Contrasting Patterns of Code-Switching in Two Communities

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Recent interests in the constraints on bilingual behavior. and in particular. code-switching. show trends which seem to have come full circle.[1] By early accounts (e.g. Labov 1971). the behavior embodied in code-switching was the exception to the systematic and rule-governed nature of language variation. Researchers such as Gumperz and his students subsequently showed convincingly that code-switching was at least subject to pragmatic and/or interactional conditioning. was highly sensitive to the characteristics of the participants. and could be used for a variety of conversational functions (e.g Gumperz and Hernández-Chavez 1971. Blom and Gumperz 1972. Gumperz 1976/1982) The issue of purely linguistic. or syntactic. constraints on code-switching was either not addressed or dismissed with the claim that there were none (e.g. Lance 1975) Empirical studies of actual speech behavior by among others Gumperz (1972). Hasselmo (1970. 1972). Pfaff (1979) and McClure (1981). revealed regularities which soon caused linguists to reject this view and even to adopt the opposite extreme. leading to a proliferation of particularistic and often poorly motivated statements of precisely where in the sentence a bilingual may or may not switch. It was soon seen that such ad hoc constraints. though they might hold in a majority or even all instances. were not generalizable from one language pair to another. or even across different studies of the same pair in different contexts. Later the view that some more general constraints might hold. constraints based on a universal compromise strategy of some sort. and predictable on the basis of the grammatical properties of the two languages involved in the alternation. gained currency. We return to this view below. More recent papers have contested this universalistic approach (e.g. Bentahila and Davies 1983). or have situated constraints at other than the syntagmatic level (e.g. Joshi 1983. Prince and Pintzuk 1983). or have rejected all but some language-specific conditions. reminiscent of the positions of the earlier work cited above.

In reviewing this and other current work, two issues become obvious. One is that researchers often confound different bilingual behaviors, including code-switching, but also borrowing on the community and individual levels, incomplete language acquisition, interference, and even acceptability judgements, and use them all as evidence about code-switching patterns. In this paper we stress that these linguistic manifestations of language contact are fundamentally different, both in their constitution and in their implications for the structures of the languages. Thus it is illogical to use a datum which may in fact be a fully integrated loanword, like *attorney general* in English, as evidence about word order violations in French-English code-switching. The second issue also pertains to the nature of appropriate data: attempts at assessing the true status of these different bilingual phenomena are futile unless they first distinguish community-wide from individual, and perhaps idiosyncratic, behavior. Conditions elucidated on borrowing and code-switching should in the first instance be community-wide, or part of the bilingual *langue*, since individual manifestations can only be understood against the background of the community norms. Too many variables which are crucial determinants of this behavior cannot be inferred without detailed knowledge of:

1. the bilingual ability of the informant in each of the languages.
2. the detailed nature of the two monolingual codes in question as they are actually used in some bilingual community, and as distinct from the "standard" varieties of either, and
3. the existence of particular community-specific or "compromise" solutions to the problem of reconciling two codes with conflicting rules within the same utterance, solutions which may be ungrammatical and/or unacceptable in other communities.

The nature of an utterance involving elements from more than one language may be predictable from a particular combination of these factors. Yet there is no way of inferring this information from any but systematic examination of the languages as used in the speech community. Thus use of informants of unspecified bilingual competences or linguistic backgrounds, or of isolated or exceptional examples, without situating them within patterns of community usage, is simply not relevant evidence for the existence of norms of bilingual behavior. A sufficient understanding of an individual's bilingual behavior seems beyond the reach of any but systematic corpus-based research carried out within her or his community.

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We illustrate the role of the speech community in understanding bilingual behavior with a series of studies of two bilingual communities, which are superficially similar from both sociological and linguistic points of view, but which use very different strategies for handling incorporations from English. In so doing, we return to the issue of distinguishing different contact phenomena. Early on, Haugen (1956) proposed that bilingual phenomena be located along a continuum of code distinctiveness, with switching representing maximal distinctness, integration (or borrowing) representing maximal levelling of distinctions, and interference referring to an overlapping of two codes, contrary to contemporary norms. While theoretically, these categories are eminently reasonable, in real life, bilingual behavior is not so easily classified. Indeed, as Hasselmo (1970) observed, although the intention of the speaker may be to choose either to switch or to use an integrated loanword, the constructions actually produced are often ambiguous.

Spanish/English Contact among Puerto Ricans in New York

A first series of studies was carried out in a stable bilingual Puerto Rican community in East Harlem, New York (e.g. Language Policy Task Force 1980, Poplack 1980, 1981). Analysis of data collected by Pedro Pedraza, a group member, as part of a program of long-term participant observation of language distribution and use in the neighborhood, revealed that code-switching between English and Spanish was such an integral part of the community linguistic repertoire, that it could be said to function as a mode of interaction similar to monolingual language use. An example of the sort of code-switching frequently heard in this community may be seen in (1), where in the course of a single utterance the language of the discourse oscillates from English to Spanish and back to English; and during each stretch in one language there are switches of smaller constituents to the other.

(1) But I used to eat the *bofe*, the brain. And then they stopped selling it because *tenian, este, le encontraron que tenia* worms. I used to make some *bofe! Después yo hacia uno d'esos* concoctions: the garlic *con cebolla, y hacia un mojo, y yo dejaba que se curara eso* for a couple of hours. (04/601)²

'But I used to eat the *bofe*, the brain. And then they stopped selling it bcause they had, um, they found out that it had worms. I used to make

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some *bofe*. Then I would make one of those concoctions: the garlic with onion, and I'd make a sauce, and I'd let that sit for a couple of hours

We examined a large number of these switches to find out how they functioned in discourse (Poplack 1980). One of the characteristics of this kind of "skilled" or fluent code-switching (as opposed to switching for lack of lexical or syntactic availability, and as opposed to the "flagged" switches we discuss below) is a smooth transition between L_1 and L_2 elements, unmarked by false starts, hesitations or lengthy pauses. And in fact, these data showed smooth transitions between the switched item and adjacent sentence elements in 97 % of the cases. Other characteristics include an apparent "unawareness" of the particular alternations between languages (despite a general awareness of using both codes in the discourse), insofar as the switched item is not accompanied by metalinguistic commentary, it does not constitute a repetition of an adjacent segment, is made up of larger constituents than just a single noun inserted into an otherwise L_2 sentence, and is used for purposes other than that of conveying untranslatable or ethnically bound items. Again, only about 5 % of the Spanish/English switches were used in one of these ways (ibid.).

Now, there are two purely linguistic problems that have to be solved in the course of alternating between two languages without the benefit of pausing, retracting, repeating, or otherwise indicating that you are about to pass from one language to the other. One is the resolution of eventual conflict between the word orders of the two languages involved in the alternation. In the case of Spanish and English adjective placement, for example, where the basic Spanish order is NA and the basic English order is AN, a switch to English after N means forfeiting the opportunity to produce A in Spanish, while never having had the chance to say it in English. The second problem is local morphophonological conflict between the two languages, as when an English verb used in a Spanish context must be inflected for tense and mood.

Detailed analysis of the Spanish/English code-switching data revealed that there were only two general syntactic constraints on where intrasentential switching could occur (Poplack 1980, 1981, Sankoff and Poplack 1981): the *free morpheme constraint*, which prohibits mixing morphologies within the confines of the word, and the *equivalence constraint*, which requires that the surface word order of the two languages be homologous in the vicinity of the switch point.

As a result of the operation of these constraints, sentences containing switches turned out to be locally grammatical by standards of both Spanish and English simultaneously, suggesting highly developed linguistic skill in

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both. Indeed. there were only 11 violations of the equivalence constraint. or well under 1 % of the 1.835 switches studied. though the switches had been produced by both balanced and non-fluent speakers (Poplack 1980).

In considering how these latter were able to code-switch frequently and still maintain grammaticality in both languages. we found that the Puerto Rican community in East Harlem could be characterized by three switch types: tag. sentential and intrasentential. each requiring increasingly greater control of both languages to produce. These were distributed across the community according to bilingual ability. with the most highly bilingual speakers switching mainly within the bounds of the sentence

Code-Switching versus Borrowing

Now the majority of the material involved in the code-switching studies cited above consisted of switches of sentences or constituents of sentences which were unambiguously Spanish or English. But the smaller the switched constituent. and particularly at the level of the lone lexical item. the more difficult it is to resolve the question of whether we are dealing with a code-switch or a loanword. Since a code-switch. by Haugen's definition. is maximally distinct from the surrounding discourse. while a loanword should be identical to recipient-language material on the basis of synchronic considerations alone. differentiating the two might seem to be an easy matter. However. superficially the two may be indistinguishable in appearance. Phonological integration. an oft-cited diagnostic. may not provide a clue if the speaker pronounces all his English words. whether borrowed or not. according to Spanish patterns (i.e. with a Spanish "accent"). Morphology may also be irrelevant if the form requires no affixation. as in the case of a singular noun. Similarly. because of "interlinguistic coincidence" between English and Spanish. syntactic stretches in the two languages are often homologous. The co-occurrence of forms from two languages may also be due to interference or incomplete second language acquisition.

In seeking a way to identify full-fledged loanwords. a number of indices measuring various aspects of the linguistic and social integration of borrowed words were developed (Poplack and Sankoff 1984). These were abstracted from the types of criteria used implicitly or explicitly by scholars of bilingualism (e.g. Bloomfield 1933. Fries and Pike 1949. Weinreich 1953. Mackey 1970. Hasselmo 1970. etc.) to characterize loanwords. and included measures of frequency of use. native language synonym displace-

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ment. morphophonemic and/or syntactic integration. and acceptability to native speakers.

The frequency of use and phonological integration indices were found to measure phenomena which are closely related and proceed concurrently. a result which provides solid confirmation of the claims in the literature that borrowed words which are frequently used are made to conform with recipient language linguistic patterns.' English-origin material integrated into Puerto Rican Spanish. i.e. established loanwords.' could thus be defined as those concepts for which the identical. phonologically adapted designation was used by many or all speakers.

In summary. in the bilingual behavior in the Puerto Rican community in East Harlem. there exists a mode of discourse characterized by frequent switching in a smooth and "unflagged" way between stretches of grammatical English and stretches of grammatical Spanish. the stretches consisting of words. phrases. sentences or larger discourse units. In addition. there are English lexical contributions to Spanish. manifested in terms of loanwords. which follow a well-defined linguistic and social trajectory.

Moreover. there is an operationalizable dichotomy between loanwords and switches. In the ideal case. a word or sequence of words which remains phonologically. morphologically and syntactically *unadapted* to Spanish could be considered English. i.e. a code-switch from Spanish. while one which is integrated with Spanish patterns could be considered Spanish. Though these criteria could not always be applied. for the reasons detailed above. we also had recourse to the empirical findings that 1) virtually all of the eligible Spanish-English code-switches respected the equivalence constraint. and 2) English-origin words which are used frequently are integrated into Spanish phonological and morphological patterns. Thus. given any *single* English-origin word in Puerto Rican Spanish discourse. if the same word was used by many speakers and hence uttered with Spanish phonology and morphology. and if in non-equivalent Spanish-English structures (e.g. adjective placement). it followed Spanish rules. then we could consider it a loanword and not a code-switch.

French/English Contact in Ottawa-Hull

A second series of studies forms part of an ongoing research project investigating the French spoken in Ottawa-Hull—the national capital region of Canada—and the effects on it of close and sustained contact with English

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(Poplack 1983a). The Ottawa-Hull urban complex is divided by a river which is both a geographic and linguistic border: on the Quebecside (Hull). French is the majority and sole official language, while on the Ontario side (Ottawa) it has minority status. One goal of this project is to characterize and compare the French spoken in the area in both its status as official language and in its minority guise. Five neighborhoods were selected on both sides of the border, each with a different proportion of English mother-tongue claimants, in order to test the hypothesis that influence from another language is a function of the recipient language's status in both the immediate and wider environment.

Each was sampled according to strict random sampling procedures, resulting in a fully representative sample of 120 francophones native to Ottawa or Hull respectively, stratified according to age and sex. Lengthy, informal interviews were carried out with informants by local francophone interviewers.

As in the Puerto Rican case, negative stereotypes of the French of the region and particularly of that spoken on the Ontario side are widespread, especially as regards the effects on it of coexistence with English. Our ongoing investigation of the speakers' own attitudes toward the language(s) they speak reveals a complex system of linguistic values, not too dissimilar from those obtaining in the Puerto Rican (and other minority) communities (Poplack & Miller 1985). First the French language itself, though endowed with affective import, is widely seen as having less instrumental value than English, with the inverse assessments made of English. On the other hand, speakers commented freely on the "unfairness" of having to learn English when anglophones rarely make the effort to learn French. The use of English in largely French contexts which we will examine below can therefore not be simply ascribed to prestige factors or "impression management". Second, linguistic insecurity vis-à-vis European French (le français de France) is generally admitted, although Canadian varieties—with the notable exception of informants' own dialects—are imbued with some covert prestige. Not surprisingly then, the majority of informants on both sides of the border feel that they personally do not speak "good French", characterizing it most frequently as anglicized and joual 'slang'. Descriptions of "anglicized French" included the metaphor of mixing, which we interpret to refer to the widespread use of borrowing in the area as well as to code-switching, and another evoking "true" or intrasentential code-switching. Interestingly enough, the latter was limited to Ottawa residents, who, as we shall see, in fact engage in this type of switching somewhat more than the Hull speakers. Indeed, Ottawa speakers showed far greater familiarity with

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code-switching in general, in terms of overtly recognizing its existence, admitting to engaging in it personally, showing neutral rather than negative affect towards it, and even correctly identifying their own reasons for doing it: they claim that the English way of saying it is often shorter, more succinct, and more apt or expressive.

The French speakers' attitudes contrast sharply with those of the Puerto Ricans in the previous study. Though the Puerto Ricans were also fully cognizant of the prevalence of code-switching in their community and saw nothing wrong with it, their reason for switching was in essence because they "were bilingual" and this mode of discourse was appropriate to their dual identity (Attinasi 1979, also Zentella 1982). As a rule, they did not consider that one language was better for specific interactional or conversational purposes, or that certain concepts could be more felicitously expressed in one language than the other. We shall see below how this difference in attitudes is consistent with dramatically different code-switching behaviors in the two communities.

Code-Switching in Ottawa-Hull

Turning now to the actual speech patterns of the Ottawa-Hull informants, exhaustive examination of their incorporations from English in approximately 290 hours of tape-recorded French conversations,[5] revealed some 1766 sequences which could be unambiguously identified as code-switches. Note that though it was largely possible to distinguish code-switching from borrowing in the Puerto Rican Spanish-English data, this is by no means always the case. In Ottawa-Hull (as in many other bilingual communities), French discourse may contain liberal amounts of English incorporations whose status as loanword or code-switch is at first blush unclear, as they may be consistent with both French and English morphology or syntax, as in the examples in italics in (2):

   (2) a. Il y avait une *band* là qui jouait de la musique *steady*. pis il y avait des *games* de *ball*. pis ... ils vendaient de l'*ice cream*. pis il y avait une grosse *beach*. le monde se baignait. (M.L./888)

      'There was a band there that played music all the time and there were ball games, and ... they sold ice cream, and there was a big beach where people would go swimming.'

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b. Il y avait toutes sortes de chambres là. tu sais là. un *dining room*. *living room*. un *den*. un *family room*. un *rec room*. mais .. mil neuf cent quatre-vingt dix-neuf par mois. (L.M./174)

'There were all kinds of rooms there. you know. a dining room. living room. a den. a family room. a rec room. but ... $1999 a month.'

In the Ottawa-Hull region a large number of other bilingual phenomena also intervene to further complicate identification. to which we return below One thing seems clear. however. When we exclude the problem category of uninflected single words (or compounds functioning as single words). other sequences can be identified as to their language membership on morphological and syntactic grounds. Thus the English-origin material in italics below is being handled like French and not like English. receiving French affixation in (3) and French word order in (4).

(3) Sont *spoilés* rotten. (JR/1528) 'They're spoiled rotten'.

(4) A côté il y a un autre gros *building high-rise*: (MP/174) 'Next door there's another big high-rise building.'

Determination of the status of such forms is treated elsewhere (Poplack and Sankoff 1984. Sankoff and Poplack 1984. Sankoff. Poplack & Vanniarajan 1985); the discussion which follows is limited to the treatment of unambiguously *English* sequences in otherwise French discourse. i.e. to code-switches. as in the italicized portions in (5).[6]

(5) a. On va avoir une dépression là que *we'll be rationed if we don't all die*. (JB/756)

'We're going to have such a depression that ...'

b. Les français apprennent l'allemand parce que they *have to deal with them* économiquement là. (PX/1084)

'The French learn German because they have to deal with them economically.'

Table I depicts the distribution of code-switches across the five neighborhoods sampled in Ottawa and in Hull.

	OTTAWA (ONTARIO)			HULL (QUEBEC)	
# of speakers:	Vanier 23ᵃ	Basse-Ville 23ᵃ	West-End 22ᵃ	Vieux-Hull 24	Mont-Bleu 24
Function of code-switch:					
Expression/"mot juste"	19 %	18 %	22 %	20 %	13 %
Meta-linguistic commentary	9	18	9	24	36
English bracketing	10	17***ᵇ	8	15	12
Repetition, translation, explanation	8	8	7	10	7
Reported speech	10**	13***	14*	16*	18*
Proper name	4	3	4	5	7
Changed interlocutor	18*	4	17	2	0
False start	5	7*	4	0.7	0.7
At turn boundary	2	0.7	0.7	0	0
Sentential	13**	6	12*	2	4
Intra-sentential	3	5	2	6	1
Totalsᶜ	552	423	514	148	136

Table 1. Functions of code-switching in five Ottawa-Hull neighborhoods.
ᵃ Four sample members whose use of English greatly exceeded that of the other informants and whose status as French L, speakers is not clear, were excluded from this study.
ᵇ Asterisks indicate that the effect is essentially due to that number of individuals.
ᶜ Percentages may not add up to 100 due to rounding.

We note first that in the Ottawa communities, people tend to switch three to four times as frequently as in Hull, bearing out the prediction of our hypothesis regarding the influence of English in the environment. It is striking however, that in all of the neighborhoods, on both sides of the border, at least half of all the switches (and considerably more in Quebec) fall into the same four major types: a) when the switch provides the apt expression or what I will call the *mot juste*, as exemplified in (6), b) the switch occurs

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while discussing language or engaging in metalinguistic commentary, as in (7), c) where the switch calls attention to or brackets the English intervention by the use of expressions such as those in (8), and finally, d) in the context of explaining, specifying or translating as in (9).[7]

(6) a. C'est un-*a hard-boiled killer*. (CD/1955) 'He's a hard-boiled killer.'
   b. Il dit, "je veux pas avoir des *dishpan hands*" (IM/1445) 'He says, "I don't want to have dishpan hands".'
   c. Ca aurait été probablement le pays communiste idéal là. *Quote un-quote* là. (PX/882) 'It probably would have been the ideal communist country'.

(7) a. Je m'adresse en français, pis s'il dit "*I'm sorry*", ben là je recommence en anglais. (MMR/3254) 'I begin in French and if he says, "I'm sorry", well then I start over in English.'
   b. Mais il dit, "c'est dur pour nous-autres: *le, la, les*. vois-tu? Eux-autres, c'est rien que *the*". (RM/2538) 'But he says, "it's hard for us: *le, la, les*, see? They only have *the*.'

(8) a. Mais je te gage par exemple que ... excuse mon anglais, mais les *odds* sont là. (CD/716) 'But I bet you that ... excuse my English, but the odds are there.'
   b. J'ai accepté le Seigneur là, ben ... j'étais comme sur un ... *cloud nine, cloud nine* qu'ils appellent. (MC/2476) 'I accepted the Lord then, well ... I was like on a ... cloud nine, cloud nine, as they say.'

(9) a. Je suis un peu trop anglicisé, anglifié, *anglicized*. (GF/1361) 'I'm a little too anglicized, anglified, anglicized.'
   b. J'ai été aussi pour *acupuncture*. Connais-tu ça de l'*acupuncture*? 'I also went for acupuncture. Do you know what acupuncture is?'
   c. J'ai acheté une roulotte, un *mobile home* là, une maison mobile. (GF/83) 'I bought a trailer, a mobile home, a mobile home.'

Use of English fulfills other functions as well, however on a more individual basis. Thus English may be used to report speech as in (10), but this is mainly limited to one or two speakers in each neighborhood. Similarly, a few speakers opt to designate proper names having both English and French designations in English, as in (11). Informants of course switched to English when addressing interlocutors other than the interviewer, although the opportunity only rarely arose, even in the Ottawa neighborhoods, despite the fact that there is more chance there to use and hear English. Even here, the effects are inflated by the presence, during a small number of interviews, of individuals the informants generally address in English. Finally, switching to another language may of course be used to fill lexical

gaps. This is how we interpret the behavior we have classed under the category of false starts, self-corrections and disfluencies (12).

(10) Pis il nous a appelés des grenouilles, hein? Bon. des *frogs*. Ben. j'ai dit. j'ai dit. "Jess". j'ai dit. "*maybe we re a frog. but we're not dumb*". Pis il dit, "*what do you mean?*" J'ai dit. "*we learn to swim*". Ben. j'ai dit "*you never seen a frog who don't swim*, hein?" Ben. il dit. "*no*". Ben j'ai dit. "*you're too stupid*". J'ai dit. "*you don't swim*". Il dit. "*sure*". il dit. "*I can swim*". Il dit. "*sure*". Well. *I says*—j'ai dit. "*show it to me*". (RM/2462)

'And he called us frogs, you know? Well, frogs (Eng.). Well. I said. "Jess". I said. "maybe we're a frog. but we're not dumb". And he says. "what do you mean?" I said. "we learn to swim". Well. I said. "you never seen a frog who don't swim, eh?" Well, he says. "no". Well. I said. "you're too stupid". I said. "you don't swim". He says "sure" he says. "I can swim". He says "sure". Well, I says—I said "show it to me".'

(11) a. Il avait le choix soit d'aller dans l'armée. dans *Navy* ou dans l'*Air Force*. (AB/2179)
'He had the choice either to go into the Army, the Navy or the Air Force'.

b. Montreal   [mʌntɾijal   – móʁeal]ᵏ
   Ontario   [ɔnteʁiou   – ótaʁjo]
   IGA   [aijiej   – iʒeɑ]

(12) a. Le- le- le-spontaneité de- de- de- de- *the spunk* de la faire. (RC/84)
'The- the- the- spontaneity of- of- of- of- the spunk to do it.'

b. C'est- c'est pas distor-- tu sais. *it's not distorted*. (GF/2222)
'It's- it's not distor-- you know ...'

Even this use is quite rare, and almost non-existent in the Quebec neighborhoods. However, switching to English for any one of the latter functions is only sporadic in comparison to the first four. Indeed, wherever any one of them appears to have a meaningful effect, this is invariably due to one or two individuals with a particular predilection for the type in question, as indicated by the asterisks on the Table.

Comparison of behavior in the Quebec and Ontario neighborhoods reveals subtle difference in the uses to which code-switching is put beyond the frequency differences noted above, as can be appreciated graphically in Figure 1.
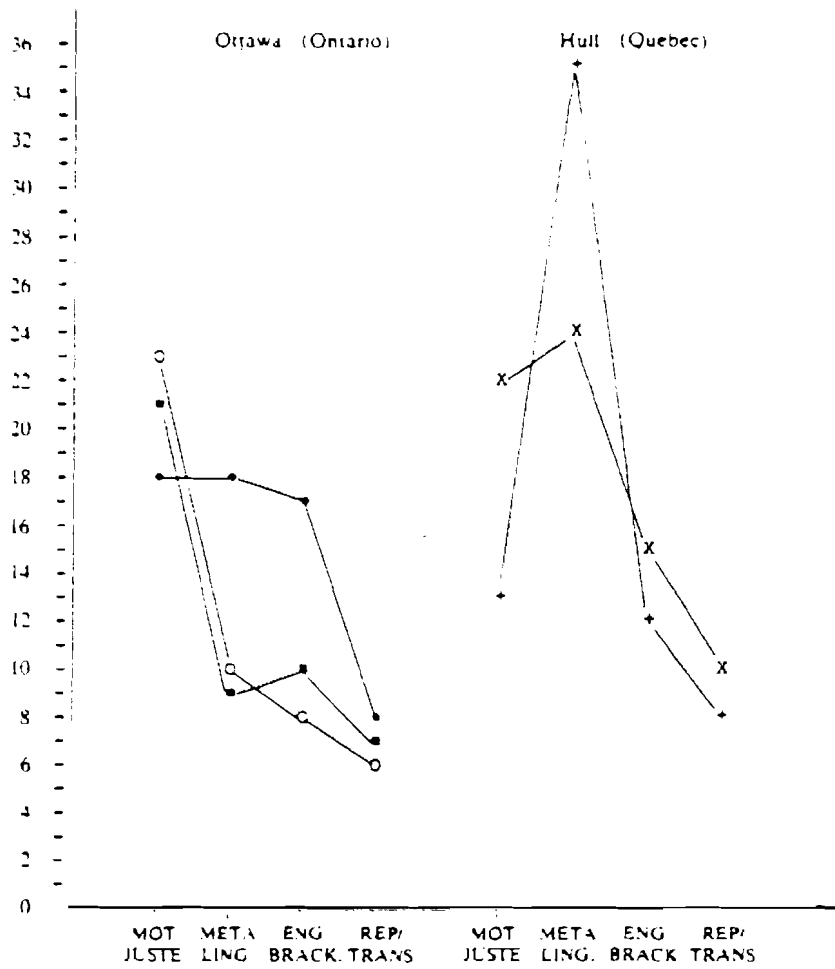
Figure 1. Distribution of favored code-switching types by neighborhood.

●	= Basse-Ville
■	= Vanier
○	= West End
×	= Vieux Hull
+	= MontBleu

Here we see that in the three Ottawa neighborhoods code-switching to English tends to be done to provide what is perceived to be the best way of saying a thing, or the *mot juste*, a finding which is consistent with the Ottawa speakers' description of their reasons for switching: to designate items for

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which the French equivalent has already been displaced (Poplack & Miller 1985). This use generally far outweighs the others. In Quebec, on the other hand, switches to English are largely restricted to metalinguistic commentary, a device having the effect of showing full awareness on the part of the speaker of using English. In the upper-middle class Mont-Bleu neighborhood of Hull, this strategy accounts for more than 1/3 of all the data, whereas the working-class Vieux Hull shows an intermediate pattern." Their linguistic behavior is also consistent with their own favorable attitudes towards proper speech, their belief that interventions from English are due to momentary lapsus, as well as their attitude that good French must of necessity exclude anglicisms.

Now the use of code-switching to fulfill particular discourse functions, and especially functions such as the ones we have outlined here, is hardly new. This functional or "semantic" approach was introduced by Gumperz over a decade ago (e.g. 1976/1982, Blom and Gumperz 1972) and has proliferated amongst students of the school of "interactionist sociolinguistics" ever since (e.g. Elías-Olivares 1976, Huerta 1978, Auer 1981, Valdes 1981, Di Luzio 1984, Heller 1984, among many others).

The aim here is not to enter into the interpretation of the "meaning" of these individual switches; indeed it is still unclear that each has a stateable meaning beyond the rough labels assigned them. Rather, I want to focus on the global function all of these code-switches fulfill in the discourse: that of flagging, or breaking up the speech flow, and the consequences of this for the investigation of purely linguistic constraints on code-switching. Perhaps the most noteworthy feature of Table 1 is the dramatically reduced frequency in all neighborhoods of spontaneous code-switches at a turn boundary within the same interaction, as in (13), switches of full sentences or independent clauses, as in (14), and especially, intra-sentential switches as in (15).

(13) Interviewer: C'est juste un petit micro, il y a une clip tu peux mettre sur ton gilet là. 'It's just a small mike, there's a clip you can put on your sweater.'

Informant: *I'm a star*.

(14) Parce que *I was there and* la seule raison c'était parce que je voulais oublier toute. (JB/996)

'Because I was there and the only reason was because I wanted to forget everything.'

(15) a. Tu sais, les condamner à chaise électrique *or* que c'est qu'ils— qu'ils voudraient. (CD/1909) 'You know, condemn them to the electric chair or whatever they want.'

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b. Faut que tu *pack your own* au Basics. (KC/336) 'You have to pack your own at Basics.'

c. Le gouvernement de l'Ontario *is an equal opportunity employer* (CN/832) 'The government of Ontario ...'

Thus the kind of behavior we had designated as "true" code-switching (i.e. in which individual switches cannot be attributed to stylistic or discourse functions) in the study of the Puerto Rican community. where it was largely confined to skilled bilinguals in appropriate. in-group interactions. is a minor phenomenon in the Ottawa-Hull French study. Table 1 shows it does not exceed a small percentage in any of the communities studied. This despite the fact that the participant constellation. mode of interaction and bilingual situation appear to be largely similar to those in the Puerto Rican study.

To recapitulate. where the Puerto Ricans code-switched in a way which minimized the salience of the switch points, and where the switches formed part of an *overall* discourse strategy to use both languages. rather than to achieve any specific local discursive effects, the Ottawa-Hull speakers do the contrary. They draw attention to their code-switches by repetition. hesitation. intonational highlighting. explicit metalinguistic commentary, etc. and use the contrast between the codes to underline the rhetorical appropriateness of their speech. We saw from Figure 1 that this is an overt strategy in the Quebec communities, covert in Ontario. In contrast. the impossibility of systematically interpreting code-switches in terms of any conversational function in the Puerto Rican materials has already been demonstrated (Poplack 1980)

Now the *mot juste* is most frequently a noun phrase or an idiomatic expression. The equivalence constraint on intra-sentential code-switching is thus satisfied trivially or is not pertinent. either because the conditions for placement of this form are homologous in French and English. or because of the devices the speaker uses to deliberately interrupt his or her sentence at a code-switch boundary, as in (16), where a potential grammatical violation is remedied in just this way.

(16) Fait que là ben. je paye un peu moins en-comme on diraitenanglais. *according* à que c'est que je fais. (DM/132) 'So. well. I pay a little less in- as they say in English. according to [Fr. *selon*] what I make.'

Thus the data provide few "interesting" tokens which could be used for or against the validity of the equivalence or other purely linguistic constraints on intra-sentential code-switching.

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Code-Switching Differences between Communities

To what should the differences in code-switching patterns between the Ottawa-Hull and New York Puerto Rican bilingual communities be ascribed? They cannot be due to linguistic (i.e. typological) differences between the two languages as compared with English, as these are minor and relatively few in number. It is more likely that at least part of the divergence between the two studies is due to differences in data collection techniques: the random sampling methodology used in the Ottawa-Hull study required that the interviewers, though of French Canadian ethnicity and local origin, *not* be group members in the strict sense, as opposed to the participant observation technique employed in the Puerto Rican research. For the same reasons, the large number of speakers interviewed in five separate neighborhoods precluded establishment of the familiarity resulting from years of observing and interacting with the same group of informants on a single city block. Moreover, though interventions in English from the Ottawa-Hull informants were never actively discouraged, they were not overtly encouraged either (by interviewer participation in the code-switching mode). The approach in these interviews was basically French, in keeping with our original goal of studying the French in the region. Since the optimal conditions for code-switching arise when all factors: the setting, participant constellation and situation are considered appropriate, this may account for the preponderance of "special-purpose" code-switching in Ottawa-Hull, as opposed to its virtual absence in the Puerto Rican study. Attractive as this explanation may be, however, it should be pointed out that we have no non-anecdotal evidence, either from the interviews or from systematic ethnographic observation, that there exist situations or domains, untapped by us, where intrasentential code-switching is the norm.

Until such evidence can be found, therefore, we cannot reject out of hand the possibility that these results may represent a true difference in communicative patterns, albeit one which has no simple explanation based on a summary comparison of the characteristics of the two bilingual contexts. The situations of French in Canada and Spanish in the United States share superficial similarities as minority languages, though French has been in contact with English longer than Puerto Rican Spanish has; it has the status of official national language in Canada while Spanish enjoys no such prestige in the United States, and French Canadian ethnics are neither as visi-

ble nor as highly stigmatized as are Puerto Ricans in New York. Yet none of these observations seem directly relevant to the code-switching patterns discussed above. Indirectly, however, the different social, historical and political factors have led to differences in attitudes towards use of English in the two situations, which themselves may be partly determinant of the contrasting code-switching patterns. These attitudes may reflect the fact that bilingualism is seen to be emblematic of New York Puerto Rican identity (as compared both with Island Puerto Ricans and non-Puerto Rican anglophones) whereas in the Ottawa-Hull situation, knowledge of English does not appear to be associated with any emergent ethnic grouping. Indeed, bilingualism among francophones (rather than anglophones) has traditionally been the outcome of contact throughout Canada (e.g. Lieberson 1970). Differences in professed affect toward English and toward switching may also play a role.

Moreover, although there is evidence that different methods of data collection may lead to quantitative differences in code-switching behavior even on the part of the same speaker (Poplack 1981), we have no reason to believe that this should result in the nearly categorical *qualitative* differences observed here: the sum of sentential, intrasentential and spontaneous switches at a turn boundary does not reach 4 % of all of the Ottawa-Hull data, while the proportion of flagged or special-purpose switching in Puerto Rican Spanish does not exceed 5 %.

If the differences between the two communities are indeed due to true differences in communicative strategies, then this shows a much greater awareness on the part of Ottawa-Hull francophones of their usage of English during French discourse than most casual observers would have expected. But even if the result is an artifact of our methodology, i.e. is due to perceived inappropriateness (because of social distance along the axis of familiarity), we have the striking result that this reaction is neither idiosyncratic nor the property of a small group, but is a community-wide pattern. Its interpretation would then be that in situations where ("true") code-switching is perceived to be inappropriate or has not been negotiated, the response is not necessarily to eschew usage of English altogether, but to use it in ways that show full speaker awareness. Such usage corresponds well with both Ottawa and Hull speaker perceptions mentioned above regarding the role and value of English.

This finding raises other questions concerning the background assumptions of the French speakers in our study. As Gumperz (1982) has pointed out, bilinguals do not ordinarily engage in code-switching before they know whether the listener's background and attitudes will render it feasible or ac-

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ceptable. Rather they begin interactions with a series of probes aiming to establish shared presuppositions. In addition, the most favorable conditions for code-switching according to him (p. 70) are ones where speakers' ethnic identities and social backgrounds are not matters of common agreement. The situation amongst the Ottawa-Hull speakers is somewhat different. Shared ethnic identity is established before the onset of the interaction.'" No "probing" as to language knowledge appears in these interviews. Instead, members appear to equate French Canadian ethnicity with knowledge of *both* English and French, an assessment which is not always correct, as can be seen in the exchange in (18), which recurred not infrequently between interviewer and informant.

(18)	INFORMANT:	Il y avait de la *wrestling* pis de la boxe pis ...
	INTERVIEWER:	Le *wrestling*, c'était quoi ça?
	INFORMANT:	Le *wrestling*, quand les-les *wrestlers* là, comment-ceque ...?
	INTERVIEWER:	Ah'ouais, ouais, okay.
	INFORMANT:	De la lutte
	(INFORMANT	There was wrestling, and boxing and ...
	INTERVIEWER:	Wrestling, what was that?
	INFORMANT:	Wrestling, when the-the wrestlers, how do you ...?
	INTERVIEWER:	Oh yeah, yeah, okay.
	INFORMANT:	Wrestling (Fr))

Thus in the Ottawa-Hull region, members' implicit ascription of bilingual competence to each other (cf. Auer 1981) includes the (founded or unfounded) presupposition of competence in English. On the other hand their usage of English is calculated to demonstrate their own full awareness of doing so.

Code-Switching vs. Other Bilingual Phenomena

The discussion in the previous sections was based on some 1700 stretches of English-origin material which could be unambiguously identified as code-switches. However, there are thousands more which cannot be so identified in a clearcut way. In an earlier pilot study involving 44 of these same speakers (Poplack 1983b), we extracted some 2300 English-origin forms consisting of a single word (or a compound functioning as a single word) from an exhaustive search of their recorded interviews. These were the words oper-

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ationally excluded from the code-switching data base, as described in the previous section, although some may in fact be code-switches.

Recall that in the Puerto Rican case we were largely able to distinguish borrowing from code-switching even for lone lexical items. How can we ascertain the status of the English-origin words in Ottawa-Hull French discourse?

The straightforward case is that of certain high-frequency forms which are integrated into local French. These forms tend to recur across speakers, to have a single French phonological rendition, and to behave like bona-fide loanwords in Ottawa-Hull French. It should come as no surprise that most are also attested nation-wide in other varieties of Canadian French (e.g. *chum. gang*).

In other cases, forms may seem equally linguistically integrated into French as in (19), but the frequency criterion is unclear or non-existent.

(19) Je serais pas capable de *coper* avec. (LM/1086) 'I couldn't cope with it.

Indeed with studies of the spoken language, even in a data base of this size, most borrowed words are relatively rare, such that those that occur tend to do so only once. Even in the lengthy recorded conversations with our sub-sample of 44 individuals, we were only able to identify about 500 English-origin words, or about 20 %, which were used by at least *two* different people. This renders the status of words like *coper* indeterminate for the time being.

The situation is further complicated by the fact that "momentary" or nonce borrowings[11] coexist with the integrated loanwords, and the distinction between them is not necessarily recoverable from the structural form of the word. Occasionally the free morpheme constraint, which prohibits mixing phonologies within the (code-switched) word, can be circumvented through the mechanism of momentary borrowing. The examples in (20) show unadapted English morphemes conjoined with French verbal and participial affixes.

(20) quiter   [kwl'te]
     enjoyer   [ɛnjɔ'je]
     traveler   [tʀæv'le]
     grower   [gʀo 'we]
     polishait   [pʰalɔ'ʃɛ]
     shockés   [ʃaːkʰe]
     drowné   [dʀaw'ne]

This is in contrast with the Puerto Rican usage. which permitted no English root with Spanish affixes unless this root was first integrated into Spanish phonologically and sociologically. but seems to be at variance with the usual French Canadian treatment of integrated loanwords as well.

The Ottawa-Hull francophones also make use of several other strategies which allow them to combine the lexicons. word-formation rules and phonological rules from both languages. Aside from the fully integrated loanwords. synchronically indistinguishable from native French lexical items. we find other words (of greater or lesser frequency) which do not appear constrained to take on the same phonological form. even when uttered by the same speaker (see also Mougeon et al. 1984). Thus we find coexisting examples such as the ones in (21) (Miller 1984):

(21)	meetings	['miDiŋ]		~	[mi'tiŋ]
	tough	[tɔv] ~ [tʰʌf]		~	[tøf]
	anyway(s)	[ɛnəwez]		~	[ɛnɛwé]
	whoever	[uɛvár]		~	[uévʀ]

Alternatively. and more surprisingly. the French affixes are occasionally rendered in an anglicized way. sothat the entire word will have English phonology but French morphology.

afforder	[ə'fɔʀDe]	for	[afɔʀˑde]
relaxés	[ʀə'lækse]	for	[ʁəlak'se]

(This situation is further complicated by the fact that English retroflex [ʀ] has penetrated the French phonological system and presently co-varies with apical [r] and velar [ʁ] even in French-origin words.) And in many other cases where the phonological systems differ minimally. only the affixes can be identified as to language (e.g. *mover* 'to move' [mu've]). In addition. a wide range of English items may be borrowed "momentarily" by means of a pattern which is also widespread in other French-speaking communities in Canada. This is a distinctive stress pattern applied to English-origin words in predominantly French discourse. but never to French words. and never in English discourse by the same speakers if they are fluent bilinguals. (Among speakers less fluent in English. it forms part of the stereotypical "French Canadian accent". but the interesting fact here is its use by fluent bilinguals in the restricted context of nonce borrowing.)

Briefly. the main word stress rule shifts the heaviest stress to the rightmost syllable within the word in French. and to the leftmost syllable in English. The two languages also differ as to their rules for assigning syllable stress, or beats. A compromise between English and French stress assign-

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ment patterns appears to be taking place in polysyllabic words (and even frozen expressions) of English origin occurring occasionally in French discourse, as in (22):

(22) des alcoholics   [ælkəhálĭk]
     les neighbors   [néybəʀ]
     des arguments   [áʀgjumə̀nt]
     J'aime avoir du *peace and quiet* [pʰíys æn kwájə̀t]
     'I like having peace and quiet.'

Here we find main word stress assigned according to English rules, shifting stress to the left, while syllable stress is assigned according to French patterns. Final syllables which would normally be unstressed schwas in English thus receive secondary stress.

The resulting word-structures have no counterpart in English or in French, and constitute an example of the innovative solutions which evolve in given speech communities. Their particular function here appears to be to allow nonce borrowing of an English word without "switching" to English (i.e. producing it in English), while still informing the interlocutor that one is attending to the fact of uttering an English word. (These forms may also be accompanied by one or both of rising intonation _____⌐ and the punctuant *là*, which have the further function of bracketing these words.)

Discussion

What are the implications of these results for a general theory of bilingualism? The striking contrasts between the patterns of English influence in just two not very dissimilar communities do not augur well for any simple deterministic view of bilingual behavior. Nor are they promising for attempts to impose global restrictions on the purely linguistic level.

However, the development of any kind of discourse based on more than one code must eventually come to terms with the structural differences between them. For Puerto Ricans, code-switching *per se* is emblematic of their dual identity, and smooth, skilled switching is the domain of highly fluent bilinguals. The use of individual code-switches for particular effects or functions is relatively rare in intra-group communication, consistent with the perceived ability of either language to fulfill any communicative need. The equivalence and free morpheme constraints are simple and natural strategies to achieve this kind of discourse.

The French-English example presented made clear another point: evaluation of the equivalence or any syntactic constraint is a fruitless pursuit in situations where "smooth" code-switching is not a community-wide discourse mode. Here, English use as well as speaker attitudes towards it are consistent with high-lighting, flagging or otherwise calling attention to the switch. Indeed, in order for the switch to accomplish its purpose—be it metalinguistic commentary, finding the *mot juste*, providing an explanation and so on—it must be salient, and should not pass unnoticed. One by-product of this is the interruption of the speech flow at the switch point, effectively circumventing a grammaticality requirement or rendering one unnecessary.

On the other hand, the high rate of use of borrowed material, integrated or not, well-established or momentary, appears to be serving largely referential purposes, so that these should occur without fanfare in the flow of discourse. This explains to some extent the wide range of strategies current in this community to handle English-origin material, in addition to code-switching and fully integrated borrowing. From the brief description of some of these given in the previous section, it should be evident that they do not necessarily show the same regularities or restrictions as the other phenomena, and must be studied in their own right. Moreover, none of the characteristics of the languages involved in the alternation, the contact situations or other aspects of the bilingual context would have permitted us to infer or predict the differences in code-switching patterns outlined here.

In concluding, I have been using the term "code-switching" here to refer to the alternate use of two codes in a fully grammatical way, in the same discourse, and even in the same sentence. Others use "code-mixing", "code-shifting" or other terms for the same purpose, and this poses no problem. What is important is that this phenomenon be clearly distinguished, first conceptually, and then operationally as much as possible, from all the other consequences of bilingualism which involve not alternate use, but the truly simultaneous use of elements from both codes. And within this latter category, lexical borrowing on the community level should be kept distinct from "momentary" or "nonce" borrowing by individuals, on the one hand, and on the other, from incomplete acquisition and language loss. Not least important, all of these phenomena should be distinguished from speech errors which involve elements of both languages, and which may be properly considered "interference". Of course these distinctions are easier to label than to operationalize. In practice, one type of behavior may fade into another. And given a simple utterance containing words from two codes there is not necessarily any *a priori* way of distinguishing a switch from a loanword from

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one of the other results of language contact discussed here. What appears to be the same phenomenon may have a different status from one bilingual community to another.

This leads to my final point. What data are appropriate to the study and categorization of these phenomena? Clearly. if we are presented with a sentence of unknown pedigree containing elements from two codes. we cannot be sure of anything. We need to know the community patterns. both monolingual and bilingual. the bilingual abilities of the individual. and whether the context is likely to have produced speech in the code-switching mode or not.

Similarly. an acceptability or grammaticality judgement does not reveal whether the item in question is a grammatical code-switch. an established loanword. or a commonly heard speech error among L_2 learners. And if the linguist has such difficulty making these analytical distinctions. it is unlikely that the informant should know the answers intuitively.

For an understanding of language contact phenomena. even more than in monolingual studies. corpus-based research on language use in well-documented contexts is indispensable. Subjective reactions. acceptability judgements and intuition all have their place. but they must be tied to knowledge of the community.

Notes

² The code identifies the speaker and example number.

³ See Mougeon et al. 1984 for an opposing point of view in a situation of language shift.

⁴ As opposed to nonce borrowing and other types of language mixture discussed below.

⁵ The systematic combing of such a large data base was made possible by automated manipulation of the computerized Ottawa-Hull French corpus to extract English sequences which had been identified as code-switches during transcription (see Poplack 1983a).

⁶ Our basic procedure was to operationally exclude single nouns (or compounds functioning as single nouns) unless there was contextual evidence to indicate they were being treated as code-switches (as in the examples in (8)). Incorporations of single English elements from other grammatical categories were retained as code-switches, with the exception of those which are either well-documented as loanwords (e.g. *so*: Roy 1979, Mougeon etal. 1983), or which in the Ottawa-Hull corpus satisfy the frequency criterion for loanwords.

⁷ These categories and the others which follow are rough labels for discourse behavior rather than analytical constructs, and include discourse strategies along with linguistic categories. The former will obviously show some overlap, as a single utterance can accomplish more than one function in discourse. Since our concern here is to assess the amount of attention called to or motivation for an English intervention, switches were classed preferentially into categories most clearly reflecting this. Thus bracketing of a switch took precedence over its function to provide the *mot juste*, etc.

⁸ R = retroflex r.

⁹ In fact both the largely monolingual French Vieux Hull and the highly bilingual Basse-Ville of Ottawa show intermediate patterns: in each neighborhood some people behave more like Ottawa speakers and others more like Hull speakers. This is not surprising—code-switching patterns could not possibly be determined solely by neighborhood of residence, being dependent on so many other factors (in particular, proficiency in English. Vanier and West End have many more highly proficient English speakers, to whom the *mot juste* presumably occurs easily in English. Basse-Ville is more evenly divided between speakers of high and low proficiency.) as well. More surprising is the regularity which does obtain here. We focus then on the gross differences between Ottawa and Hull.

¹⁰ By the response of the potential informant to the interviewer's quest for a "francophone born and raised in the region" and by the interviewer's assessment of the "nativeness" of his French.

¹¹ Grosjean (1982) refers to these as "speech" borrowings.

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References

Attinasi. J. 1979. Language attitudes in a New York Puerto Rican community. In
Padilla. R. (ed.). *Ethnoperspectives in Bilingual Education Research*. Ypsilanti,
MI: Eastern Michigan University.

Auer. J. C. P. 1981. Bilingualism as a member's concept: language choice and lan-
guage alternation in their relation to lay assessments of competence *Sonder-
forschungsbereich 99*. Department of Linguistics. University of Konstanz.

Auer. J. C. P. 1984. "On the meaning of conversational code-switching." Ms.

Bentahila. A. and Davies. E. 1983. The syntax of Arabic-French code-switching.
Lingua 59, 301–330.

Blom. J. P. and Gumperz. J. 1972. Social meaning in linguistic structures. In Gum-
perz. J. and Hymes. D. (eds). *Directions in Sociolinguistics*. N.Y.: Holt,
Rinehart and Winston.

Bloomfield. L. 1933. *Language History*. Ed. H. Hoijer. New York: Holt. Rinehart
and Winston.

Duran. R. (ed.) 1981. *Latino Language and Communicative Behavior*. Norwood,
New Jersey: Ablex.

Elias-Olivares. L. 1976. Ways of Speaking in a Chicano Community: aSociolinguis-
tic Approach. Ph. D. dissertation. The University of Texas at Austin.

Fries. C. and Pike. K. 1949. Coexistent phonemic systems. *Language* 25. 29–50.

Grosjean. F. 1982. *Life with two Languages*. Cambridge: Harvard University Press.

Gumperz. J. 1976/1982. Conversational code-switching. In his *Discourse Strategies*.
Cambridge: Cambridge University Press.

Gumperz. J. and Hernández-Chavez. E. 1971. Bilingualism. bidialectalism and
classroom interaction. In Cazden. E. et al. (eds.). *The Functions of Language in
the Classroom*. New York: Teachers College Press.

Hasselmo. N. 1970. Code-switching and modes of speaking. In Gilbert. G. (ed.)
Texas Studies in Bilingualism. Berlin: Walter de Gruyter and Co.

Hasselmo. N. 1972. Code-switching as ordered selection. In Finchow. E. et al.
(eds.). *Studies for Einar Haugen*. The Hague: Mouton.

Haugen. E. 1956. *Bilingualism in the Americas*. Publication of the American Dialect
Society no. 26. University of Alabama Press.

Heller. M. 1982. "Bonjour. hello?": Negotiations of language choice in Montreal.
In Gumperz. J. (ed.). *Language and Social Identity*. Cambridge: Cambridge Uni-
versity Press.

Heller. M. 1984. Strategic ambiguity: code-switching in the management of conflict.
To appear in Heller. M. (ed.). *Code-switching: Anthropological and Linguistic
Perspectives*.

Huerta. A. 1978. Code-switching among Spanish-English bilinguals: a sociolingu-
istic perspective. Ph.D. dissertation. The University of Texas at Austin.

Joshi. A. 1983. Processing of sentences with intra-sentential code-switching. To ap-
pear in Dowty. D. et al. (eds.). *Natural Language Processing: Psycholinguistic.
Computational and Theoretical Perspectives*. Cambridge: Cambridge University
Press.

Labov. W. 1971. The notion of "system" in creole languages. In Hymes. D. (ed.).

Pidginization and Creolization of Languages. Cambridge: Cambridge University Press

Lance. D. 1975. Spanish-English code-switching. In Hernandez-Chavez. E. et al. (eds.). *El. lenguaje de los chicanos*. Arlington: Center for Applied Linguistics.

Language.Policy Task Force. 1980. Social Dimensions of Language Use in East Harlem. Working paper no. 7. New York: Center for Puerto Rican Studies.

Lieberson. S. 1970. *Language and Ethnic Relations in Canada*. New York. Wiley & Sons.

di Luzio. A. 1984. On the meaning of language choice for the sociocultural identity of bilingual migrant children. Ms.

Mackey. W. 1970 Interference. integration and the synchronic fallacy. In Alatis. J. (ed.). *Georgetown University Roundtable on Languages and Linguistics* 23. Washington. D.C.: Georgetown University Press.

McClure. E. 1981. Formal and functional aspects of the code-switched discourse of bilingual children. In Duran. R. (ed.).

Miller. C. 1984. Phonetic criteria for loanword integration in Ottawa-Hull French. University of Ottawa class paper.

Mougeon. R.. Valois. D. and E. Béniak. 1983. For a quantitative study of linguistic borrowing. Paper presented at the Canadian Linguistics Association.

Mougeon. R.. Valois. D. and E. Béniak. 1984. Variation in the phonological treatment of lexical borrowings from English by speakers of a minority language Paper presented at the XIII conference on New Ways of Analyzing Variation. University of Pennsylvania.

Pfaff. C. 1979. Constraints on language mixing. *Language* 55. 291–318.

Poplack. S. 1980. "Sometimes I'll start a sentence in Spanish *y termino en español*:" Toward a typology of code-switching. *Linguistic* 18. 581–618.

Poplack. S. 1981. Syntactic structure and social function of code-switching. In Duran. R. (ed.).

Poplack. S. 1983a. The care and handling of a mega-corpus: the Ottawa-Hull French project. To appear in Fasold. R. and Shiffrin. D. (eds.). *Language Variation and Change*. Orlando: Harcourt Brace Jovanovich.

Poplack. S. 1983b. The propagation of loanwords within a speech community. Paper presented at the XII conference on New Ways of Analyzing Variation. Université de Montréal.

Poplack. S. and Sankoff. D. 1984. Borrowing: the synchrony of integration. *Linguistics* 22.1. 99–135

Poplack. S. and Miller. C. 1985. Political and interactional consequences of linguistic insecurity. Paper presented at the XIV conference on New Ways of Analyzing Variation. Georgetown University.

Prince. E. and Pintzuk. S. 1983. Code-switching and the open/closed class distinction. Ms.

Roy. M.-M. 1979. Les conjonctions anglaises 'but' et 'so' dans le français de Moncton. M. A. Thesis. Université du Québec à Montréal.

Sankoff. D. and Poplack. S. 1981. A formal grammar for code-switching. *Papers in Linguistics* 14.1. 3–46.

Sankoff. D. and Poplack. S. 1984. Code-switching constraints in functional and typological perspective. Paper presented at the XIII conference on New Ways of Analyzing Variation. University of Pennsylvania.

Sankoff. D . Poplack. S. and Vanniarajan. S. 1985. The case of the nonce loan in
Tamil. Paper presented at the XIV conference on New Ways of Analyzing Varia-
tion. Georgetown University.

Valdes. G. 1981. "Code-switching as a deliberate verbal strategy: a micro-analysis
of direct and indirect requests." In Duran. R. (ed.).

Weinreich. U. 1953. *Languages in Contact*. The Hague: Mouton.

Zentella. A. 1982. Spanish and English in contact in the United States: the Puerto
Rican experience. *Word* 33.1–2. 41–57.