can be found on 102d Street is apparently related to degree of control of L_2: the less knowledge the speaker has of the other language, the less structurally integrated into the discourse will be his switches into that language. Preliminary comparison of language attitudes of block residents with their recorded speech reveals, understandably enough, that those who claim Spanish as "the language they feel most comfortable in," and also evidence positive attitudes toward its use and maintenance, tend to switch into English primarily through use of tags, frozen forms, and idiomatic expressions. Thus 82 percent of the English switches transcribed for Juan, a key Spanish-dominant figure on the block, were of this type: e.g., "right," "you know."

Another type of codeswitching can be characterized by high proportions of what I call *noun switching:* switches of a single noun in an otherwise L_1 utterance, as exemplified in 3 below:

3a. We'll go to the *sala.* (We'll go to the living room.) (B6a, 1)
3b. All those *viejas* that sit in the *banca* all day spending their welfare checks playing numbers. (All those old ladies that sit in the numbers parlor all day spending their welfare checks playing numbers.) (C17, 31)

Yet another type may be characterized by higher proportions of intrasentential switches, as in 2, than in either of the latter types.

I shall demonstrate that both frequency and type of switching within the stream of discourse (i.e., preference for intrasentential over single-noun or tag switching) varies with the ethnicity of the interlocutor.

Lola

One speaker was selected as an informant for this exploratory study, since on the basis of both ethnographic observation and comparison of her taped speech with that of others on the block, she appears to be the most skilled codeswitcher in the community. Lola switches frequently and smoothly: only

a small percentage of her switches is preceded by hesitations, false starts, or other repair mechanisms which might mark a shift in code. Her Spanish is not influenced by contact with English. Variation in key Puerto Rican Spanish phonological variables corresponds to that of monolingual speakers. An analysis of her use of Spanish tense and mood reveals that these also cluster in the same areas found for monolinguals. Nor were any instances of syntactic irregularity noted. Likewise, Lola's English is rarely affected by Puerto Rican Spanish phonology. When it is, it can be considered part of her repertoire range, as she also controls vernacular and corrected New York City English, as well as Black English vernacular. Her English is also unaffected by contact with Spanish at other linguistic levels.

Lola was born in Humacao, Puerto Rico, 35 years ago, migrated to El Barrio at the age of five, and has lived there ever since. She is a member of a network of housewives and mothers on the block, and functions as a link between them and a subgroup of single women. She is able to participate in both groups because she is both a mother and a single woman, and she was born in Puerto Rico and raised there until the age of five, as were most of the other Spanish-speaking housewives on the block. Having lived in New York City since the age of five is a characteristic she shares with the single women born or raised in New York City. That she was raised in El Barrio when most residents were recent monolingual arrivals from Puerto Rico (the 1940s), as well as her having completed high school in New York, explains her linguistic ability in both Spanish and English.

Her use of codeswitching as a mode of communication is more extensive than that of most other members of this network, who generally revert to monolingual speech outside of the group setting. Lola, in contrast, extends this behavior to other settings, such as the home.

Lola evinces very positive attitudes toward bilingualism. She denies that Puerto Ricans in New York are creating a new language, Spanglish, although she does admit that some members of the speech community mix Spanish and English together.[3]

Although Lola has lived in El Barrio ever since she moved to New York, she expresses uniformly negative attitudes toward her relationship to Puerto Rican ethnicity. For example, when asked how the neighborhood had changed since she moved in, she responded:

> When I came to my block—to 102d Street—it was a joy! It was beautiful! There were very few Puerto Ricans, and less... blacks. It was mostly *griegos, italianos* (Greeks, Italians). In my building there were only one—two Puerto Rican families. The fa—the other ones *eran polacos* (were Polish). (C14, 47)

[3]The foregoing information about Lola has been excerpted from Pedraza's ethnographic diary of 102d Street.

Methodology

The research design included recording sessions with Lola on separate occasions by Pedraza, an ingroup member who has a long-standing relationship with the informant, and the author, a nongroup member. When setting up an appointment for me to interview Lola, Pedraza specifically described me as a person who was not Puerto Rican but who could speak fluent Spanish anyway. Lola immediately assured him that this was no problem since she could speak English. English, parenthetically, is the language claimed by Lola to be the one she "feels most comfortable in," and in fact was the "base" language used with both Pedraza and me. The majority of the material discussed below refers to switches into Spanish.

The data I report on here consist of 4 hours and 15 minutes of taperecorded speech collected in four different recording sessions with Lola:

1. A "formal" interview session in which she responded orally to a questionnaire about language attitudes, ethnicity, bilingual education, etc.;
2. An open-ended "informal" session with minimal input from the interviewer during which Lola basically directed the conversation toward topics of interest to her (e.g., a childhood illness, life in El Barrio);
3. A session in the street with no directing input from the interviewer during which Lola was accompanied while doing her errands, and chatting with passersby, which we will refer to as *vernacular*.

All these were collected by Pedraza, the ingroup member. A fourth segment of speech may be designated as *informal* by the preceding criteria, but was recorded by the author, a nongroup member. The first half of this interview was directed by Lola toward general, ethnically neutral topics of interest to women: men, sex, child rearing. During the second half of the interview, I concentrated on introducing ethnically specific topics, such as recipes for Puerto Rican dishes, Puerto Rican childhood games, etc. Ethnically neutral items were considered to be those with a low degree of cultural specificity, or those which could be easily translated from L_1 to L_2 (Hasselmo, 1969), e.g., *pan* (bread), *casa* (house). Ethnically specific items were those which were highly culturally specific,or located in a low position on a translatability scale, e.g., *gandinga* (a Puerto Rican dish), *culantrillo* (maidenhair fern (an herb used in making rice and beans)).

On the basis of the study of switching behavior of a single speaker, highly skilled in two languages, and close to the so-called ideal bilingual, I suggest a framework which can be used in a community-wide study of codeswitching, including speakers at different stages of bilingual ability.

THE LINGUISTIC CONFIGURATION OF CODESWITCHING

Although in some of the earlier literature (e.g., Lance, 1975: 143) it was felt that codeswitching was a random phenomenon, most investigators today appear to agree that it is not random but rule-governed. There is, however, no present agreement on the precise nature of the rules which govern codeswitching. It seems clear that some of the constraints on its occurrence are extralinguistic. Other factors constraining the occurrence of codeswitching are linguistic, or internal to the discourse. I suggest that these factors covary, such that there will be higher proportions of certain types of switches in the presence or absence of certain extralinguistic factors.

In order to describe linguistically the different types of codeswitches, we must first define the total population of possible forms: are there elements in discourse which cannot be switched? Are there environments in discourse where switches cannot occur?

A comparison of some of the syntactic constraints on codeswitching suggested in the literature with our own data revealed counterexamples, some of which are listed in 4:

4a. Proposed Constraint: Switching is restricted between pronominal subjects or objects and verbs. (Gumperz, 1970:158; Timm, 1975:477.)

Counterexample: You *está*s diciéndole la pregunta in the wrong person. (You are asking the question to the wrong person.) (B9b, 43.)

4b. Proposed Constraint: Switching is blocked between finite verbs and their infinitive complements. (Timm, 1975:748.)

Counterexample: There's an old Spanish saying that it goes, you have to *dar de l'ala pa' comer de la pechuga.* (There's an old Spanish saying that, it goes, you have to give from the wing to get to the breast.) (B6a, 9)

4c. Proposed Constraint: Switching does not occur between auxiliaries and verbs. (Timm, 1975:478.)

Counterexample: So you take the ham . . . as they're *ablandando, ya que está* un poquito hirviendo, tu le echas el güeso del jamón. (So you take the ham . . . as they're softening, as they're boiling a little, you throw in the ham bone.) (B7b, 56.)

4d. Proposed Constraint: The conjunction must be in the same code as the conjoined sentence. (Gumperz, 1976:34)

Counterexample: *es mía* . . . because *ellas son puertorriqueñas* to the core. (It's mine . . . because they are Puerto Rican to the core.) (B9b, 23.)

4e. Proposed Constraint: Switching phrases in which the [main] verb is not repeated (gapping) is only marginally acceptable. (Gumperz, 1976:34).

Counterexample: There's a lot of them that are working very hard out there and struggling and *adelant ándose,* okay? (There's a lot of them that are working very hard out there and struggling and getting ahead, okay?) (B9b, 62)

4f. Proposed Constraint: A lone determiner cannot be switched. (Wentz, 1977:142)

Counterexample: Where are they, *los* language things (Where are they, the language things?) (003)[4]

Counterexamples to many of these constraints were also found by Pfaff (1975, 1976) in her study of Chicano codeswitching performance.

Analysis of performance data suggests two linguistic constraints on codeswitching:

The Free Morpheme Constraint. A switch may occur at any point of the discourse at which it is possible to make a surface constituent cut and still retain a free morpheme.[5] According to this constraint, it is possible to switch full sentences (including conjoined sentences, repetitions equaling full sentences, and interjections) as well as any constituent within the sentences, provided that the constituent consists of at least one free morpheme.

Wentz and McClure (n.d.) have also suggested a constraint for the Chicano speech community on the "bicodal word": "no words with morphology from both languages can exist without first having the stem integrated into the language of the suffix phonologically and semantically" (p. 245).

The Equivalence Constraint. A second syntactic constraint operates simultaneously with the first. It states that codes will tend to be switched at points where juxtaposition of English and Spanish elements does not violate a syntactic rule of either language, i.e., at points where the surface structures of the languages map onto each other. Consider example 5:

5a. E I/told him/ that/ so that/ he would bring it/ fast.
5b. CS I told him that *pa' que la trajera ligero.* (C4, 3)
5c. S (*yo*) le dije eso pa' que la trajera ligero.

---

[4]The 00 series refers to switches collected from our built-in data source: the researchers at the Center for Puerto Rican Studies, many of whom are codeswitchers.

[5]Included under this constraint are idiomatic expressions or frozen forms, which are not broken up.

According to the free morpheme constraint a codeswitch could take place after any free morpheme in 5. There are, however, some differences in English and Spanish morpho-syntax which limit these choices. For one thing, both the main and subordinate clause contain an indirect pronominal object, which in Spanish precedes the verb, and in English follows it. Because of surface discrepancy, or nonequivalent word orders of Spanish and English, the probability of a switch between verb and object in either clause is lower, so in our data there were no occurrences like those listed in 6:

6. *told *le, le* told, him *dije, dije* him
bring *la, la* bring, it *trajera, trajera* it.

In the embedded sentence, whereas English marks tense and mood on the modal auxiliary, "would," Spanish marks the same categories morphologically on the main verb itself, *trajera.* Here again there is no overlap between the surface structures of L_1 and L_2. (There is an option in Spanish of marking tense and mood on the auxiliary as well: *pudiera traer.* Had it been chosen, the probability of a switch between auxiliary and verb would be greater, as these two surface structures are equivalent.) The speaker actually opted to switch at a higher node, 5b, producing the entire main clause in English, and the entire embedded sentence in Spanish. Switching an entire higher-level constituent when the equivalence constraint is not met at a lower node is a device which Lola appears to use frequently. This can be seen by the higher proportions of major constituent switches than of switches of the elements within them (Table 1). Points at which these constraints predict possible occurrences of codeswitches are indicated by the slashes in 5a.

The free morpheme and equivalence constraints are exemplified in example 7, which lists the major switch types found in the data:

7a. Full Sentence:
ella canta canciones insultando a los hombres. That's why you never heard of her. (She sings songs insulting men. That's why you never heard of her.) (B6b, 36)

7b. Conjoined Sentence:
yo voy por to' esos sitios y I was in 7th Avenue and Broadway. (I go to all those places and I was in 7th Avenue and Broadway.) (B9b, 51)

7c. Interjection
There should be a stop with these kids where there should be sta-discipline. *¡contra!* You know, open classrooms . . . (There should be a stop with these kids where there should be sta- discipline. Darn! You know, open classrooms . . .) (B9b, 61)

7d. Between Major Noun Phrase and Verb Phrase: Years ago people *se iban a trabajar.* (Years ago people would go to work.) (B6a, 62)

7e. Between Verb Phrase and Object Noun Phrase:
What ruined this people is la *vagancia de no 'cer na."* (What ruined this people is the laziness of not doing anything.) (B6a, 61)

7f. Between Verb Phrase and Prepositional Phrase:
tu quieres meter mano wid a man, that's your business. (You want to fool around wid a man, that's your business.) (C17, 85)

7g. Between Verb and Adverb:
Un americano me puede preguntar very nicely *"hace tiempo que yo te estoy viendo así y perdona que te pregunte."* (An American can ask me very nicely "I've been seeing you like this for some time and excuse me for asking you.") (B9b, 41)

7h. Between Noun and Adjective:
cojo mi garlic *puro.* (I take my garlic pure.) (C17, 103)

7i. Between Determiner and Noun:
Because if you smash it with the *pilón* and spray it, you don't get that burning sensation. (Because if you smash it with the pestle and spray it, you don't get that burning sensation.) (B7b, 53)

7j. Between Auxiliary and Verb:
So . . . you take the ham . . . as they're *ablandando, ya que está un poquito hirviendo, tu le echas el güeso del jamón.* (So . . . you take the ham . . . as they're softening, as they're boiling a little, you throw in the ham bone.) (B7b, 227)

Furthermore, as can be seen in Table 1, it appears that the higher the syntactic level of constituent, the greater the probability that it will be switched.

Full sentence types together constitute nearly half the switches. Major constituent boundaries within the sentence, such as those between noun phrase and verb phrase, verb phrase and object noun phrase, verb phrase and prepositional phrase, follow full sentence types as favorable switch points, with about 6 percent of the total number of switches occurring at each. Smaller-sized elements within these constituents such as those which modify the noun and the verb follow, whereas a switch within the verb itself accounts for only 1 percent of the data ($N = 4$). There is one exception, the noun, which at 34 percent is the single most frequently switched category in the corpus. We return to the noun in the next section.

We can also see the equivalence constraint operating through the behavior of adjectival switches in the data. English and Spanish have different rules of adjective placement. In English, attributive adjectives typically precede the nouns they modify, whereas in Spanish, they typically follow them. A closed set of Spanish adjectives (e.g., *grande/gran; bueno/buen*) may also precede the noun, although their use entails some change in semantic referent. Switching an adjective within the noun phrase by following either English or Spanish adjective placement for adjectives other than those in the closed set,

TABLE 1
Percentage of Occurrence of Switches at Different Surface Constituents

Switched Segment	*Percent*
At Major Constituent Boundaries	
Full sentence	13
Conjoined sentence	15
Interjection	11
Repetition	4
Between noun phrase and verb phrase	6
Between verb phrase and object noun phrase	6
Between verb phrase and prepositional phrase	5
Within Major Constituents	
Noun	34
Adjective	3
Adverb	1
Within verb	1

N = 400

appears to result in a construction which would be judged unacceptable by, for example, Timm's informants (1975:479), and which occurred only once in the data. Instead, when switching adjectives, the data indicated an overwhelming preference for a rule of predicate adjective formation which exists in both Spanish and English. This is exemplified in 8:

8a. S *A mi mamá le gusta el arroz amogollado.*
8b. E My mother likes her rice sticky.
8c. CS My mother likes her rice *amogollado.* (B6b, 84)

These constraints also explain the unacceptability of certain other constructions cited by Timm. For example, she claims that negating elements in each language must correspond in code to the verbs undergoing negation, so that a sentence such as 9 is judged unacceptable.

9. *I don't *quiero* (Timm, 1975:479).

According to the free morpheme constraint, a switch could occur at any point in the sentence except after *do,* given that the contracted form of *not* is a bound morpheme. Operation of the equivalence constraint, however, prevents this from taking place. English requires the dummy morpheme *do* or a modal auxiliary for negative support, whereas Spanish negates by inserting the negative particle immediately before the verb. These two rules do not

overlap, and switching is therefore avoided in negative constructions. Timm also cites as unacceptable a switch between finite verb and infinitive complement:

10. *(they) want *a venir;* want *a* come; *quieren* to come;
*(I'm) going *a decidir;* going *a* decide; *voy* to decide; *voy a* decide (Timm, 1975:478).

I suggest that the "unacceptable" constructions can be explained by the free morpheme constraint, which excludes switches from occurring at bound morphemes. That *want to, going to, have to,* are often perceived as single modals is supported by their most frequent phonological realization in spoken language: ['wanə, 'gɔnə, 'hæftə]. So although there are no occurrences of constructions like "going + *a decidir*" in our corpus, there were examples like "have to + *dar*" with the switch occurring after the finite verb. That the Spanish counterparts of these verbs are perceived in the same way is evidenced in counterexamples to Timm's constraint provided by Pfaff's Chicano data:

11. *fui a* + cash *su cheque.* (I went to cash her check.)
no van a + bring it up. (They're not going to bring it up.) (Pfaff, 1975:11).

Within the framework of the free morpheme and equivalence constraints, I analyzed 400 switches occurring in Lola's speech in three different speech styles, ranging from formal to vernacular, and with two different participants, an ingroup member and a nonmember.

Relationship of Ethnicity to Codeswitching Configuration

In comparing the data collected from these four recording sessions there appears to be some correlation between formality of speech style and raw frequency of codeswitching as indicated in Table 2.

Table 2 is highly suggestive even though these measurements were derived by dividing total time of the interview involving two interlocutors by the total number of Lola's codeswitches, rather than by what would be a truer measure, i.e., dividing the total time of Lola's speech by the total number of codeswitches she produced. As can be seen, even from this rough measure, switching occurs much more frequently in informal speech styles than in formal speech styles. What is more, frequency of codeswitching is also constrained by the group membership of Lola's interlocutor: it occurs as infrequently with the nonmember in an informal speech style as it does in

TABLE 2
Average Number of Code Switches per Minute by Speech Style and Group Membership

Speech Style	*Number of Code switches*	*Number of Conversation (minutes)*	*Average Number of Code switches (per minute)*
Formal	87	90	1
Informal (nongroup)	107	120	1
Informal	152	30	5
Vernacular	54	15	4

$N = 400$

formal speech—the least favorable environment for switching with the group member. These results add empirical support to Gumperz's hypothesis of ethnic identity.

Apart from actual frequency of codeswitching shown in Table 2, when the participant was held constant there did not appear to be any differences in the type of codeswitching in the formal, informal, and vernacular speech styles that could not be explained by the nature of the speech event. For example, there were more interjections in the vernacular data (19 percent) than in the remainder of the data combined (11 percent). This is due to the sort of interaction Lola was engaged in at the time of recording (yelling at her daughter, exchanging greetings, etc.). When the participant was changed from an ingroup to a nongroup member, there were qualitative differences in the configuration of the switches, as can be seen in Table 3. For the remainder of the analysis, therefore, the data from the three "in-group" sessions will be considered together and compared with the "nongroup" session.

Table 3 indicates that the configuration of the switches used with a group member is substantively different from that used with a nonmember. For one thing, although we have seen in Table 1 that noun switches (i.e., switches of a

TABLE 3
Distribution of Noun Switches by Raw Frequency and Ethnic Specificity with Ingroup and Nongroup Member

	Participant	
Noun Switches	*Ingroup (%)*	*Nongroup (%)*
Nouns out of Total Number of Code Switches	24 (n = 70/292)	65 (n = 70/180)
[+ Ethnic] Nouns	49 (n = 34/70)	89 (n = 62/70)

single noun in an otherwise L_1 sentence) are the most switchable category at 34 percent, noun switches account for a disproportionate amount of the switches when interacting with the nongroup member. On the other hand, they account for less than one-fourth of the switches with the group member. Furthermore, a full 89 percent of the noun switches with the nonmember are used for ethnically specific terms, or items low on the scale of translatability, whereas when interacting with a group member, the speaker is about as likely to switch for items not ethnically specific.

The noun has been found to be the most frequently switched element by several scholars (e.g., Wentz, 1977; Timm, 1975). Many, however, do not consider the presence of an L_2 noun in an otherwise L_1 sentence to represent a true instance of codeswitching (Wentz, 1977; Gingràs, 1975; Gumperz, 1971). Gumperz (1971:139) believes the introduction of such an element to be part of the speaker's monolingual style. Similarly, Wentz's (1977:142) approach regards noun phrases containing switches between determiner and noun as monolingual constituents. Such switches were included in the present study by reason of our initial definition of a switch as any L_1 item which is unadapted phonologically, morphologically or syntactically into L_2 discourse. Although it is clear that noun switches are different in nature from intrasentential or even sentential switches, it is also clear that they can be used as a discourse strategy. Their inclusion has permitted differentiation of the type of switching used with a group member and a nonmember. Switching with a group member allows for a wider latitude of possible switch points, as can be seen in Table 4.

TABLE 4
Distribution of Major Switch Types with Ingroup and Nongroup Member

	Participant	
Switch Type	*Ingroup (%)*	*Nongroup (%)*
Full sentence	45	23
Intrasentential	31	12
Noun	24	65

Table 4 shows that intrasentential switches, those which all investigators agree to be "true" instances of codeswitching, constitute nearly one-third of Lola's codeswitches with the group member, whereas with the nonmember, they account for only 12 percent.

DISCUSSION

To identify these different codeswitching configurations it was necessary to define constraints on switching which would account for our own data and, if possible, for the Chicano data on which the majority of the literature is based. We cannot rule out the possibility that different sets of discourse rules obtain for Chicano and Latino switching behavior. But given that neither the Spanish dialects nor the English dialects with which they came in contact differ significantly in a structural way, as well as that empirical studies of actual performance are beginning to show important areas of convergence (Pfaff, 1975; 1976; Wentz & McClure, n.d.),[6] it would not be surprising if codeswitching in the two speech communities were governed by at least the same set of linguistic rules. Ongoing variable rule studies of Hispanic dialects (Cedergren, 1973; Terrell, 1975; Poplack, 1977) are beginning to show that these dialects may all be described by similar sets of constraints, which function in different proportions. There seems to be no reason why a similar framework could not account for different varieties of codeswitching.

There are two major issues in the study of codeswitching: (1) why it occurs (functional or pragmatic constraints); (2) where it occurs (formal or syntactic constraints). These have traditionally been treated separately, although all scholars agree that the two constraints interact. It has been pointed out that we cannot predict where a switch will occur any more than we can predict when a speaker will opt to produce an embedded sentence.[7] Our results suggest that it is possible to predict where switching is *more likely* to occur. We can also predict where it will not occur.

If we treat the constraints proposed in this study as rules whose probability of application will vary in the presence of well-defined extralinguistic factors, such as the ethnic identity factor, we should be able to account for different types of codeswitches in terms of different probabilities of rule application.

Weighting of constraints should account for several points raised in this paper, although at this point any hierarchy would be speculative at best. The free morpheme (and constituent size) constraint might explain the fact that occurrences of the counterexamples listed in example 4 are rare enough to have led investigators to posit constraints against them. The equivalence constraint should account for speakers' different bilingual abilities. We might expect that equivalence (or well-formedness) will apply in lower proportions for less-skilled bilinguals, or as appears to be the case in the Puerto Rican community, that switch points which are "risky" in terms of syntactic well-formedness, will tend to be avoided altogether. (Hence, the preponderance of tag switching cited for Juan earlier.) Further studies of codeswitching performance between both typologically similar and dissimilar languages would provide invaluable data to test this constraint further. The interaction of both constraints with pragmatic factors (e.g., display of ethnic identity, norms of the speech situation) which might be specific to different speech communities should show differential switching configurations which could be accounted for by the same framework.

[6]For example, these three scholars and the author have all independently posited a constraint similar to the "free morpheme" constraint. Wentz and McClure's (1977) constraint on the bicodal word is discussed on page 175. Pfaff (1976) found that stems of borrowed verbs are adapted to Spanish phonology when inflected with Spanish morphology.

[7]Beatriz Lavandera, personal communication.

Quantitative analysis has uncovered two syntactic constraints which function simultaneously. Together they are general enough to account for all the instances of switching in the Latino data under consideration as well as some Chicano data we have examined, yet they do not seem strong enough to generate instances of nonoccurring switches. The first constraint states that it is possible to switch any constituent in discourse, provided that it is a free morpheme. Moreover, it appears that the more major the constituent the greater the probability of a switch, with the exception of nouns which are the most frequently switched category. This constraint interacts with the equivalence constraint which states that codeswitching will tend to occur in those areas where surface structure representations in the two codes are equivalent.

The equivalence constraint suggests that the codeswitching mode proceeds from that area of the bilingual's grammar where the surface structures of L_1 and L_2 overlap, whereas the outer areas where there is no equivalence will tend to be reserved for monolingual segments of discourse. The hatched portion in Figure 1 below represents the area in which surface structures are equivalent in two languages.

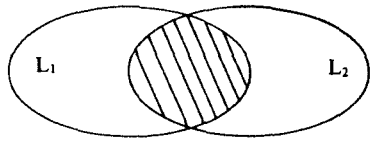

FIG. 1. Representation of Codeswitching Grammar

The most striking evidence in favor of this hypothesis, however, comes from Lola's data: only one example of the 400 investigated did not satisfy either English or Spanish surface structure constraints. The remaining 399 were well-formed utterances by both English and Spanish standards.

This is additional evidence that codeswitching, rather than arising from insufficient control of L_2, can be a highly developed skill requiring competence in two languages, a skill which is governed by rules common to both.[8]

[8]Since the work reported in this paper was completed (1978), further studies (Poplack in press, Sankoff and Poplack 1980) have confirmed the validity of the codeswitching constraints on a wider sample of speakers, and investigated their implications for a formal account of bilingual syntax.

REFERENCES

Cedergren, H. *The interplay of social and linguistic factors in Panama.* Unpublished doctoral dissertation, Cornell University, 1973.

Gingràs, R. Problems in the description of Spanish-English intra-sentential codeswitching. In G. Bills (Ed.), *Southwest areal linguistics.* San Diego, Calif.: Institute for Cultural Pluralism, 1974.

Gumperz, J. J. *Language in social groups.* Stanford, Calif.: Stanford University Press, 1971.

Gumperz, J. J. The sociolinguistic significance of conversational codeswitching, *Working Paper* 46. University of California, Berkeley, Language Behavior Research Laboratory, 1976.

Gumperz, J. J. & Hernandez-Chavez, E. Cognitive aspects of bilingual communication. In E. Hernandez-Chavez et al. (Eds.), *El lenguaje de los Chicanos.* Arlington, Va.: Center for Applied Linguistics, 1970.

Hasselmo, N. On diversity in American Swedish. *Svenska Landsmal Och Svenskt Folksliv,* 1969.

Lance, D. 1975. Spanish-English code-switching. In E. Hernandez-Chavez et al. (Eds.) *El lenguaje de los Chicanos.*

McClure, E. The acquisition of communicative competence in a bicultural setting. NIE Grant NE-G-00-e-0147 final report, undated.

Pedraza, P. 1978. Ethnographic observations of language use in El Barrio. Unpublished ms.

Pfaff, C. *Syntactic constraints on codeswitching: a quantitative study of Spanish/ English.* Paper presented at the LSA annual meeting, 1975.

Pfaff, C. Functional and structural constraints on syntactic variation in codeswitching. *Papers from the parasession on diachronic syntax.* Chicago: Chicago Linguistic Society, 1976.

Poplack, S. 1980. The notion of the plural in Puerto Rican Spanish: Competing constraints on /s/ deletion. In W. Labov (Ed.), *Locating language in time and space.* New York. Academic Press.

Poplack, S. in press. "Sometimes I'll start a sentence in Spanish *y termino en espanol":* Toward a typology of code-switching. *Linguistics 18:7/8.*

Sankoff, D. & Poplack, S. A formal grammar for code-switching. Working paper no. 8. New York: Center for Puerto Rican Studies, 1980.

Timm, L. A. Spanish-English codeswitching: el porqué y how-not-to. *Romance Philology, 28,* 1975.

Terrell, T. 1975. Functional constraints on deletion of word-final /s/ in Cuban Spanish. Berkeley Linguistic Society, *1.* Berkeley: University of California, 1975.

Valdés-Fallis, G. Social interaction and codeswitching patterns: A case study of Spanish/ English alternation." In G. Keller et al. (Eds.), *Bilingualism in the bicentennial and beyond.* New York: Bilingual Press, 1976.

Wentz, J. *Some considerations in the development of a syntactic description of codeswitching.* Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign , 1977.

II LATINO LANGUAGE, COMMUNICATION, AND COGNITION IN HOME, COMMUNITY, AND SCHOOL SETTINGS