Towards a uniform approach to code-switching and borrowing

Book or Report Section

Published Version

Publisher: European Science Foundation

Central Archive at the University of Reading

Reading's research outputs online

TOWARDS A UNIFORM APPROACH TO CODE-SWITCHING AND BORROWING* Jeanine Treffers-Daller (University of Amsterdam)

1. The distinction between code-switching and borrowing

Making the distinction between code-switching and borrowing has preoccupied students of code-switching since the earliest studies of language contact phenomena.

While most researchers in the field consider code-switching and borrowing as fundamentally different phenomena, there are important theoretical and practical advantages to an approach which considers both both phenomena as similar.

Though traditionally code-switching 1S defined as the interaction of the grammar and the lexicon of   language A with those of   language B. and borrowing as the interaction of the grammar and the lexicon of language A with the lexicon (and not the grammar)   of   language B. these definitions have become problematic since the introduction of radical versions of X-bar theory (Stowell. 1981). Many syntactic properties are now assumed to derive from the lexicon. more specifically from individual lexical items. whereas grammar rules are reduced as far as possible to general. abstract principles, that many languages have in common (cf. for a more detailed discussion, Muysken 1990). Thus,   if one adopts this   v1ew, code-switching and borrowing automatically become very similar from a theoretical point -of view. Both   code-switching and   borrowing may be considered in the first place as the interaction of lexicons.

In monolingual discourse, the juxtaposition of elements from one lexicon 1S   determined ln   the first place by the subcategorization frames of the individual items. This means, for example. that the verb <u>to give</u> should be accompanied by at least a subject, an object and an indirect object. Most probably, the juxtaposition of elements from <u>two</u> lexicons 1S regulated by the subcategorization frames   as well   (Similar ideas have been

advanced by Bentahila and Davies. 1983). Below. I hope to show that the requirements made by the subcategorization frames of the individual items can explain most of the 'constraints' on code-switching or borrowing. and that it is therefore not necessary to stipulate special rules or 'constraints' that regulate code-switching.

If one agrees that code-switching and borrowing are to be considered as similar phenomena from a theoretical point of view it becomes necessary to find a uniform approach toward both phenomena. In fact, under this perspective, it is undesirable to formulate a set of constraints for code-switching that should say nothing about borrowing. And how could one formulate two sets of constraints (one for code-switching and one for borrowing) that are entirely different but both based on the interaction of two lexicons? Even if one tried, both rule systems would turn out to be very similar.

Constraints on code-switching that have been formulated earlier. such as the equivalence constraint and the government constraint, were assumed not to be valid for borrowing. But because of the practical difficulties that arise in distinguishing code-switching from borrowing. the constraints become hard to falsify. In fact. an easy way to invalidate potential counterexamples to the proposed constraints is to say that the examples constitute cases of borrowing and not of code-switching. But this does not solve the problem. because borrowing is a rule-governed process as well. The question why a particular element from language A (considered to be a borrowing) can be placed so easily in a particular slot remains unanswered. The problem is moved towards the formulation of constraints on borrowing.

As code-switching and borrowing can hardly be distinguished from a theoretical point of view. It comes as no surprise that making the distinction between code-switching and borrowing has proven to be extremely difficult in practice. All tradional criteria have been found to be inadequate. As examples are abundant in the literature I will not go further into this matter here. Instead I will only try to show why the criterion of syntactic integration. considered to be a relatively robust criterion by some researchers. is not always a useful criterion to distinguish borrowing from code-switching.

French adverbs (many of which are considered to be borrowings, and at least one of which, <u>pertang</u>, can be found in dictionaries) cannot be introduced into the position directly preceding the finite verb in Brussels Dutch sentences, even though this is the normal position for adverbs in Brussels Dutch:

(1a) <u>Pertang</u> ze hebben een brief gemaakt
However they have a letter made 'However they have made a letter'

(1b) *<u>Pertang</u> hebben ze een brief gemaakt
However have they a letter made 'However they have made a letter'

<u>Pertang</u> only appears more to the left, perhaps as an adjunct to S'. Clearly <u>pertang</u> is not fully syntactically integrated, even though it is phonetically integrated (<u>pertang</u> comes from French <u>pourtant</u>). Should <u>pertang</u> be considered as a code-switch therefore? This seems strange, as it is attested in the dictionary of De Clerck (1981) and is widely used and recurrent*. Or is it a 'nonce borrowing' or still something else?

Things become really complicated when, apart from (1a) and (1b) sentences are found in which a French direct object is placed immediately before the finite verb, cf. (2) and (3).

(2) <u>Le français de Bruxelles</u> spreek ik
Brussels French speak I
'I speak Brussels French'

(3) <u>Un risque de condensation</u> heb je
A condensation risk have you
'You have a condensation risk'

* As <u>pertang</u> is used widely, not only in Brussels Dutch, but also in other Brabantic and Flemish dialects, one may doubt whether <u>pertang</u> can still be considered a loanword. Even if this may be so, the restrictions on its placement should still be attributed to the fact that it is originally French. The same restrictions apply to <u>surtout</u> and <u>d'ailleurs</u>, among others (cf. TreffersDaller 1991, in prep.)

The direct objects in (2) and (3) cannot be considered as borrow-ings because of the use of Brussels French articles and because the pronunciation of the French elements is in no way adapted to Brussels Dutch*. Most probably therefore, the direct objects in (2)and (3) are to be considered as code-switches. The problem we are confronted with now is why the direct objects in (2) and (3) are allowed to appear in the position directly preceding the finite verb, whereas pertang is not. We would rather expect to find the reverse situation, as borrowings are supposed to be syntactically integrated and code-switches are not. Apparently, the distinction between code-switching and borrowing is not of much help here. The details of the analysis I propose are given below.

2. A hierarchy of switched constituents

Above it has been hypothesized that, if code-switching and borrowing are basically the same thing, it should be possible to formulate principles that are valid for both language contact phenomena. Here I will show-that the well-known 'hierarchies of borrowability' (Haugen, 1953; Muysken, 1981) can be applied to entire constituents, showing that some types of constituents are switched more often, and more easily than others. Generally I assume that constituents which are arguments of a verb or of a preposition are switched less easily than constituents which are not. Thus, in the sentence Mary gives a book to John for his birthday the pp for his birthday would be the most likely candidate for switching, whereas the subject, the direct and the indirect object would be less easily switched. This does not mean that they can't be switched, but generally they are switched less often and special adjustments have to be made to facilitate the switch (see below). The reason why non-arguments are switched more easily than arguments, is that they don't have to fit into a subcategorization frame. They have therefore less close ties with the syntactic structure of the sentence. I suppose that coordinated or dislocated NP's and PP's are least

* In Brussels Dutch condensation would be pronounced [kɔndansusə] and not [kɔ~da~sasj ɔ~].

and arguments are most' syntactically connected to the structure of the sentence. Predicative NP's and PP's and possessive PP's are supposed to form intermediate categories.

The actual hierarchy of switched constituents I would like to propose is the following:

> coordinated PP's/NP's
> dislocated PP's/NP's
> adverbial PP's/NP's
> 5' introduced by a subordinate conjunction
> predicative NP's/AP's possessive PP's
> NP's/S' as subject or object
> indirect questions;

The hierarchy introduced here owes much to the constraints proposed by Bentahila and Davies (1983) and Muysken (cf. DiSciullio, Muysken & Singh 1986; Muysken 1990) which are based on the structural relations between constituents. This approach differs from the other approaches in that it does not - in principle - make absolute claims, but only relative ones, more precisely, it claims to predict the probability with which constituents are switched. Another major difference between this approach and the other ones follows from the acceptation of the notion of a base language, defined by the finite verb (see section 3). I assume that switched constituents are syntactically integrated into the host language and that their placement does not necessarily correspond to the placement rules of the guest language. I will briefly illustrate this with three examples involving the switch of a direct object in French-Dutch codeswitching. French and Dutch differ from each other in basic word order, French being SVO, and Dutch SOV. Switches of direct objects are therefore highly relevant with respect to my hypothesis. In (4) the Dutch direct object daan vinger (that finger) is introduced after the infinitive glisser, although the normal position for direct objects in Dutch would be between the modal devoir and the infinitive glisser.

(4) <u>je dois je dois glisser</u>**daan** vinger hier I
          must I must slide that finger here
    'I have to press here with my finger'

In (2) and (3) the French direct object is followed by the finite
verb. This, however, is impossible in Brussels French. If a direct
object is topicalized*, it should be followed by the subject and
not by the finite verb, as in (5).

(5) Tout ce qui pèse lourd j 'aime pas
Everything that weighs heavy I don't like
'I don't like anything heavy'

The grammar of the guest language may determine word order <u>inside</u>
the switched constituent, as is shown in (6), where the adjective
follows the noun, according to French grammar rules. Generally,
however, in these constituents, the individual words form a fixed
combination (<u>radio liber</u> (free radio); <u>tasse de cafe </u>(cup of
coffee).

(6) Hij komt uit ne <u>sens unique </u>
        'He comes out of a one-way-street'

    If I am right in saying that switched constituents are
syntactically integrated into the host language (i.e. the language
of the finite verb), this would be very relevant from a theoretical
point of view. Up till now, only borrowings are generally considered
to be syntactically integrated, in contrast to code-switches. As
shown above 1n examples (1) till (3), this contrast cannot be
maintained. This is another indication that the differences between
code-switching and borrowing are not so absolute as has been thought
earlier and that it is possible to find unified principles governing
their use and integration.
    As the hierarchy proposed here does not make absolute claims,
its predictions are perhaps less strong than those made by e.g. the
government constraint (DiSciullio et al. 1986) or the

* Although topicalisation is not possible in Standard French
Brussels French allows to some extent topicalisation of
direct objects, (cf. de Vriendt (ms.).

equivalence constraint (Poplack, 1980 et seq.). On the other hand, the hierarchy has the advantage that it brings together the study of borrowing and code-switching, showing that the restrictions on both phenomena can be described with a hierarchy.

     In the following section I will illustrate this hierarchy with data from my corpus from Brussels.

3. A hierarchy of switched constituents in Dutch-French language contact

     In sentences with intrasentential code-switching, it is not a trivial problem to determine which constituents are switched, and which ones are not. In (2), for example, it is in principle possible to say that it is not the direct object that is switched but the finite verb and the subject.

I decided to choose the language of the finite verb as the base language of the sentence, because each sentence contains at least a finite verb (although in a minority of cases the verb may be infinite), and because the subcategorization frame of the verb determines to a large part the structure of the sentence (see for a discussion on the way the base language can be determined, Nortier 1989).

     Sentences which contain elements that can belong to both languages (such as names or cognates) at the switch site may complicate the analysis, cf. (7)

(7 Un petit canaridoe geen vuil, he, Joske, non
    A small canary makes no dirt, does it, Joske, no
    'A small canary doesn't make anything dirty, does it, Joske, no'

In sentences like (7) it is impossible to decide whether the switch takes place after canari or before it. The corpus contains 27 of such sentences (16% of the 168 switches found). These problematic cases have been kept apart, as they could not be divided unambiguously into one category, and will be discussed later.

     The switches found in the corpus have been divided into different types, according to the scheme given in table 1.

7

Table 1
Different switchtypes

one ,tull constituent	12	85.2%
two or more constituents	0	12.0%
non-constituent switching	17	2.8%
(e.g. two half constituents)	4	
TOTAL	**141**	100 %

As can be seen in Table 1, most of the switches consist of one full
constituent. If more than one constituent is involved in the
switch, generally an interjection or a conjunction forms one
of the two constituents, as in (8). Switches of more than one
constituent are not analysed any further at this point.

(8)   tu sais,   l'affuteur de scies hein, daan gink bij de been-
      houwers, de zager
      You know, the knife-grinder eh, he went to the butchers, the
      sawyer

The number of non-constituent switches is very low. This shows
that   French-Dutch   code-switching mostly takes place
at constituent boundaries, a result which is in line with other
studies (Sridhar and   Sridhar,   1980).   The   non-constituent
switches can of course   not be   accounted for   in a hierarchy of
switched constituents.
     The switches that consist of one full constituent have been
subdivided into different categories (see table 2).

Table 2
Switches of full constituents

NP's	49	41.3%
PP's	45	37.2%
AP's	2	1.7%
S'	1	11. 6%
S (-tense)	4	4.9%
relative clause		1. 7%
indirect question	7	0.8%
TOTAL	2	
	1	
	120	

in

1-

~s
~t

Table 2
Switches of full constituents

NP's	49	41.3%
PP's	45	37.2%
AP's	2	1.7%
S'	14	11.6%
S (-tense)	7	4.9%
relative clause	2	1.7%
indirect question	1	0.8%
TOTAL	120	

Table 2 shows that most of the switches consist of smaller constituents, predominantly NP's and PP's. In my view, however, it is not the length of the constituent, but the function of the constituent, especially whether it is an argument of a verb or of a preposition, which determines the ease with which the constituent can be switched. Therefore in table 3, the different categories are subdivided into smaller groups, and compared in frequency with the occurrence of the same constituents in normal discourse (both French and Dutch). The frequency counts of these constituents in monolingual discourse is based on counts made in 200 French and 200 Dutch sentences uttered by the same speakers who produced the code-switched sentences.

In the appendix, examples are given of the different types of switches distinguished in table 2 and table 3.

Table 3a
Frequency of different PP's in normal discourse and in code-switching

	Dutch text (200 sentences)	French text (200 sentences)	total F+D	switches (141 sentences)
locative PP's	29	31	60	12
temporal PP's	4	5	9	7
manner PP's	6	6	12	17
final PP's	4	3	7	4
source PP's	1	4	5	0
all adverbial PP's	44	49	93 (70.5%)	40 (88.9%)
dislocated PP's	0	0	0 (0%)	3 (6.7%)
possessive PP's	9	8	17 (12.9%)	1 (2.2%)
PP's as argument	9	13	22 (16.7%)	1 (2.2%)
total	62	70	132 (100%	45 (100%)

The frequency of adverbial switched discourse differs monolingual discourse (X^2 = have been left out in frequency is too low .

•

PP's. possessive PP's and argument PP's in significantly from the distribution in 12.39; df = 2; p < .005). The dislocated the the calculation, since their expected

Table 3b
Frequency of Different NPs in monolingual discourse and in code-switching

	Dutch text (200 sentences)	French text (200 sentences)	total F+D	switches (141 sentences)
NP subject	21	11	32 (11.8%)	3 (6. 1%)
NP object of V	27	38	65 (23.9%	4 (8.2%)
NP obj ect of P	52	46	98 (36.0%	1 (2.0%)
NP predicate	16	25	41 (15.1%	7 (14.3%)
NP adverbial	10	10	20 (7.4%)	9 (18.4%)
NP dislocated	6	9	15 (5.5%)	18 (36.7%)
NP coordinated	1	0	1 (0.4%)	7 (14.3%)
total	133	139	272 (100%)	49 (100%)

The frequency of subject NP's, predicative NP's, adverbial NP's discourse differs significantly discourse (X^2 = 37.1; df = 5; p = been left out in the calculation, low.

object NP's (object of V and P), and dislocated NP's in switched from their frequency in monolingual 0.001). The coordinated NP's have since their expected frequency is too

Table 3 shows that dislocated and adverbial PP's and NP's are switched most often. The percentage of switches of these constituents is higher than could be expected on the basis of the occurrence of these constituents in monolingual French or Dutch discourse. Switched NP's which are dislocated form 12% of the total number of switches, whereas in ordinary discourse only 3% of the NP's is dislocated. Adverbial PP's form 28% of the switches, although monolingual discourse 23% of the constituents are adverbial PP's. This supports the idea that these elements are switched relatively easily.

The frequency of predicative NP's in monolingual discourse and in code-switching does not differ much (15.1% and 14.3% respectively). As a matter of fact, these constituents are switched about as often as could be expected on the basis of their frequency in monolingual discourse. In my study of code-switched and borrowed adjectives in Brussels Dutch (Treffers. 1989), 1 showed that both integrated and unintegrated adjectives

can appear freely in predicative position as well. The results of
the present analysis reconfirm that the predicative position is
indeed open to switched elements.

On the contrary, possessive PP's and PP's which are arguments
of a verb, are switched less often in comparison to the other
switched constituents. The same is true for NP's which are an
argument of a verb or a preposition. Object NP's are found 1n 16% of
the sentences of the monolingual texts, but in not yet 3% of the
sentences with intrasentential code-switches. The same tendency can
be observed in the differences between the frequency of subject NP's
in switched discourse and 1n monolingual sentences. The relatively
.low frequency of argument-PP's in switched discourse points into
the same direction. The data clearly support the idea that
constituents which are arguments of a verb or a preposition are
switched less easily than those that are no arguments.

The results ofaX^2-test shows that the differences between the
frequency of switched NP's and the frequency of these elements in
monolingual discourse is significant and cannot be attributed to
chance. The X2$_{test}$ has been applied to the PP's as well, with the
same significant result. (cf. for more details the comments under
table 3a and 3b).

The same comparison between the frequency of constituents
in switches and 1n monolingual discourse can be made for the other
constituents. These comparisons should, however, be handled with
care, because the frequency of the other constituents (subordinate,
non-tensed and relative clauses and indirect questions) is low in
both switched and ordinary discourse. Table 4 shows the results of
this comparison.

It can be concluded from table 4 that clauses which are
introduced by an adverbial subordinator are switched relatively
easily, whereas clauses which have the function of direct object or
subject of a verb are switched less easily. The differencef between
the frequency of the constituents 1n monolingua discourse and 1n
code-switching are significant (cf. for mor details, the
calculations under table 4) .

Table 4
Subordinate clauses and other constituents 1n intrasentential code-switching and in monolingual discourse

	Dutch sentences N = 200	French sentences N = 200	total F+D	mixed sentences
S' intr by sub conj	7	10	17 (34.7%)	10 (41.7%)
S' subject/ object	8	7	15 (30.6%)	4 (16.7%)
S [-tense]	3	1	4 (8.2%)	7 (29.2%)
relative clause	1	1 2	13 (26.5%)	2 (8.3%)
indirect question	0	0	0 (0%)	1 (4.2%)
total	1 9	3 0	49 (100%)	24 (100%)

The frequency of the different categories (except for the indirect question) in switched discourse differs significantly from the distribution in monolingual discourse ($X^2 = 17.82$; df = 3; $p < .001$)

4. The syntactic integration of switched constituents

The important number of - dislocated NP's, in comparison to the frequency of dislocated NP's in monolingual discourse. may indicate that dislocation 1S a strategy used to facilitate switching of constituents that can't be switched easi In fact, from a semantic poin of view, all the dislocated NP's are either subjects or objects of the verb in the main clause. Syntactically the role of subject or object is taken over by a pronoun or a demonstrative, cf. (9), where the dislocated constituent functions as the semantic object of _faire_ (to do) and (10), where les _étrangers_ is the semantic subject of the verb _hebben_ (to have) :

(9) malS, je crois que moi j 'avais déjà fait **ça** il y a deux ans, **de steek**

But I think that I I had already made that two years ago, that stitch

'But I think that I have already used that knitting stitch two years ago'

(10) **les** étrangers, **ze** hebben geen geld he

'The foreigners, they don't have any money~ do they'

The number of dislocated PP's is not large enough to support the conclusion that dislocation.is used as a strategy to facilitate switching of PP's. In sentence (11), the only example of a switched PP that forms part of the subcategorization frame of the verb, the speaker hesitates at the switch point. This might be an indication of the difficulties involved in switching at this point.

t
e

(11) ... quand elle est mariée [PAUSE] met een Brusselaar.

'When (although) she is married to a Brusseler'

Similar hesitations can be found at switch points in sentences in which the subject or the object of a verb or a preposition is switched. Other sentences in which an argument of the verb is switched have characteristics that might facilitate switching. Thus, in (12), the French PP derrière le dos de l'inspecteur (behind the inspector's back), placed between the subject and the finite verb, may facilitate switching of the subject, as it separates the subject from the finite verb. This and other characteristics are not found regularly enough, however, to consider them as real strategies.

(12) 't **schoolmeester** derrière le dos de l'inspecteur fait comme ça.

the teacher behind the back of the inspector does like this

'The teacher, behind the inspector's back, gives a sign'

Cognates (especially names), however, are found relatively often at 'difficult switch points', a fact that has been noticed before

by Muysken (1987). My corpus contains 27 examples of sentences with
intrasentential switches which contain cognates at the switch point,
e.g. (7), in which an overlap between French and Dutth is found at the
switch point: canari belongs to both French and.Dutch, and this may
facilitate the switch between subject and finite verb.

In section 1.2 mention was made of French adverbs such as pertang
that cannot appear in the position irr~ediately preceding the finite
verb (from now on: the sentence ·initial position), whereas French
direct objects can, and most probably have to appear 1n that position,
cf. (2) and (3). In my opinion, the direct objects have to appear in
the sentence initial position, because this 1S the normal position for
topicalized constituents. In Brussels Dutch, as well as 1n Standard
Dutch, the finite verb has to follow the topicalized constituent.
Sentences like (13) are impossible and are not found 1n my
corpus.

(13) *Brussels Frans ik spreek
     Brussels French I speak

Adverbs, however, may appear in a position at the extreme left of the
sentence*, cf. (14), although most adverbs appear in the normal
position, i.e. the sentence initial position. Sometimes special
intonation patterns mark a separation between the adverb and the rest
of the sentence.

(14) En nu de dienst komt vanuit de kerk, 't kerkhof
     'And now the service comes from the church, the cemetery'

Just as French NP's, which are in general dislocated when used in a
Brussels Dutch sentence, French adverbs like pertang are placed in a
position which is only loosely attached to the syntactic structure of
the sentence.

*Elsewhere I have argued that this position is situated left of the
position for dislocated constituents (Treffers-Daller 1991,
forthc.) .

5. Discussion and conclusion

The point I have tried to make here, 1S that code-switching and borrowing should not be considered as two principally different language contact phenomena, since it is impossible, both at a theoretical and at a practical level, to differentiate between both phenomena. From this, it follows necessarily that one should try to describe the restrictions on both phenomena in similar ways. The hierarchy of switched constituents proposed here is a first step towards a uniform approach to code-switching and borrowing.

As a matter of fact, the restrictions on borrowing can be described in the form of a hierarchy, stipulating that nouns are most easily borrowed, followed by adjectives, verbs, prepositions, coordinating conjunctions, etc. (Haugen, 1953; Muysken, 1981). Poplack et al. (1988) showed that there is massive empirical support for a hierarchical approach to borrowing. Both grammatical and semantic arguments can be advanced to explain the hierarchy of borrowing. Poplack et al. assume that nouns are most easily borrowed because they are structurally less integrated into the recipient language, and because they have most lexical content. A more elaborated verS10n of the structural arguments can be found back in Muysken (1981), who states that general structural principles explain the hierarchy. Thus, for example, words that form part of a structured paradigm (like demonstratives ln Dutch deze/dit (this); die/dat (that) are less easily incorporated into the host language than words that do not form part of a structured paradigm, such as most nouns. Muysken subsumes the principles advanced in one general principle: lexical borrowing is restricted by principles of paradigmatic and syntagmatic coherence of the host language (my translation).

It is my contention that code-switching is regulated by the same principles of paradigmatic and syntagmatic coherence. In the previous sections, I have demonstrated that constituents that are most attached to the grammatical structure of the sentence, such as subject or object NP's, are least easily switched, whereas NP's that are loosely attached, such as NP's that are used adverbially, can be switched much more easily. Most probably implicational relations hold between the switched constituents.

Thus, for example, one may assume that if a person switches subject NP's, he or she will switch other types of NP's as well. The same kind of implicational relations have been assumed to exist for borrowed items (Moravcsik, 1978).

Future research should be directed at an integration of the the hierarchies that have been proposed to describe the 'borrowability' of single words and the hierarchy of switched constituents introduced here. Probably the distinction between categories and constituents will prove to be' a more valid one than the distinction code-switching versus borrowing In future research on the restrictions on mixing of elements of two languages. I will close this section by making an initial step towards such an integration.

I assume that single words like nouns, adjectives or verbs can be switched (or borrowed) more easily than full constituents, because for these categories of single words paradigmatic (that is: mostly morphologic ') routines may exist which facilitate their integration. Thus, all French verbs on -er can be easily integrated into Dutch through morphological adaptation of the suffix. These routines do not exist for, for example, prepositions, demonstratives or full constituents. As long as the categories of language A are compatible with those of language B, integration along these routines is relatively easy. On the other hand, an NP may be more easily integrated than, say, a preposition, because some syntactic slots are easily accessible for NP's (the predicative position, or the dislocated position), whereas no such slots are available for single prepositions. Thus, one could say that syntactic integration routines have been created for the integration of NP's. Elements for which neither morphologic, nor syntactic integration routines exist in the host language (e.g. single prepositions) are switched (or borrowed) least easily. Morphologic or syntactic routines may, however, differ from language pair to language pair. An agglutinating language may, for example, possess much more morphologic integration routines than a flectional language. Therefore the integration hierarchy of ' single words or constituents can vary considerably from language paIr to language paIr. The (dis)similarities between the integration patterns of different language pairs form an interesting field for further study.

Bibliography

Bentahila, A. en E.E. Davies (1983), 'The syntax of Arabic-French code-switching', Lingua 59, 301-330

Clerck, W. de (1981), Zuidnederlands Woordenboek, Den Haag, Antwerpen: Martinus Nijhoff

de Vriendt, S. (ms.) 'Theme-rheme et contraintes syntaxiques dans le francais bruxellois', unpublished paper, Dutch-speaking Free University of Brussels

DiSciullio, A.-M., P. Muysken & R. Singh (1986), 'Government and code-mixing', Journal of Linguistics, 22:1-24

Haugen, E. (1953), 'The norwegian language in America, a study In bilingualbehavior', Philadelphia Pennsylvania

Moravcsik, E.A. (1978), 'Language contact', in   Greenberg, J. Universsals of human language, Stanford, 95-122

Muysken (1981), 'Spaans en Quechua In Ecuador', Tijdschrift voor Taal en Tekstwetenschap 2, 124-138

Muysken, P. (1987b), 'Neutrality in code-mixing', in: Eigen en vreemd, Handelingen van het 3ge filologencongres, 359-373

Muysken, P. (1990), 'Concepts, methodology and data in language contact research: ten remarks from the perspective of grammatical theory', in: Papers for the workshop on concepts, methodology and data, Network on Code-switching and Language Contact, Basel, 1213 January 1990

Nortier, J.M. (1989), Dutch and Moroccan Arabic in Contact: Code-switching among Moroccans in the Netherlands, doctoral dissertation, University of Amsterdam

Poplack, S. (1980), 'Sometimes I'll start a sentence in Spanish Y TERMINO EN ESPANOL: toward a typology of code-switching', Linguistics 18 (1980), 581-618

Poplack, S & D. Sankoff & C. Miller (1988), 'The social correlates and linguistic processes of lexical borrowing and assimilation', Linguistics 26, 47-104

Sridhar, S. and K. Sridhar (1980), 'The syntax and psycholinguistics of bilingual code-mixing', in Studies in the Linguistic Sciences, 10 (1)

Stowell, T.A. (1981), Origins   of Phrase   Structure, Ph.D-dissertation, MIT

Tref f ers-Da ller, J . C .   French-Dutch language contact in (1991) Brussels, PhD-   in preparation, University of dissertation Amsterdam

Appendix
Examples of different types of intrasentential code-switches. In
each sentence the French part is underlined. The constituent
switched is printed in bold characters.

Locative **pp**

moi j'ai chaud lCl met daan chauffage
Me I have hot here with this heating
'As far as I am concerned, it heating' is warm here because of that

~dverbially used NP

de week dervoor le docteur dit encore:
'the week before the doctor said still:

Ze is super mais pas malin
'She is super but not malicious'

S' introduced by an adverbial subordinator

gaat slapen, zeit em, de perroquet tegen Marcel, parce qu'il avait
monta quatre etages,
go to sleep, said he, the parrot to Marcel, because he had climbed
four floors
'Go to sleep, the parrot said to Marcel, because he had climbed UP
to the fourth floor'

5' object

ja maar ik ben d'r zeker van, ah, qu'elle gagnait sa vie avec ca
yes but I am there sure of, ah, that she won her life with that
'yes, but I am sure, really, that she made a living by that'

indirect question

tu te rends compte hoeveel bollen dat ge moet hebben, VOOr dat te
breien?
You realise how many balls that you must have, to knit that?
'Do you realise how many balls of wool you need in order to knit
that? '

non-tensed clause

Parce que nous autres on a du signer voor borg te staan
Because we had to sign to stand security
'Because we had to sign that we were prepared to stand security'

relative clause

't is da **que j'ai dit ~ madame**. 'That
is what I said to the lady'

Paper by J eanine Treffers, discussant: Michael Clyne

J eanine Treffers' paper was the culmination point of a discussion that had evolved throughout the conference on the arbitrary nature of the distinction between 'codeswitching' and 'borrowing'. In his commentary, Michael Clyne referred to his earlier attempt to accommodate all the results of language contact (but not the processes) under the single term 'transference'. He supported Treffers' proposal for a unified approach, but expressed the desirability for a distinction to be maintained between 'code-switching' and 'borrowing' in relation to functions and processes. The hierarchy of switched constituents suggested by Treffers was strongly supported. Clyne proposed including syntactic convergence in the model as the syntactic variation surrounding the code-switch often indicated a convergence that could occur even without code-switching.

Hugo Baetens Beardsmore questioned the validity of example (1) because *pertang* was no longer perceived as a borrowing by some members of the Brussels community. Referring to her own model, Carol Myers-Scotton argued that frequency should be taken into account in determining code-switching. Andree Tabouret-Keller used Alsatian examples to illustrate her contention that the relation between 'borrowing' and 'code-switching' can be dynamic, with the perceived categorisation within a community changing over time. Lesley Milroy suggested that the hierarchy of switched constituents be examined implicationall y.