The role of a dominant research experience in shaping one’s vision

Code-mixing phenomena and their constraints

Pieter Muysken

It has been said somewhat maliciously that Indo-Europeanists will tend to make their reconstructed Proto-Indo-European look like the language that they have thoroughly studied first. If they started out with Albanian, their version of the proto-language will have many features of Albanian, and so on. This subjectivism (if the observation is at all valid) may seem reprehensible, but I think there are many ways in which research that one does early on shapes one’s vision. This does not mean one is condemned to the one perspective of an early dominant research experience, but rather that this perspective is often the frame of reference onto which later ideas are grafted.

I am making this point here because it is clear that Tony Feitsma’s work is strongly shaped by a vision, which gives it unity and force. I will illustrate the role of perspective by looking at the recent work of some researchers in the field of bilingual code-switching, a subject of vivid interest to Tony Feitsma, as well as to other Frisian (socio)linguists. In fact, I will for the moment just focus on two researchers here: Shana Poplack and Carol Myers-Scotton, representing two different perspectives: alternation and insertion.

1 Alternation and insertion

Other authors might come up with a different general picture, but one could say that there are two dominant approaches to the problem of syntactic constraints on intra-sentential code switching (Muysken, forthcoming): (a) those that depart from alternation, and view the constraints on it in terms of the compatibility or equivalence of the languages involved at the switchpoint, and (b) those that depart from the notion of insertion, and view the constraints in terms of the structural properties of some matrix structure. The (a) models involve bidirectional compatibility checking, the (b) models unidirectional compatibility checking.

Under model (a) code-mixing is akin to the switching of codes between turns or utterances. Under model (b) we conceive of the process of code-switching as something akin to borrowing: the insertion of an alien lexical or phrasal category into a given structure. The difference would simply be the size and type of element inserted, e.g. noun versus noun phrase.

Here I want to claim that these ‘models’ in fact correspond to phenomena: there is both alternation between languages and insertion into a matrix or base language in the reported code-mixing data.

2 Poplack and equivalence

Shana Poplack (University of Ottawa) is the principal exponent of the alternation
The role of a dominant research experience in shaping one’s vision

perspective. She has carried out extensive research on diverse bilingual communities, including the Puerto Rican community in New York, the French-speaking community in the Ottawa-Hull region and among Finnish, Tamil and West African immigrants in Canada. She works in the variationist paradigm, in which accountable data collection and analysis procedures are stressed. In her work on Spanish/English code-switching in the Puerto Rican community (1980), Poplack refuted earlier accounts of the switchability or non-switchability of various grammatical categories and discovered that code-switching was constrained to occur largely at sites of equivalent constituent order at the place where the two languages alternate. Furthermore she has argued that apparent word-internal switches were actually inflected borrowings. In subsequent papers, some written in collaboration with David Sankoff (e.g. Poplack and Sankoff 1988), Poplack developed methods and criteria for characterizing the contrasts between smooth and flagged switching, nonce and established borrowing, and equivalence-based switching versus constituent-insertion. The overall aim of her research is to work out a clear and reproducible typology of contact phenomena, and to quantitatively identify the one(s) that historically characterize each bilingual speech community.

Notice the definition of code-switching given by Poplack (1993), which embodies this idea of alternation. It runs as follows:

*Code-switching is the juxtaposition (emphasis SP) of sentences or sentence fragments, each of which is internally consistent with the morphological and syntactic (and optionally, phonological) rules of the language of its provenance.*

The kind of data that, in my opinion, have been the basis for Poplack’s views were from Spanish/English code-mixing. They include examples such as the following, in which the elements switched do not form a single constituent:

1. Bueno, *in other words, the flight that leaves Chicago around three o’clock.*

   ‘Good, in other words, the flight that leaves Chicago around three o’clock.’

   Here *que sale de Chicago* ‘that leaves Chicago’ or even *el flight que sale de Chicago* (assuming *Chicago* to be part of the Spanish stretch for the sake of the argument - in fact it may be the trigger for the subsequent switch to English) is a constituent, but not a unique one, since it also includes the English fragment *around three o’clock.*

   An example where the several switched elements do not form a constituent at all (unless this includes the entire utterance) is again from Spanish-English code-mixing:

2. He was sitting down *en la cama, mirándonos peleando, y really, I don’t remember if él nos separó*  

   ‘He was sitting down on the bed, watching us fight, and really, I don’t remember if he took us apart.’

   Here the Spanish stretch in the middle consists of three separate constituents. The stretch at the end is a unique constituent, an embedded clause.

   A number of examples are not at all like the following two, which could be insertions, since they involve island constituents surrounded by syntactically coherent material from the other language:
(3) Yo anduve in a state of shock pa dos días.
'I walked in a state of shock for two days.'

Here the temporal expression pa dos días is clearly related to the verb anduve. Similarly:

(4) Es una little box asina y ya viene ...
'It is a little box like this and it comes already ...'

Here the post-nominal determiner asina is clearly related to the article una.

However, there is not always such a relation. A few cases to illustrate this include:

(5) (A) Right to 104th Street (B) donde tenía una casa (C) which were furnished rooms.
'Right to 104th Street where I had a house which were furnished rooms.'

Here the Spanish fragment (B) modifies Street in (A) and the second English stretch (C) modifies casa 'house' in (B). Clearly the English fragments (A) and (C) are not syntactically related. Similarly:

(6) (A) Why make Carol sentarse atras (B) pa'que everybody has to move (C) pa'que se salga.
'Why make Carol sit at the back so that everybody has to move so that she can get out.'

Here sentence fragment (B) is a complement to (A), and (C) is a complement to (B). Notice that the first Spanish fragment here contains both a verb phrase, sentarse atras and a purposive complementizer, pa'que. Neither between the English fragments nor between the Spanish ones is there a particular grammatical relation. A final example:

(7) (A) Se me hace que (B) I have to respect her (C) porque 'ta ... older.
'It appears to me that I have to respect her because [she] is ... older.'

Again, (B) is a complement to (A), and (C) modifies (B). Notice that porque 'ta 'because [she] is' does not form a unique constituent, excluding other elements, in this case older.

It is clear that this type of data cannot be handled very well in a model which takes insertion into a matrix and a dependency relation between matrix and inserted material as its primes. Rather, it has led to the idea that order equivalence across the switch point is what constrains code-mixing here. As said before, Poplack has developed a more elaborate typology of code-mixing phenomena in later work, but always taking the issue of whether a given code-mixing pattern conforms to the equivalence constraint as the starting point.

3 Myers-Scotton and insertion

This type of data contrasts rather sharply to the cases of Swahili-English switching that have been the basis for Myers-Scotton's work, which exemplifies the insertion
approach. Carol Myers-Scotton (University of South Carolina) is best-known for her work on Swahili-English bilingualism in eastern Africa, which she has approached from a number of perspectives. She has worked on code-switching since 1972, when she was confronted with abundant CS data collected by her students in a seminar in Nairobi. Myers-Scotton has written on strategies of neutrality, and on code-switching as a marked/unmarked choice. She has recently completed two books. In one volume (1993a), she summarizes her socio-pragmatic model for code-switching. The other volume (1993b) reflects a recent shift in Myers-Scotton’s interests: it tries to develop a comprehensive psycholinguistically embedded linguistic model for intra-sentential code-switching. The model proposed, the Matrix Language Frame Model, crucially incorporates the idea that there is an asymmetrical relation between the matrix and the embedded language in the switching situation; this contrasts with the symmetry implied in Poplack's Equivalence Constraint, which involves properties of both languages. Furthermore, content and function morphemes behave differently in Myers-Scotton’s model: the former can be inserted, when congruent with the matrix language categories, into mixed constituents, the latter cannot (Myers-Scotton, in press). Finally, no essential difference is made between switching and borrowing at the level of morphosyntactic integration, as in Poplack's work.

Myers-Scotton (1993a: 4) defines CS somewhat controversially as:

> Code-switching is the selection by bilinguals or multilinguals of forms from an embedded language (or languages) in utterances of a matrix language during the same conversation.

This definition is in line with the author’s structural work and fits much of the African material discussed (characterized by insertions) in that sense. It makes it necessary, however, to assume a going back and forth between different matrix languages where e.g. Spanish-English CS in the United States is discussed. Yet it is not clear that the central notion of 'unmarked CS' as such requires the concept of a matrix language.

Consider some of the cases that form the basis of Myers-Scotton’s analysis, which are representative for the data reported on in her work:

(8) Na kweli, hata mimi si-ko sure lakini n-a-suspect i-ta-kuwa week kesho.

> 'Well, even I am not sure, but I suspect it will be next week.'

Here the elements sure, suspect, and week are single elements inserted into a Swahili utterance. The same holds for:

(9) Ujue watu wengine ni funny sana. Wa-na-claim ati mishahara yao iko low sana. Tena wanawake eti hawapewi housing allowance.

> 'You know, some people are very funny. They are claiming that their salaries are very low. They also say - eh - that they are not given house allowances.'

A possible counter-example could be:

(10) Nimemaliza kutengeneza vitanda ni-ka-wash all the clothing na wewe bado maliza na kitchen.
Pieter Muysken

'I have finished making the beds and then washed all the clothing and you haven’t yet finished with the kitchen.'

Here Myers-Scotton’s model could be interpreted so as to force an analysis of wash and all the clothing as two separate constituents, inserted separately into Swahili structures next to each other. This would be akin to alternation. Alternatively, however, they could be evidence of a single English verb phrase inserted into Swahili material, to which person and tense markers have been cliticized. In this perspective, ni-ka-wash is only a word phonologically, not syntactically.

4 Dutch cases

So far, I have contrasted Spanish-English and Swahili-English code-mixing. How do other cases fit into the alternation / insertion typology? Considering for a moment the code-mixing between Dutch and other languages, it turns out that both types are present. Data which look more like alternation have been reported on in Nortier (1989) for Moroccan Arabic-Dutch code-mixing. In Nortier (1989:140) a number of examples are mentioned (five, to be precise), in which the item mixed in does not correspond to a constituent:

\[(11) \text{ xess-na m9a bestuur praten }\]

we-must with board speak

'We must speak with the board.'

\[(12) \text{ bagi neŠri dik s - smurfen voor de auto }\]

wanting I-bought that the smurfs for the car

'I wanted to buy those smurfs for the car.'

In (11) the transition occurs internal to a PP but the noun mixed in is followed by the verb governing the PP as a whole. In (12) the noun mixed in and the PP following it do not form a constituent either.

In contrast, Moluccan Malay-Dutch code-mixing as reported on by Huwaë (1992) suggests an insertional pattern:

\[(13) \text{ volgens mij a su verslaafd aan die pijnstillers }\]

according-to me I PERF addicted to those painkillers

'I think I have become addicted to those painkillers.'

\[(14) \text{ ini tong nog ada bedanken }\]

DET we still be/have give thanks

'That is we are still saying thanks here.'

In the Matrix Language Frame model proposed by Carol Myers-Scotton the grammatical morphemes have to be from the base language, and notice that in (13) and (14) the subject pronouns, the copula, and the perfective marker are indeed from Malay, even if most of the lexical material is Dutch.

Data from Turkish-Dutch code-mixing reported on in Boeschoten (1990) suggest
The role of a dominant research experience in shaping one's vision

that here an insertional pattern is dominant as well. However, in more recent work by Backus based on another Turkish peer group (Backus, in prep.), alternation patterns occur as well. Sometimes, it is simply hard to tell, and future work will need to focus on the relation between these processes.

5 My own work

Before ending I should perhaps make clear how my own research in the area of language contact took shape. In 1977 I had already been doing eight months of fieldwork on the Andean Amerindian language of Quechua in a community in central Ecuador where both Quechua and Spanish were spoken. In the middle of the night I heard my hosts at the time speak yet a third language among themselves. Upon enquiry the next morning I found out that this language, which had sounded entirely strange to me, was really a mixture of Quechua and Spanish. It was often referred to as Media Lengua 'half(way) language', or Utilia Ingrid 'little Inca-ese (Quechua)' (Muyssen, 1981). In the following example both the Media Lengua (ML) original is given and its Quechua (Q) and Spanish (Sp) equivalents:

(15) ML Chicha-da-ga xora-mi irbi-chi-ndu, ahi-munda-mi
    Q aswa-da-ga sara-mi yanu-sha, chay-munda-mi
    Sp Chicha, haciendo hervir jora, después

    ML simi-achi, ahi-munda-ga dulsi-da poní-nchi
    Q shushu-nchi chay-munda-ga mishki-da chura-nchi
    Sp la cernimos, y después ponemos dulce.

'As to chicha, having cooked corn first we strain it and then we put in sugar.'

An inspection of this recorded utterance and its equivalents will reveal that all lexical bases in Media Lengua are Spanish, the affixes all Quechua (with the exception of the gerundial marker -ndu, <-Sp. -ndo>, and the general word order and syntax Quechua.

In retrospect, a number of the questions raised by Media Lengua turn out to be the same as the questions that intrigue me about code-mixing some fifteen years later. These include:

(a) the role of morphology in language mixing;
(b) the interaction of the lexicon and the morpho-syntax;
(c) the role of typological differences between the languages involved;
(d) cases where properties of the languages involved in the mix are operant simultaneously in the utterance, rather than sequentially.
References

Backus, A. (in preparation)

Boeschoten, H.E. (1990)


Huwaë, R. (1992)

Lüdi, G., L. Milroy and P. Muysken, eds. (In press)
One speaker, two languages. Results from the ESF Network on Code-Switching and Language Contact.


Muysken, P. (forthcoming)
Grammar contact. Code-mixing and structural coherence.

Myers-Scotton, C. (1993a)

Myers-Scotton, C. (1993b)

Myers-Scotton, C. (in press)
The Matrix Language Frame Model. in: Lüdi et al. (in press).


Sometimes I’ll start a sentence in Spanish y termino en Español. in: Linguistics 26, pp. 581-618.

Poplack, S. and D. Sankoff (1988)