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The Cambridge Handbook of Linguistic Code-switching

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On the notions of congruence and convergence in code-switching

Mark Sebba

3.1 Introduction

Intra-sentential code-switching (hereafter CS) can be viewed as a remarkable achievement on the part of bilingual speakers. In spite of all the differences in lexis, morphology, and syntax that exist between most pairs of languages, code-switchers successfully communicate in mixed-language utterances which are fluent (at least, no less fluent than monolingual utterances) and which on the whole do not violate the grammar of either language (or at least, violate it no more than monolingual utterances). This chapter will be devoted to examining exactly what this means and how it comes about.

What do code-switchers actually achieve? An analogy from the world of sports is useful here. Consider two team games, for example, football (soccer) and basketball. It is relatively easy to identify certain components of each game that have an equivalent in the other (though we should not be too complacent about assuming this equivalence): for example, in each game there are two teams that compete, there are players, there is a ball, there is a net that acts as a goal. Equally easily we could identify certain things that are different between the two games, for example, the number of players, the parts of the body that are allowed to be used for moving the ball, the areas used or not used for certain purposes, the specific roles or functions of players, and many other things. The achievement of code-switchers is to play both games at once in a way that is satisfactory to the participants, while keeping (sufficiently if not absolutely) to the rules of both.

In our games analogy, it is clear that the fact that certain key components are “the same” across the two games is helpful in allowing them to be combined. Yet somehow the combined game is being played in spite of the differences as well. Looking at CS, we can say that part of explaining how it is possible must involve looking at what is similar in the two languages, while another part of the explanation must involve looking at the differences and how code-switching bilinguals might resolve (or avoid) these differences when they speak. In the CS literature, various terms have been given to this quality of “sameness” of grammatical categories across languages, in particular, correspondence, equivalence, and congruence.

3.2 Cross-linguistic identity in the CS literature: “equivalence,” “correspondence,” and “congruence”

Much of the work on formal (as opposed to sociolinguistic) aspects of CS starts from an assumption that it involves the interaction of two autonomous language systems, each with its own grammatical system, but with some shared elements. The notion that structural elements of one language may have equivalents in another language seems to be so taken for granted that it has rarely been discussed as problematic (but see below); rather, researchers tend to begin with an assumption that some categories or structures are “the same” across languages. An early mention of this in the literature comes from Weinreich (1964:33, footnote omitted), who remarks in connection with the transference from one language to another of bound morphemes:

It stands very much to reason that the transfer of morphemes is facilitated between highly congruent structures; for a highly bound morpheme is so dependent on its grammatical function (as opposed to its designative value) that it is useless in an alien system unless there is a ready function for it.

In fact, some notion of “congruence” or “equivalence” of categories of the grammar is implicit in many accounts of the syntax of CS even where it is not mentioned. The cross-linguistic equivalence of categories is in keeping with Chomskyan ideas of language acquisition, which require that all children be capable in principle of acquiring the same categories. Surprisingly, however, few writers on the subject of CS have produced any direct evidence that grammatical categories (in particular, phrase structure categories) are equivalent across language pairs. Rather, the existence of CS is itself taken as evidence for such equivalence. For example, Woolford (1983:535) concludes that “the ability of grammars to cooperate in this fashion to produce structurally and lexically mixed sentences strongly indicates that the category labels of different grammars have a cross-linguistic identity.”

While Woolford asserts this “cross-linguistic identity” of category labels explicitly, most other CS researchers seem to assume it. For example, Poplack’s formulation (1980) of the Equivalence Constraint appears to imply an assumption that the phrase structure categories of the languages
involved are equivalent, at least at the surface level, i.e. \(X_0\) (the category \(X\) in English) is treated by the phrase structure rules as the same thing as \(X_f\) (the category \(X\) in French). Bentahila and Davies (1983) make similar assumptions (see below). Joshi (1985a) describes a formal system to account for Marathi–English CS that requires “correspondence” between categories of \(C_m\) (grammar of Marathi) and \(G_e\) (grammar of English).

Myers-Scotton (1993a, 1995), Myers-Scotton and Jake (1995, this volume), and Jake and Myers-Scotton (1997) make use of a notion of “congruence” within their Matrix Language Frame (MLF) Model. Within this model, the Matrix Language provides the grammatical frame of the bilingual clause, but the Embedded Language may supply content morphemes that are inserted within it. “However, in order for these Embedded Language morphemes to appear, they must be checked for ‘sufficient congruence’ with their Matrix Language counterparts (Myers-Scotton 2002a:20).” This checking occurs at three levels in the mental lexicon: lexical–conceptual structure, predicate–argument structure, and morphological realization patterns. What exactly this means in practice is uncertain, however; as Myers-Scotton says (2002a:20):

However, the fly in the ointment is the issue of what sufficient congruence means. This notion has not yet been adequately refined. Very definitely, sufficient does not mean complete congruence – because, of course, content morphemes across languages are rarely completely congruent […] what constitutes congruence in contact phenomena is still largely unstudied.

### 3.3 Cross-language equivalence of phrase structure categories

In spite of the lack of clarity mentioned by Myers-Scotton, some notion of cross-linguistic identity of categories in language pairs seems to be present in all attempts to account for the syntax of CS. Usually, this takes the form of an implicit assumption that phrase structure categories (X-bar categories in the sense of Jackendoff 1977) – N, N', N'', V, V', V'', etc. – are identical across languages when they exist in both. To what extent is this assumption justified? As Deuchar points out (2005:257), “one might argue that the use of universal labels for categories such as NP, VP, VP has helped to perpetuate the view that these are equivalent categories across languages.” But clearly, if switching between languages at an intra-sentential level is known empirically to be a fact, there must be some kind of “sameness” between the categories of the two languages.

An example of an argument in the literature that relies on the cross-linguistic identity of categories is a discussion of switching among Moroccan Arabic–French bilinguals by Bentahila and Davies (1983:321). They show that while expressions like (1a) and (1b) are acceptable and common, expressions like (2a) and (2b) do not occur and are judged odd by informants. The reason, they say, is that the French demonstrative cette and the Arabic demonstrative had subcategorize different complements: cette requires N, while had requires N' (which includes the article). In (2a) cette has a N complement, and in (2b), had has a N' complement; this accounts for the unacceptability of these examples.

1. (a) **cette xubza**
   - this-FEM bread
   - “this bread”
   (b) **had le pain**
   - this the-MASC bread
   - “this bread”

2. (a) *cette i xubza*
   (b) *had pain*

Bentahila and Davies' (1983:329) conclusion that “switching is freely permitted at all boundaries above that of the word, subject only to the condition that it entails no violation of the subcategorisation restrictions on particular lexical items of either language” is clearly dependent on the categories of French having a direct correspondence with those of Moroccan Arabic which have the same labels: \(X_0 = X_f\) for the purposes of the subcategorization rules.

### 3.4 Cross-language equivalence of other grammatical categories

In the tradition begun by Poplack's (1980) now classic proposal to account for the syntax of CS by means of constraints on surface phrase structure and morphology, research has tended to emphasise the cross-linguistic equivalence of phrase structures. However, grammars of languages are not simply sets of X-bar type structures, and while identity of phrase category labels across languages may be a necessary condition for CS it is not a sufficient condition. In concentrating on identity of phrase category labels, researchers have tended to overlook other types of identity between systems that manifest themselves in CS behavior. There are numerous other categories such as number, gender, tense, aspect, definiteness, and indefiniteness, which in many languages are fully grammaticalized in spite of having some semantic basis. For CS to take place, there must be some kind of identity (or “compatibility”) between these categories in the different languages concerned as well. One of the relatively few researchers who recognizes this explicitly is Deuchar (2005:256), who defines “congruence” as “a notion of equivalence between the grammatical categories or word classes of different languages” and separates this
into two types: “Paradigmatic congruence is defined as similarity or equivalence between the grammatical categories of two languages, whereas syntagmatic congruence is defined in terms of similarity of word order (2005:256).” Let us look now at some examples where congruence between non-phrasal categories seems to be an essential requirement for CS.

3.4.1 Gender in French and Arabic

In their 1983 article, Bentahila and Davies have many examples of agreement between determiners, nouns, and adjectives in Moroccan Arabic. French demonstratives can combine with Arabic nouns, as in (3) (repetition of (1a) above). Both French and Arabic have grammatical gender and require agreement between nouns and certain modifiers (e.g. determiners and adjectives). In this example, the French demonstrative has the form cete, which is used with feminine nouns. The Arabic noun xubza is indeed feminine, although the French word that is its translation equivalent, pain, is masculine.

(3) cete xubza
   this+FEM bread
   “this bread”

On the face of it, this may seem unremarkable. The determiner and noun show agreement in gender. However, note that while gender in French and Arabic works in rather similar ways, it is in both languages a grammatical category. While certain animate nouns (man, mother, daughter, cow . . .) have their natural or “expected” gender, all inanimate things are also assigned to masculine or feminine gender, to a large extent arbitrarily. Thus “bread” is masculine in French but feminine in Arabic, while “moon” is masculine in Arabic, but feminine in French, and “sun” is exactly the other way around. Therefore, the fact that linguists have given the same labels, “masculine” and “feminine,” to the two genders in Arabic and French obscures the fact that here we actually have two largely arbitrary sets that divide the whole of the nominal vocabulary of the language into two. We could equally well say that in French all words belong either to one of two disjoint sets, Set A and Set B, while in Arabic each word is assigned either to one of two other disjoint sets, C and D. Now what the bilingual speakers of Moroccan Arabic and French have done seems more noteworthy. They have treated the French Set A as equivalent to the Arabic Set C, and the French B as equivalent to the Arabic D. Just as the use of the same labels across languages for phrasal categories has led to a default view that these are equivalent (as Deuchar has pointed out), we could say that calling these sets “masculine” and “feminine” in both French and Arabic has somewhat obscured the work that code-switchers must do to treat them as “the same.”

3.4.2 Noun class agreement in Swahili

Swahili, in common with other Bantu languages, has a rather large number of noun classes (about ten), each of which induces a distinctive set of agreement markers on verbs, adjectives, possessive markers, and various other morphemes. All native Swahili nouns belong to one of these classes and the class of each noun in a sentence will be displayed by other words in the sentence that show agreement with it. Where a non-Swahili noun is present, as in (4) and (5) below, normally one of three markers occurs on items in grammatical agreement with it: wa = Class 2 nominal prefix: agreement prefix for “living things” (singular or plural); f / y = Class 9 nominal prefix: agreement prefix for “inanimate things” (singular); z = Class 10 nominal prefix: agreement prefix for “inanimate things” (plural).

(4) Swahili–English
   mwaika wa tatu i-le long paper i-li-kwpa wa nini
   year CL3-of three CL1-PAST-INF-INF-3OF CL19-of what
   “In the third year what was that long paper for?”
   (Kibogoya 1995)

(5) Swahili–English
   Tour Operators wa-na-wa-chukua across the border to Tanzania
   tour operators cl20b-PRES-cl20b-carry across the border to Tanzania
   “Tour Operators take them across the border to Tanzania.”
   (Kibogoya 1995)

Thus the Swahili/English bilingual who produces sentences like (4) and (5) has treated at least four categories as equivalent across the two languages: (i) English “animate” = Swahili “animate”; (ii) English “animate” = Swahili “animate”; (iii) English “singular” = Swahili “singular”; (iv) English “plural” = Swahili “plural.” Although it could be argued that the Swahili agreement prefixes are assigned partly on a semantic basis even with native Swahili nouns (animate nouns take the wa- agreement prefix even if they belong morphologically to another class), the categories mentioned above are nevertheless also grammatical categories in Swahili, and it is still the case that Swahili–English speakers are recognizing the categories of English and treating them as if they were Swahili categories. This case is quite analogous to that of (3), except that the Swahili noun classes are much more numerous. It is clearer that there is no a priori one-to-one mapping from the English to the Swahili categories, and that some kind of conceptual work is going on to make the systems compatible.

3.4.3 Auxiliary + participle constructions: examples from Alsation–French, Spanish–English, and Swahili–English

Many languages have tense/aspect systems that make use of structures of the form auxiliary + participle. Where this similarity of form exists,
we might expect it to be exploited in CS. In this section we will look at three examples.

The verb systems of French and the Germanic languages are structurally similar in many ways, but also have differences both in form and in semantics. There is no general one-to-one mapping between the two, though certainly the similarities of form lead to some “false friends” and difficulties for French and German speakers learning each other’s languages. A particular construction that French and German have in common (and which English has too) is the auxiliary + past participle construction. In example (6) we have a code-switch within such a construction between French and Alsatian (a Germanic dialect spoken in Strasbourg in France).

(6) Alsatian–French
   Noch schlimmer, wenn de client recolé wurd am permiss
   still worse when the candidate failed in licence
   “Even worse, when the candidate fails in the driving test . . .”
   (Gardner-Chloros 1991:152)

In (6), the French recolé (“failed”) is treated “as if” it were an Alsatian past participle.2 The bilingual speaker who produced (6) has clearly chosen the most likely candidate of the available French structures to replace the Alsatian past participle required by wurd; or looking at it from a different angle, the speaker has chosen the most appropriate Alsatian auxiliary, wurd, to do the work of the French est (for which a more “literal” substitute would be Alsatian/German ist). Clearly some explanation is required for the ability of bilingual speakers to do this.

Spanish and English also have similar auxiliary + participle constructions, using both past and present participles. In (7), the English present participle form promising is treated as equivalent to the Spanish prometiendo, which could appear in this context following está “he is.”

(7) Spanish–English
   Siempre está promising cosas.
   always be-PRES3SG promising things
   “He’s always promising things.”
   (Poplack 1980:596)

While in (6) and (7) the structural similarities may make the substitution of one participle for the other an “obvious” strategy for bilingual speakers, example (8) shows a more complex case from Swahili and English, where it is far from clear that there is structural compatibility.

(8) Swahili–English
   likuwa discussed kwenyen approximants
   C15-PAST-INF-BE discussed in approximants
   “It was discussed under approximants.”
   (Kibogoya 1995)

In (8) the English past participle discussed forms a passive construction with the Swahili verb likuwa, which generally would be translated as “it was.” The verb kuwa is used as an auxiliary with certain verb forms in monolingual Swahili, for example, likuwa imekala “it was sleeping.” In this example, imekala is identical to a finite form, composed of the class 9 nominal prefix i-, the perfect tense inflexion -me-, and the verb stem. However, as Kibogoya (1995) points out, there is nothing corresponding to the English BE + Past participle passive construction in monolingual Swahili.3 Rather, Swahili passives are formed by using verbal affixes on the main verb stem. Compare the Swahili–English phrase (9) with its monolingual equivalent (10). Thus according to Kibogoya, (8) and (9) are not consistent with Kiswahili forms; rather, they are calqued on the English passive construction.

(9) wa-li-ku-wa beaten
   3Pl-PAST-INF-COP beaten
   “They were beaten.”

(10) wa-li-pig-wa
   3Pl-PAST-beat-PASSIVE
   “They were beaten.”

In this case again, bilingual speakers are treating a category of the grammar of language L1 as equivalent to a category of language L2. This is more complex than in the Alsatian–French and the English–Spanish examples. There, each language has a very similar construction consisting of an auxiliary verb that subcategorizes for a past or present participle. In the Swahili–English case, these obvious similarities are absent. If we treat the Swahili–English mixed passive as a basically Swahili construction that incorporates an English element, we have to see the English past participle beaten as filling the Swahili slot that normally is occupied by a dependent, but nonetheless finite, verb form. The alternative is to view the mixed passive as a basically English construction, but with the English it was, in (8), or they were, in (10), being substituted by the Swahili verb kuwa “to be” with the appropriate affixes. In this case also, the equivalence is not “given”; although kuwa is a possible literal translation of to be, it is not true in general that English it was should be translated as likuwa.

The above examples show that code-switching bilinguals must recognize, in specific language pairs, the cross-language identity of various grammatical categories. While all of these are potentially semantic categories, what is important is that they are also grammatical categories in at least one of the languages concerned.
3.5 Playing two games at once: the achievement of grammaticality in intra-sentential CS

In the previous sections we have seen how both phrase structure categories and other categories of grammar can be treated as equivalent or congruent across languages. In this section we will look at some of the strategies that code-switchers use to integrate two linguistic systems.

3.5.1 Strategies of harmonization

When congruent categories exist across the languages involved, CS can proceed straightforwardly with the grammatical categories of one language being treated as though they were the identical category in the other language. We have seen several examples of this already. Another example comes from Joshi (1985a) in his discussion of CS between Marathi and English. In Marathi the verb pataw (“persuade”) takes the complementizers la (which Joshi glosses as “to”) and ca (which he glosses as “ing”). The corresponding English verb persuade, however, only takes the complementizer to. Hence, when the English verb persuade takes a Marathi complement, only the complement la (corresponding to to) is allowed. Hence (11a) is acceptable in the code-switching mode, but (11b), Joshi says, is not:

(a) Mi tyala ghar ghyayla persuade kela la
   I he-DAT house to buy persuade did “to”
(b) ‘Mi tyala ghar ghyayca persuade kela ca
   ‘I he-DAT house to buy persuade did “ing”
   “I persuaded him to buy a house.”

(Joshi 1985a:197)

Joshi’s judgment here is based on his native intuitions as a Marathi–English code-switcher, and his assertion that la = “to” and ca = “ing” may be an oversimplification, but it appears that speakers do indeed treat la but not ca as congruent with to. Thus the requirement that English persuade should be followed by a verb with a to complementizer is met only by the Marathi verb with la.

3.5.2 Strategies of neutralization

Where the grammars of the languages concerned are too divergent to allow harmonization strategies to operate in a particular construction, speakers may nevertheless effect code-switches by means of a neutralization strategy (also called nativization, e.g. by Appel and Muysken 1987). This refers to a case where an existing structure in L1 is used to incorporate an element from L2 that belongs to an easily “switchable” category such as N or V. By doing this, the bilingual speaker avoids the necessity to inflect or otherwise adapt the L2 item. A common strategy found across language pairings is one in which a morpheme meaning something like “do” or “make” in L1 is used with a content word from L2 as a way of enabling the L2 content word to appear without affixations that are required by the monolingual L1 grammar. Example (12), taken from Dutch–Turkish data discussed by Backus (1996:278), is typical:

(12) bir sürprü taal-larni beheersen yapnyorken
   many language-PI master-INF make/do-while
   “while s/he spoke many languages”

Here the Dutch beheersen “to master” is combined with an inflected Turkish verb, a form of the verb yapmak “do, make.” Very similar strategies are common in CS modes involving languages of the Indian subcontinent, where the verb karnaa “do” or its cognates function as the infinitive operator, creating a “slot” for a more syntactically neutral element from L2. Typically this is a lexical category (such as a noun or verb) either in a bare form or in a grammatically “neutral” form such as an infinitive. However, a little caution is necessary here in identifying these forms; for example, the Dutch beheersen in example (12) is indeed the infinitive form of “to master” but it is also homophonous with the inflected present tense forms (except the third person singular).

3.5.3 Compromise strategies

In spite of the opportunities for using harmonization and neutralization strategies, in some cases where switching takes place we find structures that appear to violate the grammar of both languages. Noritier (1990) studied CS between Moroccan Arabic and Dutch and found that it followed different rules from the CS between Moroccan Arabic and French reported by Bentahila and Davies (1983). One of her findings was that about a quarter of all the Dutch nouns inserted within Moroccan Arabic stretches in her corpus were lacking obligatory definite articles (Noritier 1990:197, 208). The resulting stretches containing “bare nouns” were therefore ungrammatical from the point of view of both Dutch and Arabic grammar.

This apparent anomaly affects the Demonstrative + Noun construction as well. In Noritier’s corpus, the CS in (13b) is common, but that in (13a) is absent (note the form of the demonstrative is different from that in the data from Bentahila and Davies).

(a) ‘dik het gesprek
   this the conversation
(b) dik gesprek
   “this conversation”
   see Dutch dit gesprek, “this conversation”
Unlike the French–Moroccan Arabic examples (e.g. (3) above) in the data of Bentahila and Davies, it seems that in Dutch–Moroccan Arabic switching the Dutch Det+NP combination may not occur following the Arabic demonstrative. Nortier suggests a possible explanation that relates to the difference between Arabic and French articles on the one hand, and Dutch articles on the other (1990:208–9): “... if French articles are assumed to be more proclitic than articles in Dutch it follows that Dutch nouns can more easily be separated from their articles than French nouns, so when a Dutch NP is inserted the article can more often be lacking than when a French NP is inserted.” Whatever the explanation, the Dutch–Moroccan Arabic structure appears to be a compromise. It resembles the monolingual grammar of Dutch in having the form Demonstrative + (bare) Noun but it does not conform to the Moroccan Arabic structure, which is Demonstrative + Determiner + Noun. It is interesting, but at this stage not fully explained, that the grammars of French and Moroccan Arabic can be harmonized in respect of this construction, but the grammars of Dutch and Moroccan Arabic cannot. This kind of grammatical compromise is, of course, not the only way of dealing with incompatibilities that make harmonization or neutralization impossible or unlikely. Gardner-Chloros and Edwards (2004:108) observe that

... code-switchers take advantage of various “let-outs” to avoid the straightjacket of grammatical rules. [...] Speakers use pauses, interruptions, “left/right-dislocation” and other devices to neutralize any grammatical awkwardness resulting from switching at a particular point in the sentence [...] allowing the full resources of both varieties to be exploited while sidestepping any grammatical difficulties. They can “legitimize” combinations from languages which are typologically different, for example as regards word-order.

Some of these strategies – in particular, pauses and interruptions – are equally available in monolingual speech. While they provide convenient opportunities for code-switchers to avoid the complexities of harmonizing divergent grammatical systems, they may be frustrating for linguists looking for evidence of how grammatical harmony is achieved.

Returning to the question of how code-switchers succeed in playing two games at the same time, let us look again at one of our early examples, that of the harmonization of gender in French–Moroccan Arabic CS. From different viewpoints we could suggest at least three possible explanations for how this comes about:

(1.) The gender systems of French and Moroccan Arabic are “naturally” congruent and map onto each other in such a way that bilinguals will always automatically treat the French category “masculine” as equivalent to the Arabic category “masculine.” If this is the case, we should expect few or no exceptions (as long as the bilingual code-switchers have native-like competence in both languages), and little or no variation between different CS communities where the same language pairs are involved.

(2.) The gender systems of French and Moroccan Arabic are similar in function, but the equation of the French and Arabic categories of masculine and feminine is the result of educated speakers, who have some explicit knowledge of the grammar of both languages, treating them as equivalent. The strategy of using the French feminine form of a demonstrative with a noun that is feminine in Arabic is then more of a conscious attempt to make the systems behave harmoniously in keeping with learned rules of grammar. We would expect some level of variation between speakers as a result of different levels of (prescriptive) grammatical knowledge, and we would expect those who have no explicit grammatical knowledge in one or both of the languages to use different strategies from this one or to exhibit high degrees of variability.

(3.) The harmonized gender system is conventional, in the same way and to the same extent as the norms of monolingual language systems are conventional. In this view, CS could be seen as a “mixed system” which is the product of norms and conventions, just like any “monolingual” system, and as in the case of any language they must be acquired through a social process, whether in early childhood, youth, or adulthood. In this case, inter-speaker and intra-speaker variability should be fairly limited within a single code-switching community, but there could be substantial differences between communities with different histories of bilingualism even where the same language pairs are involved.

The first of these views is implicit in much of the literature and is in keeping with widely accepted notions of universal grammar. The second allows for the possibility that congruence between categories is partly constructed by individual speakers, while the third sees it as a product of both linguistic and social processes that may lead to different outcomes in spite of the same languages being involved. This is a view less widely held, but taken, for example, by Sebba (1998) (see also Hamers and Blanc 2000:269).

3.6 From congruence to convergence

As pointed out above, many researchers of CS start from the assumption that two independent grammars are involved. These grammars interact with each other through a CS mechanism of some kind, but in other respects retain their integrity and separateness.
These assumptions can be and have been challenged. Alvarez-Caccamo (1998:36), for example, believes that neither the assumption that “speakers who code-switch possess two (or more) identifiable linguistic systems or languages” nor the assumption that “code-switched” speech results from the predictable interaction between lexical elements and grammatical rules from these languages [...] is proven yet.” Gardner-Chloros and Edwards (2004:106–108) agree, and give four reasons why CS data are “likely to pose problems for grammatical descriptions.” In brief, these are: variability; uncertainty over the applicability of abstract categories such as noun, verb, noun phrase, clause, and, particularly, sentence; the use by code-switchers of strategies to neutralize what would otherwise be “grammatical awkwardness”; the fact that CS “frequently involves creative, innovative elements, often based on exploiting similarities between the two varieties.”

The assumption that CS is the product of two monolingual grammars can be seen as a consequence of studying CS from the viewpoint of a monolingual norm, and a reluctance to deal with linguistic variation. For the sake of objectivity, it would be desirable to study CS systems without reference to the monolingual norm, and also to bear in mind that a “mixed system,” like any other language system, is subject to development over time. In particular, prolonged interaction between languages, given the right social conditions, may lead to a greater or lesser degree of language convergence. Furthermore, if circumstances are conducive to it, the grammatical norms of the “switched” code may converge on a new, mixed, or “hybrid” set of norms (see Auer 1999).

Examples of emerging hybrid systems were observed in the Swahili–English data (8) and (9), the latter repeated here as (14):

(14) wa-li-kwa wa-beaten
3PL-PAST-INF-COP beaten
“They were beaten.”

According to Kibogoya (1995), utterances like this are modeled on English and do not correspond exactly to Swahili. Here again, there appears a construction that is possible only in the mixed code, as the Swahili verb, with its array of Swahili tense and nominal affixes (many of them without counterparts in monolingual English), functions as an auxiliary to the English past participle (which has no counterpart in monolingual Swahili).

The development of a mixed system may not involve only new, hybrid syntactic structures, but also new semantic structures. Let us look again at Poplack’s example (7), repeated here as (15):

(15) Siempre está prometiendo cosas.
always be-PRES3SG promising things
“He’s always promising things.”

Here the Spanish and English present participles are treated by speakers as being “the same category.” I.e. English V-ing is congruent with Spanish V+ndo. But in spite of their formal similarity and a good deal of overlap in meaning, the Spanish be + present participle construction does not map semantically on to the English one, i.e. there are pragmatic contexts where one is appropriate but not the other. However, longstanding varieties of contact Spanish in the United States have been shown to remap estar + present participle as the simple present progressive (e.g. Klein 1980; Silva-Corvalán 1994). Romaine comments (1995:178–179):

If bilingual speakers of typologically different languages can realign their usage in areas of the grammar where choice exists and where one or more of the possible variants overlaps with choices in the contact language, they can maximise the structural equivalence between the two languages to create more potential loci for switching. Intensive bilingualism with frequent code-switching [...] can in this way lay the groundwork for massive convergence.

As in the Swahili–English example above, the Spanish–English example (15) shows a structural integration of the Spanish and English systems. In the Spanish–English case, unlike the Swahili–English one, there is a clear structural similarity to begin with; but there are semantic/pragmatic differences in how the tenses are used according to the monolingual norms of English and Spanish. Whether the CS utterance in (15) conforms pragmatically to the norms of monolingual English or monolingual Spanish, or neither, we have a form that is different (by virtue of being structurally mixed) from both.

If CS is subject to norms and conventions like other language behavior, we should expect to find variability. For example, we should expect to find that where there are potential alternative strategies that will allow switching to take place, both (or all) alternatives will be realized. Thus in addition to the examples like (8), which show harmonization of the Arabic and French gender systems, Bentahila and Davies’s data also contain others like (16) and (17):

(16) les moustaches [...]
the-pl moustaches-pl the yellow-sg
“the yellow moustache”

(17) le trajet kulha
that-the masc journey whole-fem
“that whole journey”

As Bentahila and Davies (1983;327) point out, the lack of agreement (in number in (16), and gender in (17)) “is not due to ignorance, for the correct use of the French determiners in each case shows that the speakers are aware of the gender of the French nouns.” However, they point
out that in each case, the Arabic adjective has the inflection that would be required to agree with the equivalent Arabic noun, though not the French one. The Arabic for moustache is singular (though plural in French) and the Arabic for journey is feminine (though masculine in French). Thus we find a hybrid kind of agreement in both these examples, the determiner agreeing with the gender of the noun that is actually present, while the postposed adjective agrees with the gender of the translation equivalent.

Following Poplack (1980), it is accepted that the ability to code-switch, especially within sentences, correlates with a high degree of fluency in both languages. It is maximally fluent bilinguals, then, who should show the greatest propensity for CS and the most skill and success in using those strategies that allow it to happen. This will be true especially when the languages involved have roughly equal social as well as linguistic status, so that speakers have no motive to minimize the use of one of the languages, and where CS behavior itself is not seen as illegitimate due to purism or other prescriptive notions. This type of situation might be taken to typify the “healthiest” environment for CS, where switches are not limited by lack of competence on the part of speakers and take place in response to a positive motivation rather than as a strategy for avoidance.

The particular Spanish–English, Swahili–English, and Moroccan–French contexts that have provided a number of examples already are probably good examples of such “healthy” CS environments. Others might be “Taglish,” mixed Tagalog and English discourse in the Philippines, which Bautista (2004:226) describes as “the language of informality among middle-class, college-educated, urbanized Filipinos,” and the mixing of English and Malay in Brunei Darussalam, as described by McLellan (2005). In the latter case, typological similarities between English and Malay seem to permit a large number of categories to be treated as congruent, as shown by examples from McLellan’s corpus of (written) postings to a message board. For example, one finds English prepositions governing Malay nominal phrases (18), English complementizers or conjunctions introducing Malay verbs (19), and verbal groups containing mixed Malay–English passive constructions as in (20) and (21):

(18) the Task Force yang-rei discover the big black secret behind projek rumah expo atu-dem
   “the Task Force which discovered the big black secret behind that expo housing project” (McLellan 2005:120)

(19) tapi its time to lapaskan daddy/bapa/mummy/ibu
   but AV-leave father mother (AV = Active Verb)
   “but it’s time to leave daddy and mummy” (McLellan 2005:122)

(20) So far are we really-really tertindas by the concept so far are we really-really REDUP AV-oppressed
   “So far are we really oppressed by the concept?” (McLellan 2005:117)

(21) How sure are you all yang-rei the ex minister atu-dem, kana-past remove from office
   “How sure are you all that that ex-Minister was removed from office?” (McLellan 2005:115)

In the above examples we can see how CS and convergence may go hand in hand. A number of researchers have noted a connection between the two; for example, Clyne (1987:750), who writes: “Our studies of German and Dutch in Australia suggest that (a) the syntactic system of L1 in many individuals converges toward L2, and (b) syntactic convergence in specific sentences often accompanies code switching.” Clyne uses a notion of local syntactic convergence (perhaps similar to harmonization as discussed above) that favors switching within an utterance: “syntactic convergence will take place around the switch, apparently IN ORDER to ease code switching (Clyne 1987:753).” However, if identifying congruences is a strategy for enabling CS, as has been argued above, then these local “convergences” are the product of a more global process of convergence that is driven by the CS itself. This seems to coincide with the view of Thomason and Kaufman (1988:96), who say it is likely that convergence in a multilingual situation involves “bi- and multilingual speakers favoring structures […] that are common to some or all of the languages.” If we accept that CS is one of the mechanisms by which language convergence comes about, then we must also accept that the monolingual grammatical norms for the languages involved are subject to alteration as a result of switching (or of language contact phenomena more generally). According to this view, part of the work that bilingual code-switchers do is to “create congruence” between the two existing languages, if necessary by making adjustments to the monolingual norms.

3.7 Conclusions

What might we reasonably expect of a theory about the grammar of CS, given the central place that it has assumed in linguists’ attempts to understand both bilingual and monolingual language behavior? Here are some suggestions of desiderata for such a theory (Sebba 1998:2):

(1) It should set the syntactic and phonological limits within which CS may occur, while allowing a role for pragmatic and social factors that may determine what switching actually does occur.
In other words, it should take into account both competence and performance.

(2.) It should be inclusive enough to account for different observed phenomena across different language pairs and situations. Identifying a new CS outcome in a previously studied language pair should not automatically falsify the hypothesis; non-structural factors should be allowed to account for differing outcomes.

(3.) It should be able to account for different observed phenomena from different code-switching individuals, even those who may reasonably be considered to belong to the same “speech community.”

(4.) It should allow for a separation of the phonological, syntactic, and pragmatic levels so that a switch at one level need not necessarily be taken to be accompanied by a corresponding switch at another level.

(5.) It should be sensitive to sociolinguistic features of individual speakers as well as of the situation, such as the individual’s bilingual competence, the norms of language use within the community (for example, the extent to which CS is approved of or frowned upon), the length and closeness of language contact, and the power relations between the languages.

(6.) It should take into account the acquisition of CS behavior, including such factors as the age at which CS practices emerge in speakers and how code-switchers become socialized into these practices.

To this we might add:

(7.) It will be part of an account of other phenomena of bilingualism and language contact such as relexicalization, language convergence, inter-language, and language death; perhaps also of pidginization, creolization, and language mixing/interwining.

Clearly, the grammar of CS involves something more than just the individual grammars of two languages put together. In explaining the syntax of CS, the notion of equivalent or congruent categories across languages seems to be essential and is implicit or explicit in much of the literature. In this chapter we have looked at some of the issues involved in identifying categories as “the same” across languages and have described some strategies – harmonization, neutralization, and compromise – which speakers may use when they engage in CS. There are many researchable issues here, for example, examining the extent of compatibility ("congruence" or "equivalence") between the languages of different CS pairs, as measured by the extent to which the different strategies are used. Another important question is the extent to which the grammar of CS is dependent on what we might broadly call "sociolinguistic factors" such as the history of bilingualism in the individual speaker and the bilingual community. Is it reasonable to expect different structural outcomes depending on, for example, the extent to which speakers have explicit, school-based knowledge of the grammars of the languages concerned? Will the grammar of CS be different in two communities where the language pairs involved are the same, but the contact is old and pervasive in one case, but recent and superficial in another? In the last section of this chapter it was suggested that not only is this likely, but also that continued close contact between languages in a CS community may lead to the emergence of new norms and the gradual convergence of the languages into a new hybrid system. Thus congruence of categories may lead over time to convergence of languages.

Notes

1. "Switches will tend to occur at points in discourse where juxtaposition of L1 and L2 elements does not violate a syntactic rule of either language, i.e., at points around which the surface structures of the two languages map onto each other (Poplack 1980:586)."

2. Myers-Scotton (1993a:89) observes rightly of this example that recall "precedes the Alsatian auxiliary wurd in accordance with Alsatian syntactic specifications." The equivalent French order would be est recallé. However, she does not comment on the fact that speakers are at the same time treating the French category of past participle as equivalent to an Alsatian one.

3. Myers-Scotton and Jake (1995:1007) point out that the English past participle "does not fit into the morpho-syntactic frame normally projected in the Swahili passive construction. It does, however, fit into a frame of copula 'be' + predicate adjective in Swahili."

On the notions of congruence and convergence in code-switching