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# Codeswitching and language change: One thing leads to another?

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### Abstract

This article introduces the topic of and the contributions to this Special Issue of the *International Journal of Bilingualism*. It explores the degree to which the hypothesis that codeswitching is a cause of contact-induced language change makes sense. After reviewing a number of methodological conditions that need to be met before the question can even be tackled, I provide an overview of theories proposed to account for structural change in contact situations (Croft, Johanson, Thomason), pointing out commonalities and differences. The article concludes with an attempt to classify attested contact-induced changes on the basis of these theories, and finally revisits the question to what degree codeswitching can cause change.

### Key words

*codeswitching*

*contact-induced*

*structural change*

## 1 Introduction

This special issue of the *International Journal of Bilingualism* is about the relationship between codeswitching and language change. Both terms are used in many different ways, so I will first explain what I mean by them. “Codeswitching,” here, refers to any kind of discourse in which words originating in two different language systems are used side-by-side. “Language change” should be read as ‘contact-induced structural change’, that is: changes in the structure of a language as a result of language contact. One may wonder why we should be interested in the connection between the two phenomena. This may be best illustrated through an example. Consider the following Australian German sentences, from Clyne (1967).<sup>1</sup>

<sup>1</sup> See Clyne (1967, pp.64–68) for many other examples, as well as Clyne (2003).

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- (1) a. Jedes Jahr die Schafe werden geschert. (p.81)  
 ‘Every year the sheep are shorn’
- b. *Before that* wir haben gewohnt *about* vier Meilen von hier.  
 ‘*Before that* we have lived *about* four miles from here’

These are not normal German sentences, that is, they would be ungrammatical in Germany, because of the word order. German is Verb Second, which means that topicalized adverbs, such as ‘every year’ and ‘before that’ in our examples, trigger inversion of verb and subject. In addition, the nonfinite verb should be placed at the end of the sentence:

- (2) a. Jedes Jahr werden die Schafe geschert.  
 b. Davor haben wir ungefähr vier Meilen von hier gewohnt.

At the same time, the Australian German sentences bear a striking resemblance to the equivalent English pattern. The logical interpretation is that word order rules in Australian German have changed, under the influence of English, from German Verb Second to English SVO. Such borrowing of a word order pattern is a prototypical example of structural borrowing. Structural borrowing should be seen as a subcategory of “contact-induced change,” itself one of two types of “change” (the other one being “internal change,” cf. Section 4.1). If we take the semantics of the term “borrowing” serious, it must mean that the speaker, or someone else before him/her, has taken a structural pattern from the other language and used it in his/her base language. While the literature on language contact presents an abundance of examples where structural borrowing has clearly occurred, such as these examples from Australian German, there is relatively little discussion of the actual mechanisms through which it happens, nor of the reasons why it happens.<sup>2</sup> That is, we know the results, but we do not know very well how they came to be. It is not very likely that Australian Germans consciously targeted SVO structure as a useful addition to their German, like they may have done with content words such as ‘gumtree’ and ‘creek’ (Clyne, 1967, p.73). Our knowledge of grammatical structures is much more unconscious than that of words (though see Section 6). My goal in this article is not so much to introduce new alternative explanations for contact-induced structural change, but rather to bring some existing ones together. One possible hypothesis for what happened in Australian German is given in (3), in which (3a) is the general formulation and (3b) the adaptation to the Australian German example.

- (3a) The word order in Construction X from Language B is unconsciously applied to Construction Y, the equivalent of X in Language A. The result is that Y ceases to exist, and gives way to X. All the morphemes involved continue to be from A.
- (3b) The German Topicalization construction with subject-verb inversion (“Construction Y in Language A”) gives way to the English Topicalization construction (TopSVO; this would be “Construction X in Language B”). All the morphemes involved are German.

<sup>2</sup> Michael Clyne himself certainly is not guilty of this. His 1967 book often refers, in the vein of Weinreich (1953), to the possible sources of confusion for Australian Germans that lead to English interference in their German.

There are many problems with this account. For me, the main problem is that it does not bring us any closer to understanding **why** this particular change happened. Motivating this Special Issue is the hypothesis that the word order change is caused by frequent codeswitching, and has crept into German on the back of specific English words and expressions which brought the English word order with them. Cases of structural borrowing, that is, may be by-products of frequent lexical borrowing. Of course, this is a somewhat simplistic hypothesis if extended to change in general. For one thing, structural change has been attested where there is no lexical borrowing (Aikhenvald, 2002). However, it is plausible that at least some cases of structural borrowing benefit from previous lexical borrowing, so that at least a subset of contact-induced structural changes are also cases of **lexically-induced** structural change. Stating this hypothesis in the strongest possible terms invites the reader to shoot as many holes in it as possible. Apart from being inherently fun to do, this will surely help us all in assembling most or all of the ingredients we have to incorporate in a general theory of contact-induced language change. With that goal in mind, let me state the hypothesis in provocatively clear terms, in (4a) just for the Australian German construction, and in (4b) for structural change in general:

- (4a) The Australian German word order change is brought about by frequent German-English codeswitching;
- (4b) Structural borrowing in contact settings is brought about by codeswitching.

The next section opens the discussion by listing 10 problems with this. Discussion of these problems will lay the groundwork for an account of the relationship between structural borrowing and codeswitching. This discussion will be divided into a methodological (Section 3) and a conceptual section (Section 4). This latter section, which takes up the bulk of this article, will try to sort out causes and mechanisms of change. Section 5 is a necessarily brief attempt to construct a typology of attested changes. References to the articles collected in this volume will be found throughout this introduction.

## 2 Methodological and conceptual problem areas

At least some problems with Hypothesis (4) are the following, and I do not pretend to be complete:

a. *Variability between old and new forms*

It's possible that speakers only use the English word order some of the time, and at other times adhere to the German pattern. How often, or in what percentage of the relevant cases, does a new construction have to occur before we accept it as part of the grammar of the language, and thus as an instance of change (or, more precisely, as a change in progress)?

b. *Variability between monolingual and bilingual modes of speaking*

It's possible that speakers only tend to use the English word order when they are engaged in particularly bilingual conversations, not when mainly speaking German.

c. *Variability between more- and less-influenced speakers*

It's possible that only some speakers in the community use this word order, for example those who are relatively English-dominant.

d. *Variability between different grammatical contexts*

It's possible that the English word order mainly appears in certain grammatical contexts, for example, with temporal adverbs in Topic position in declarative or passive sentences, while other Topicalization constructions retain German order.

e. *Evidence for absence of innovative structure before contact*

It's possible that the "innovative" word order was part of German all along, perhaps in pragmatically conditioned variation with the Verb Second structure.

f. *Individual ("lexical") versus generalized ("syntactic") "translation"*

It's possible that the example in (1a) was "just" a literal translation (calque) of a complete English equivalent sentence ('Every year the sheep are sheared') that was, for some reason, active in the speaker's mind. Would that still count as an instance of change?

g. *Degree of abstraction: individual constructions versus syntactic structure*

We need to know whether the word order change only holds for Australian German Topicalization constructions, or whether it is part of a larger pattern, of wholesale adoption of English word order patterns.

h. *Comparison with other changes*

To assess what this particular change implies for our theory of change in general, we need to know whether it is somehow "typical" in the light of other attested changes in contact situations in various other language pairs, or, alternatively, that it is of a type rarely seen.

i. *Causes and mechanisms*

The explanation given is not a real explanation because it does not explain how the change came about, nor does it say what caused it. Even if codeswitching can bring about structural change, we still need to explain how this happens: how can a word ("in the lexicon") bring about a structure ("in the syntax")?

j. *Level of awareness*

It's likely that structural changes just "happen" to speakers, since we do not often attend to grammatical patterns consciously. In this respect, "borrowing" might be an accurate term for lexical but not for structural influence from another language.

The first five points are "merely" methodological and can perhaps be overcome with solid corpus-based research designs; others confront us with gaps in our theoretical underpinnings. The objections f and g question the accuracy of the analysis, and the last three points identify problematic aspects of the explanation. I will briefly take up the methodological points first.

### 3 Methodological points of attention

It is of course impossible to build a theory on two isolated examples from just one language pair. A theory of contact-induced change must look at whole corpora, at community-wide language use, at many different aspects of language structure, and at many different language pairs. This section explores the methodological implications of the first five points raised in Section 2. Thomason (2001, pp. 91–95) discusses similar points.

#### 3.1

##### ***Variability between the old and new forms***

We cannot say that Australian German word order has changed solely on the basis of the two examples in (1). We must ensure that the examples on which we base our analyses are representative of language use in the community in question. In order to know that they are representative, we need to have some idea about whether the phenomenon is frequent, whether the innovative construction is in variation with the one it ostensibly replaced, or is replacing, and, if so, what conditions the choice between variants. Obviously, we need to have “sufficient” data if we wish to make any kind of generalization (cf. Johanson, 2002, p. 64 on the oft-cited case of Asia Minor Greek). Such quantitative evidence is relatively easy to come by for structural aspects.<sup>3</sup> Word order, for instance, occurs in every utterance, and many other grammatical categories, such as possession or transitivity, will have abundant representation in any corpus. Such data on relative frequency are important not just because they illustrate the sheer existence of two “equivalent” variants, but also because they provide information on how “entrenched” (see below, and Croft, 2000; Langacker, 2000, p. 3) they are relative to one another.

#### 3.2

##### ***Variability between monolingual and bilingual modes of speaking***

We will also want to investigate the possible effects of conversational factors. Variability between German and English word order, for example, may well be conditioned by the immediately preceding context (specifically by the degree of bilinguality of the conversation, whether the conversants are in a “bilingual mode,” cf. Grosjean, 1998, which may induce more “interference”), or by the sorts of interpersonal relationships and negotiations which only conversational analysis can uncover. Before concluding, on the basis of a bilingual corpus, that Australian German word order has shifted from V2 to SVO, we may want to collect relatively monolingual data from the same informants, since the English-style word order may be limited to the bilingual register. In this volume, Halmari presents some intriguing quasi-experimental data that are relevant to this issue.

#### 3.3

##### ***Variability between more- and less-influenced speakers***

No speech community is homogenous, and the suspected contact feature is likely to be used to different degrees by different people. Ideally, we should design our study in

<sup>3</sup> This is hard to do, though, for lexical borrowings, since specific content words are not likely to occur very often in a corpus.

such a way that informants expected to use the foreign element a lot as well as informants expected to prefer the native equivalent will be included. Such variation in the informant population may take the form of, among others, generational, geographic, gender, and social variation (see, e.g., groundbreaking studies by Haase, 1992; Hill & Hill, 1986; Mougeon & Beniak, 1991; Silva-Corvalán, 1994). Correlations can then be established between background features of the speakers and the degree to which they use the new structure. If those associated with greater exposure to and/or use of the contact language are shown to use the new feature more (e.g., a younger generation, or a certain professional class), the case for contact-induced change is rather strong. Weinreich, Labov, and Herzog (1968, p. 185) urge linguists to study this aspect of change, which they refer to as the “embedding problem.” The contributions to this volume by Skaaden and Türker also bear on this issue (also see Toribio, 2004).

### 3.4

#### ***Variability between different grammatical contexts***

Formal changes in a language can be stated at various levels of abstraction. It is a bit imprecise, for instance, to say that “word order” has changed in a given language. Is it “basic word order” (the “normal” order in declarative, pragmatically neutral, main clauses, cf. Whaley, 1997, p. 80) that has changed, or is it word order in a specific construction, such as topicalization or interrogative? To take a different example, Silva-Corvalán (1994) and others, have clearly shown that the study of “pro-drop,” or rather its expected demise, in contact varieties of Spanish in the U.S., has to take into account the various grammatical constraints on the use of subject pronouns in monolingual Spanish. Simply positing that English, with its categorical use of overt subjects, will cause Spanish speakers to use more subject pronouns at the expense of zero subjects, would ignore the fact that the incidence of pro-drop is not equally likely in all grammatical contexts.

### 3.5

#### ***Evidence for absence of innovative structure before contact***

Before accepting a form as “new,” we actually have to demonstrate that it was not part of the language all along. Clearest evidence, of course, would be total lack of attestation in the precontact variety, but in syntax such evidence is not always easy to get. In addition, many languages that are currently heavily dominated by another language, do not have monolingual speakers anymore who can act as a yardstick, while precontact records have often disappeared or are nonexistent (Nettle & Romaine, 2000, p. 70). Sometimes, comparison with related languages spoken elsewhere can yield fruitful results (see, for instance, Aikhenvald, 1996, p. 84; Owens, 1996, p. 290).

In our specific example, if we want to prove that this change is the result of English influence, we obviously need to go beyond merely showing that the English and Australian German word orders are similar: We also need to show that such word orders do not exist in topicalization constructions in Germany, certainly not in the dialects spoken in the areas from which emigration ensued (see Dorian, 1993, p. 137). Here we touch on the deceptively simple distinction between **internally** and **externally induced change** (see Section 4.1).

To summarize, what would be needed to state with any confidence that Australian German has changed its word order rules to converge with English, are the following:

- (5a) an assessment of how common the new structure is in absolute terms, and in relation to the old structure, if that is still around as well;
- (5b) if there is variation between old and new structure, an assessment of the social, communicative, and linguistic (in its broadest sense) background factors that seem to influence the choice between the two;
- (5c) a demonstration that the new form is indeed new to the “borrowing” language.

On the basis of such carefully collected data we can begin to assign structural deviations to “mechanisms” and “causes,” such as attrition, imperfect acquisition or momentary interference from the other language. In doing so, we move from description to explanation, and with it comes a new set of pitfalls, some of which were mentioned as Points f–j in Section 2. We turn to those now.

## 4 Causes and mechanisms of contact-induced change: Models and theories

This section will attempt to sort out the various factors that seem to be involved in explaining language change, especially of the contact-induced kind, and draw out the commonalities underlying the various theoretical proposals available to date. Particular attention will be given to the role CS may or may not play. Section 4.1 introduces some of the issues in general terms; Sections 4.2–4.4 focus on three individual theories.

### 4.1

#### *Issues to be accounted for*

The last five problems in the list in Section 2 have to do with the **explanation** of language change. They can be paraphrased as involving the following three tasks (cf. Györi, 2002, p. 131):

- (6a) describe particular changes and generalize to establish a taxonomy and/or typology of changes;
- (6b) generalize from these to establish what the basic mechanisms of change are;
- (6c) explain what caused these changes and how they spread.

We could add a fourth task: predict future changes. All theories of language change are skeptical, however, about what can be achieved in the way of prediction (for instance Croft, 2000, p. 54; Field, this volume; Weinreich et al., 1968, pp. 99–100, 186). Johanson (2002, p. 50), while crediting Thomason and Kaufman (1988) for their scale relating social factors and degrees of change, doubts the feasibility of combining sensitivity to detail and universal validity. At best, existing knowledge allows positing rules of thumb. Thomason (2001, p. 61, 77, 85) herself says that, given the right social circumstances, anything goes, primarily because attitudinal factors allow deliberate change, which is unpredictable by definition. Matras (2000) ambitiously asks the question “how predictable is contact-induced change in grammar?” His answer is a cautious

one: given certain circumstances, one can predict for certain subsystems of grammar what course change will take, or at least make “an intelligent guess.” He correctly states that we will first need to build an inventory of what proves contact-susceptible and what does not. Ultimately, Matras is able to show that for one class of grammatical elements, utterance modifiers, a function-derived hierarchy can be set up that explains, after the fact, why we have the order of changes we observe, and from there, of course, prediction is possible.

The first half of the third task mentioned above, looking for causes, is also full of pitfalls. Chiefly, this is because causation of language contact takes place at various levels, and many factors interact (Johanson, 2002, p. 1). Some descriptions of change address structural factors (e.g., gaps in the system), others address the type or mechanisms of the change (e.g., reanalysis), yet others the social context in which the change arose (e.g., language contact or desire for upward mobility). Relevant in this connection is the distinction between ultimate and proximate causes. Ultimate causes of language change are likely to be sociocultural (Kontra, 2001; Thomason & Kaufman, 1988), while proximate causes include cognitive, attitudinal, motivational, and, probably, purely structural factors (Field, this volume; Györi, 2002, p. 148, 158). In any case, most researchers do not want to be pinned down on the issue of causation. Johanson (2002, p. 50), after surveying various social and structural aspects of language change, sums this up well: “Let me stress once again that I do not consider any of the structural factors described above nor any social conditions to be the causes of language change; I merely regard them as circumstances which potentially promote or prohibit influence.” Thomason (2001, p. 60) makes a distinction between “predictors” (social and linguistic factors that drive change), “mechanisms” (the processes through which change is effected), and “results” (the visible effects on the changing language). We will see that the distinction between predictors and mechanisms, though a useful one, is not always easy to make.

With so many factors involved, social ones setting the frame within which linguistic factors determine the details, it is no wonder that it is difficult to arrive at a generally accepted theory. In addition, there is the basic question whether contact-induced change should be separated out from a general theory of change. I will assume, in what follows, that it is better to strive for a general theory of change, mainly because bilingualism is one of the more important social factors promoting change, because internal and external factors often conspire (Clyne, 2003, pp. 93–96; Dorian, 1993, p. 132, 136; Romaine, 1989; Thomason & Kaufman, 1988, p. 61), and because, as Croft (2000, p. 8) argues, there is no **categorical** difference between so-called internally induced and externally induced change. It is important to note, though, that “structural borrowing” is only a subtype of contact-induced change. In addition to direct importation (borrowing), there is also indirect change, in which the change is induced by the circumstances of contact, but do not involve actual borrowing (see Section 5). Indirect changes are especially likely to involve a combination of internal and external causes (cf. Dorian, 1993, pp. 136–140; Romaine, 1989, p. 377; Thomason, 2001, p. 62).

While there are various general works on language change, some of which pay attention to contact-induced change as well (e.g., Harris & Campbell, 1995; Hock & Joseph, 1996; Keller, 1990; McMahan, 1994), I will focus on three book-length treatments

of contact-induced change.<sup>4</sup> They are written from three completely different perspectives, and, happily, tend to reinforce each other. Croft (2000) is about language change in general, not necessarily contact-induced, but the nature of his theory of language is such that all change is contact-induced (p. 8, 55). Johanson (2002), an updated translation of a 1992 German original, is a synthesis of work on contact effects involving Turkic languages, but with such attention for theoretical implications that the work may well serve as the introduction to a general theory of contact-induced change. Most familiar to students of language contact will be Thomason (2001), partly an update of Thomason and Kaufman (1988), written from the perspective of the historical linguist. Intellectually, all owe a lot to Weinreich (1953). In addition to these works, most models of codeswitching also address the issue of change. In what follows, I will outline the three contributions mentioned above, but also insert insights contributed by Myers-Scotton, Muysken and others where appropriate.

Codeswitching and structural borrowing often co-occur in bilingual corpora, which suggests that they are intimately related. Yet, there are very few studies that study both phenomena together in one and the same corpus.<sup>5</sup> Codeswitching studies, including my own (Backus, 1996; Halmari, 1997; Haust, 1995; Nortier, 1990; Treffers-Daller, 1994, and many others), tend to be strictly synchronic, and typically offer a more or less exhaustive survey of CS in any given corpus of bilingual speech. Any structural deviations are generally just mentioned in passing. Studies of structural borrowing, on the other hand, provide overviews of the structural changes a language has undergone under contact, or detailed investigations of a particular change. These studies tend to mention in passing that speakers also use many words from the other language. The reasons for this separation of research traditions are not very clear.<sup>6</sup> In the following, I assume no categorical distinction between lexicon and syntax, and that insertional codeswitching is the synchronic reflex of lexical borrowing. These assumptions entail that CS and structural borrowing must be instantiations of the same process: they constitute different aspects of language change. Unless I am mistaken, the theories of Croft and Johanson share these assumptions.

## 4.2

### **Croft (2000)**

Croft (2000) combines intellectual contributions from Cognitive Grammar (Langacker, 1987, 1991), especially its “usage-based” character, and theories of biological evolution to arrive at a wholly original theory of language change. Croft’s position is relatively close to Weinreich, Labov and Herzog (1968), Keller (1993), and grammaticalization theory

<sup>4</sup> I did not have timely access to the recent book by Van Coetsem (2000), which should probably be included in an overview such as this one. In addition, of course, there are many monographs about structural changes in particular languages, for example, Silva-Corvalán (1994) on English influence on Spanish in Los Angeles, De Reuse (1994) on Chukchi influence on Yupik, Haase (1992) on Romance influence on Basque, and Sarhimaa (1999) on Russian influence on Karelian.

<sup>5</sup> Which is mildly surprising since Weinreich (1953), in so many ways a model for much work in this area, did combine the two topics.

<sup>6</sup> They are also interesting in themselves; my bet is that they mostly stem from the strict divisions between synchrony and diachrony and between the lexicon and the grammar that most theories of language entertain.

(Hopper & Traugott, 2003), but his range is considerably wider. Considering the options a speaker has before saying something, Croft makes a three-way distinction between “**normal replication**” (using familiar words and patterns, resulting in the “perpetuation of the current state of affairs,” “stability” or “absence of change”), **innovation** (using a word or pattern not used before, synonymous with “actuation” in Weinreich et al., 1968, p. 186, and also referred to as “**altered replication**”; Croft, 2000, p. 4), and **propagation** (choosing the new rather than the old word or pattern, synonymous with “transition” in Weinreich et al. 1968, p. 184; another term used frequently is “diffusion”). All three, Croft argues, are necessary parts of any description of change (cf. Thomason, 1999, p. 23). A change starts its life as an innovation. Concretely, this happens when a speaker says something in a certain way that does not conform to convention up to the point of speaking. Many innovations will be ephemeral (cf. Thomason, 2001, p. 130). Only a small subset will “catch on,” with the speaker herself and with others in the speech community: these are propagated (Langacker, 2000, pp. 17–19). On the other hand, it is likely that successful innovations occur many times in the speech of many individuals at different times (Thomason, 2001, p. 138). In any case, once an innovation has been coined, speakers have to **select** between the old and the new form (cf. Thomason, 2001, p. 88; Weinreich et al., 1968, p. 156). Propagation occurs whenever people select the new form.<sup>7</sup>

Discussions of language change are mostly about propagation. It is, after all, difficult to imagine how one would study innovation. For one thing, if an innovation does not catch on, it is not propagated, and all traces disappear. Second, once we become aware of a change, it has already been propagated: its moment of conception, the innovation, is likely to remain shrouded in unrecorded history. All we can do is postulate the circumstances, that is, the possible causes and mechanisms that led to the innovation (see the discussion of “creativity” and “analogy” in Skaaden, this volume). Studying synchronic language use, such as is typically done in codeswitching studies, may provide us with useful insights. They most certainly provide insights into propagation, but only if codeswitching data are conceptualized as involving the selection of “new” forms that find themselves in ongoing competition with “old” equivalents. A challenge for the near future would be to combine the synchronic outlook of codeswitching studies (and sociolinguistics in general) with the diachronic outlook of historical linguistics (cf. Muysken, 2000, p. 264). Croft and Johanson (Section 4.3) both offer numerous suggestions as to how this can be done.

Given the question that motivated this volume, we are interested in what theories have to say regarding CS as a possible cause of innovation and propagation. In keeping with the three basic questions formulated in (6), Croft’s approach focuses on causes and mechanisms. It is particularly hard to distinguish between these two (Field, this volume), and they are often lumped together. Croft actually refers to the mechanisms of change as “causal mechanisms” (p. 79). Having said that, he carefully distinguishes between the various causal mechanisms in two ways: whether they achieve stability, innovation, or propagation, and whether they are intentional or nonintentional (p. 8). I will suggest that this division in two dimensions is directly relevant to the problematic distinction between codeswitching and borrowing.

<sup>7</sup> In the case of a form that is being lost, for example, a case marker, this new form may be zero.

For “normal replication,” that is, for maintaining the system as it is (cf. Halmari; Türker; Treffers-Daller, this volume), the **intentional** mechanism is simply the wish to “conform to convention.” However, most of the time when we say things the way they are always said, the mechanism that is guiding us will be **nonintentional**. Croft calls this mechanism “entrenchment,” in keeping with the usage of this notion in Cognitive Grammar (Langacker, 1987, 1991, 2000, p.93), where the term refers to the degree to which an element, be it a lexical item, a construction, or a syntactic pattern, is “known.” The difference between the intentional wish to conform and the nonintentional selection of what is most entrenched can best be illustrated with an example (also see Mahootian, this volume). If I want to refer to a government in a random Dutch sentence, I will normally use the word *regering*, because that word is deeply entrenched in my grammar. Most of the time, I will not be aware of the selection process, so that I’m simply using it nonintentionally, in Croft’s use of the term.

Now, were I to refer, still in a Dutch sentence, to the government of the U.S., I might, influenced by American journalistic prose, use the English word *administration*. In doing so, I would produce an innovation the first time I use it, and achieve propagation all subsequent times. This innovation may, again, have been produced intentionally or not. For innovations, the causal mechanisms are likely to be intentional, here something like “use of the best available word” (if I somehow feel that *administration* is a better word for the American government than just plain *regering*), or “act of identity” (if I want to show off my knowledge of American political jargon). To summarize, every time I say *regering*, intentionally selected or not, I achieve normal replication, and thereby increase its degree of entrenchment; every time I say *administration*, again irrespective of intentionality, I achieve propagation.

Sometimes, however, people produce innovations without wanting to. In that case, they have produced an innovation through a nonintentional mechanism. Most cases of structural borrowing may be presumed to start as nonintentional innovations, because it is unlikely that speakers consciously try to imitate foreign word order, foreign use of classifiers, cases, or Aktionsart categories, etcetera, at the initial stages of such changes. They may do so later, when these new grammatical patterns have started to establish themselves, and the choice between native and foreign structure is sensitive to the same kinds of considerations as the choice between a native and a foreign word, but at the very beginning, such patterns are not likely to be accessible for speaker reflection. It is more likely that they just “happen” to speakers.<sup>8</sup> Croft (2000, pp. 76–78) includes reanalysis, hypercorrection and others among the nonintentional mechanisms of innovation: we will have to work out whether these established mechanisms are enough to accurately describe contact-induced changes (see Section 5).

Occasionally, the motivation for borrowing the new category resides in the mere fact that the borrowing language did not have this category, and that the bilingual speakers thought it should once they started to appreciate how handy this particular category they had noticed in the contact language would be in their own language. In such cases, the term “systemic gap” is often applied, on analogy with “lexical gap.”

<sup>8</sup> Myers-Scotton’s (1997, p.2) remarks about “psycholinguistic stress” as a cause of CS are relevant here (also see Bolonyai, 2000, p.88 for more discussion).

Very few cases have been convincingly demonstrated. One candidate is a necessitative construction in Karelian (Sarhima, 1999), borrowed from Russian and containing the Russian adjective *dolžen* ('obliged'). This construction, which roughly means 'it is necessary that', takes its place among three native Karelian necessitative constructions, one frequent one ('one must') and two rare ones ('one should' and 'it is mentioned/seen that ...'). Crucially, the borrowed construction has a fairly narrow deontic meaning, it refers to obligation based on social rules and traditions, or official stipulations. This meaning is not very well represented among the three native constructions. Sarhima (1999, pp. 152–155) states that this semantic category was only weakly grammaticalized, and relied on a lot of contextual inference to be drawn out. Borrowing the Russian construction instantly filled this syntactic gap.

Croft's intentional causal mechanisms for selection and innovation clearly parallel the work done on communicative motivations for codeswitching (cf. Mahootian, this volume). Functional or communicative explanations common to both include accommodation, identity marking, expressiveness, and prestige borrowing, or, more generally, the wish to identify with a particular social group (Croft 2000, p. 166; also recall the example of Dutch *regering* vs. English *administration*). This suggests that codeswitching itself is not a causal mechanism for language change. Rather, codeswitching is an instantiation of change. It has to do with **how** change is effected, not with **why** it happens. Sometimes it will instantiate innovation, sometimes propagation (also see Field, this volume), and once the foreign word or pattern has become the established and unrivaled element in the new language, it has ceased to be change and instead instantiates normal replication. It is "just selected as the simple replication of the existing structure" (Croft, 2000, p. 73). Obviously, it has also ceased to be codeswitching then.<sup>9</sup> If CS is change, the question whether codeswitching may cause change becomes quite a meaningless one, except in the sense that codeswitching may facilitate further changes (see the discussion of Johanson's theory below).

The difference between intentional and nonintentional causal mechanisms behind the selection of a foreign lexical element is relevant for one of the most hotly debated issues in the CS literature: the alleged difference between codeswitching and borrowing. If a word has achieved loanword status, it has achieved a high degree of entrenchment. It has become **conventionalized** in the speech community in question (Croft, 2000, p. 76).<sup>10</sup> So far, the difference between codeswitching and borrowing is clear. However, as is the case for all lexical items, the mechanism that produced it can be intentional or non-intentional. If its selection was intentional, the causal mechanism is one of the familiar motivations for lexical choice. This may be something purely semantic, for example the best fit with the intended meaning, but it may also have to do with the contrast between

<sup>9</sup> All this is easiest to conceptualize with insertional codeswitching and lexical borrowing, but it applies to interference and structural borrowing as well.

<sup>10</sup> Closely related terms are usualization, routinization, and habitualization (see Györi, 2002, p. 151; Langacker, 2000, p. 3; Thomason, 2001, pp. 135–136). That codeswitching can be so entrenched that the use of foreign words and patterns instantiates normal replication fits well with some accounts of CS in the "pragmatic" literature on the phenomenon (see Alvarez-Caccamo, 1998), which reject the monolingual bias inherent in much work on CS. "Codeswitching" is obviously a misnomer in such circumstances, since speakers are just using one, etymologically mixed, code.

languages. What distinguishes words of foreign origin from native words is that they can potentially be used to exploit the indexical values associated with that language in the speech community. The important thing to realize is that they can be used for this purpose **irrespective of their degree of entrenchment**: even well-established loans are sometimes used because of the indexical values of the language of its provenance (see Hill & Hill, 1986). To be sure, this is clearly very similar to what happens when we use elements from particular styles or registers for communicative effect, though we associate register membership with a relatively small group of content words. Most of the lexicon, including most function words, is shared between all registers of a language, so the majority of words cannot index any one register. In a bilingual situation, virtually every word clearly originates in only one of the two languages, and by virtue of this language membership every one of them can index the values associated with that language. What all this comes down to is that the difference between codeswitching and borrowing is sensitive to two **independent** dimensions: the diachronically determined degree of entrenchment (a conventionalized foreign word is a borrowing, no matter why it is used in a particular conversation) and whether the synchronic mechanism for lexical choice was intentional or not (an intentionally used foreign word is a codeswitch, no matter how conventionalized it is).<sup>11</sup> A loanword, that is, can be used as a codeswitch.

To summarize, whenever speakers conform to convention, the system remains stable. Whenever they do not, they either produce an innovation or they reinforce an ongoing change. If the innovative or ascendant element is a word or structure from another language, this change is contact-induced. The mechanism that produced it may be intentional or nonintentional. Intentional motivations include the usual reasons why people codeswitch, the relevant nonintentional mechanism is simply that the new word or structure has been gaining ground, and, therefore, has a degree of entrenchment that is high enough for it to be selected unwittingly.

### 4.3

#### **Johanson (2002)**

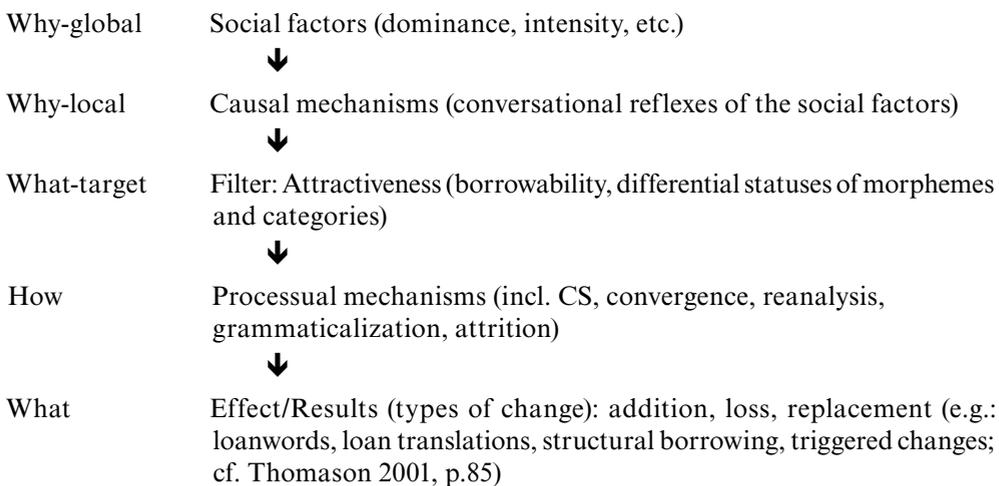
Though Johanson (2002) is in agreement with others that social factors are the ultimate causes of change, his main point is that structural factors play a larger role than is often assumed. They are hypothesized to play a role in determining which elements of a language are going to change. That is, Johanson claims that (a) some structures are easier borrowed than others, and (b) some structures more easily resist influence, independent of social circumstances. This echoes Thomason and Kaufman's (1988) scales of borrowability, as well as the "constraints problem" of Weinreich et al. (1968, pp. 183–184), but Johanson fills in the structural factors involved at a much more concrete level. The pivotal notion is "attractiveness," which, briefly, entails that a given structure's degree of attractiveness determines how easily it is borrowed (i.e., used as an innovation or selected as the propagation of a new variant) and how impervious it is to foreign influence (i.e., promoting normal replication).

<sup>11</sup> In order not to complicate things, I ignore the technical definition given to lexical borrowing by Poplack and Meechan (1998), which defines a loan as morphosyntactically integrated. This dimension is completely independent of my suggestions in this article.

Johanson's comparison of various contact situations, all involving Turkic languages, allows the tentative suggestion that "certain structural features are *attractive* in the absolute sense that they especially lend themselves to copying," or, alternatively, prove especially stable in the face of an imposing language (p.2). Importantly though, the attractiveness of any feature "is relativized by the typological relations between the given contact languages," since greater similarity facilitates copying. Attractiveness, that is, is akin to a precondition, or a virus (see Field, this volume), waiting for the right circumstances to blossom. These right circumstances are brought about by, on the one hand, social factors (also see Skaaden, this volume), and, on the other hand, what the contact language happens to be. The notion must be seen against the background of overly optimistic past tendencies to invoke structural characteristics of languages to "predict the structural conditions affecting contact-induced change" (p.41), in which, for instance, the relatively vague notions of drift and naturalness often played a role,

It is not so easy to determine where attractiveness fits in with Croft's model. I suggest we can situate it as a filter that applies independently of the causal factors and mechanisms, as in Figure 1. Sociopolitical and economic factors, causal mechanisms and attractiveness all provide predisposing circumstances for change, but they do not work the same way. Social factors are ultimate causes, and either facilitate or obstruct change in a global sense, while causal mechanisms are proximate causes, and reflect the social ones at the local level of actual conversations. Attractiveness, then, regulates what changes and what does not. This is in keeping with what Thomason (2001, p.60) proposes when she makes a distinction between social and linguistic "predictors of kinds and degrees of change." Aikhenvald (2003a, p.3) goes even further and states that the "status of categories in the languages in contact is what *determines* [my emphasis] the choice of a mechanism". Schematically:

**Figure 1**



Since Croft's causal mechanisms include both social and linguistic aspects, there is some overlap. In particular, attractiveness and degree of entrenchment are not

independent of each other. Recall that entrenchment is advanced as a nonintentional causal mechanism of both normal replication and of propagation. A structure that is highly entrenched might be so entrenched because it is attractive.

While social factors and attractiveness provide the circumstances within which Croft's causal mechanisms do their work, the bulk of Johanson (2002) is devoted to a discussion of what is traditionally called the "mechanisms of change" (in the sense of Aikhenvald, 2003a and Thomason, 2001), without the modifying adjective 'causal'. I suggest that we distinguish two kinds of mechanisms: causal mechanisms and mechanisms proper, or what I will call here, since they regulate the process itself, "processual" mechanisms. In Johanson's work, the "code copying model" describes this mechanism (Johanson, 1993, 1998, 1999a, 1999b, 2002, pp. 8–19), "code copying" being similar, though not identical to what most specialists refer to as "codeswitching." Thomason (2001, pp. 131–136) also lists "codeswitching" as an important mechanism of contact-induced change, compare Section 4.4.

First among CS models, this model covers both what is traditionally called "code-switching" (including both its subtypes, "insertion" and "alternation") and structural borrowing. Using a word originating in another language and using a structural pattern from that language are seen as different manifestations of the same process, called "copying." For reasons further explained by Skaaden in this volume, Johanson rejects the terms "borrowing" and "switching," because they paint a misleading picture of what causes and constitutes change. The model then distinguishes various kinds of copying. The main difference reflects the division between CS and structural borrowing: "global" copying equals lexical "borrowing" and insertional "codeswitching," while "selective" copying equals structural "borrowing," "interference" and similar terms.

In **global** copying, foreign morphemes are copied. The most familiar type is, of course, the insertion of a single word from the other language. Nonlexical changes are referred to as **selective** copies if they are modeled on the other language (p. 15).<sup>12</sup> Johanson distinguishes between four kinds of selective copying: material, semantic, combinational, and frequential copying.

Material copying refers to contact-induced changes in the phonology and phonetic inventory, a topic I will ignore here. In semantic copying a word changes or extends its meaning under the influence of its translation equivalent in the other language, for instance when an Australian German speaker uses *denken* 'think' instead of *glauben* 'believe' in the German versions of sentences like 'I think he won't come', on the basis of the usage of English 'think' (Clyne, 1967). As such changes affect individual words, they are only marginally related to our present topic, but note that this category shares a fuzzy boundary with structural change. If the word affected has grammatical functions, for instance as a conjunction or adposition, its changed meaning is likely to affect its grammatical behavior, in which case the change is not purely semantic (such as was the case with Mexicano question words that have become relative pronouns; Hill & Hill, 1986, p. 277).

<sup>12</sup> As mentioned in Section 4.1, there are also contact-induced changes that are not borrowed or copied from the contact language.

Combinational copying is the most important category for our purposes. It concerns the changed use of native elements, with qualities derived from their foreign equivalents. Specifically, this refers to importing a foreign combination without actually using any foreign morphemes, which results in calques or loan syntax. Johanson distinguishes between individual and generalized forms. Individual combinational code copying results in “loan translations,” in which a foreign combination is adopted, and in the process every morpheme in the chunk is replaced by its translation equivalent in the receiving language. It is important to emphasize that every such combination by definition instantiates a morphological or syntactic pattern. If the foreign model is a prepositional phrase, for instance, and the loan translation preserves its structure, the foreign pattern for forming such phrases is instantiated. Is this pattern the same across the two languages, then the loan translations are not going to effect a change: the existing PP construction is just reinforced in a pattern of normal replication.<sup>13</sup> If, however, the loan translation instantiates a pattern hitherto unknown in the borrowing language (e.g., if the borrowing language uses postpositions and/or case marking), or one of minor productivity, the cumulative effect of a great many global copies is that the foreign pattern may slowly but surely gain a foothold. Once it is used to form new combinations with native words, the combinational copy has been generalized: the language has acquired a new structure (see Section 5.1 and the papers by Skaaden & Field in this volume). Individual combinational copies are lexical changes; generalized ones are structural changes. As we will see in Section 5, most of the paradigm cases of structural contact-induced change are of this type. They show up as changes in the formal inventory for the marking of a certain category (e.g., evidentials), as changes in the marking of syntactic roles (e.g., case), as changes in the pragmatic meanings of certain sentence structures or word orders, as changes in the way clauses are combined, and so forth.

The final type of selective copying is frequential copying (p. 18). This is what happens when a language increases the frequency of a given structure because the equivalent structure is the unmarked variant in the other language. In practice, this label will only be used if the change indeed just affects frequency, and has no consequences for the (pragmatic) meaning of the structure in question, or the way in which it is used. The contributions by Zapata et al. and Skaaden in this volume discuss some of the problems involved in separating frequency changes from attendant pragmatic changes.

An intermediate category between global and selective copies, and an important one for our present concerns, is called “**mixed copies**.” These concern copied patterns or constructions that contain at least one actual copied morpheme. Haugen (1972) referred to these as “loanblends.” An example is a mixed compound noun, such as Australian German *Ketten-store* (‘chainstore’), in which both the collocation and one of the morphemes come from the contact language. If a foreign subordination structure is used along with a foreign conjunction, that would also be a mixed copy (see Section 6).

<sup>13</sup> Unless the pattern is one of two or more alternative patterns in the borrowing language. In that case, the loan translations reinforce (increase the degree of entrenchment of) this pattern, and may result in decreased frequency or productivity of the alternative pattern(s). Dorian (1993) describes such a change in the possessive system of East Sutherland Gaelic. Also see Boumans (1996).

What is left to do is explain how attractiveness works to regulate these copying processes. Attractiveness is a hypothetical construct, the characteristics of which we will have to deduce from analyzing a wide variety of attested changes (p. 43) as well as cases of stability (i.e., nonchange despite contact).

It is not so difficult to think of possible attractiveness-raising factors: ease of processing, early acquisition (which may be the same thing), semantic usefulness, and so forth (also see Skaaden, this volume).<sup>14</sup> For instance, copied structure is often analytic (while synthetic means of expressing something seldom replace analytic ones). Semantic transparency also seems to be an attractive feature (agglutinative morphology, e.g., is very stable; pp. 45–46), as is “structuredness” (p. 51) or morphological paradigmaticity (see Thomason, 2001, p. 76; Van Hout & Muysken, 1994). Relevant here is that Matras (2000, p. 580) modifies his modest claim for predictability by emphasizing that the “productivity of inherited resources available in a language” plays a role. However, attractiveness should not be seen as only an inherent characteristic that can be described for any one linguistic element on the basis of its descriptive characteristics. It needs to be seen in relation to “corresponding substructures in the contact language” (p. 54). Furthermore, it is determined in the speaker’s mind, mostly nonintentionally, during conversation. Johanson claims that typological similarity “promotes copying” (i.e., it is a causal mechanism) and that the reason for this is that the process of copying is “based on the (subjective) *perception of interlingual equivalence*” (p. 54, emphasis in the original).<sup>15</sup> This implies two things. First, it is easier to copy something that appears similar to something in the receiving language. Second, equivalence should not be understood in the sense of genuine equivalence as established by the linguist, but as subjective equivalence as established by the speaker (also see Muysken, 2000, p. 58). At times, speakers alter the structure of their language in order to create congruence with another one (Sebba, 1998, p. 6). This should probably not be taken in an intentional, teleological sense. A more accurate formulation, that captures the nonintentionality, might be this one from Clyne (1967, p. 78): “it seems that morphemic correspondence has led to confusion.” That is, the speaker does not intentionally copy (or “make a mistake”), it just happens to him (nonintentionally), and it is more likely to happen if there is a lot of similarity (cf. Haase, 1992, p. 167).

From then on, as Croft’s theory explains, the two equivalents are in competition. Every selection of the copied form increases its degree of entrenchment. A consequence of this is that typological distance is not ultimately a barrier to convergence, because successive changes bring about more and more convergence. The resulting similarity,

<sup>14</sup> Matras’ work on utterance modifiers (e.g., Matras, 1998, 2000) is one of the most ambitious projects to pin down something akin to attractiveness (Matras does not use the term himself) in concrete linguistic terms. He identifies four “mechanisms” of contact-induced change, which are likely to operate in certain social circumstances, and which target particular domains within the linguistic system. These are no doubt related to other mechanisms mentioned in the various works referenced here, but making those relations explicit is beyond the scope of this article. Attractiveness, of course, also plays a role in Thomason and Kaufman’s scale of borrowability.

<sup>15</sup> Thomason (2001, p. 71, 76–77) makes the same point when she says her “borrowing scale” (p. 70) is modified by the typological distance between the languages in contact. Basically, her generalization is that elements lower on the scale (and thus harder to borrow) are easier borrowed if the languages are similar, even though, overall, the correlation is between intensity of contact and borrowed elements.

Johanson claims, “encourages renewed copying” (p. 60).<sup>16</sup> Muysken (2000, p. 122) seems to agree when he says that convergence leads to “congruent lexicalization.”

#### 4.3.1

##### *Myers-Scotton, Muysken*

More insights into attractiveness, though not couched in the same terms, comes from the Matrix Language Frame model of codeswitching (Myers-Scotton, 2002). One of the factors Johanson mentions as promoting attractiveness is “ease of processing.” This factor figures very prominently in this model.

Language change is covered using the notion “Composite Matrix Language.”<sup>17</sup> In a Composite ML, clauses are framed by both of the languages in contact. Actual morphemes may or may not be from both languages (i.e., the clause may or may not contain CS, or, in Johanson’s terms, contains mixed and/or selective copies). The crucial thing is that the structure must derive from both languages (Myers-Scotton, 2002, p. 297). Perhaps the most ambitious exploration of this notion is Bolonyai (2000), who applies this model to changes in Hungarian verb inflection and case marking in the speech of immigrant children in the U.S. The suggested mechanism is restructuring of lexical entries, a notion not dissimilar to what many authors, particularly when focusing on internally induced changes, call “reanalysis” (cf. Aikhenvald, 2003a). In typically nonintentional fashion, speakers compare translation equivalents across two categories: “Cross-linguistic similarities/differences in terms of properties of morpheme entries in the mental lexicon and/or in the level at which they are elected in production promote ‘elective affinities’ and ‘separating and combining’ between morphemes and linguistic systems when brought into contact.” (Bolonyai, 2000, p. 82; also see Myers-Scotton, 2002, p. 243). The inherent vagueness of the terms “similar” and “different” is countered by dividing the class of functional elements in three different classes of “system morphemes.” These differences prove significant in explaining what does and what does not change.

It is congruence between the languages as perceived by the speaker that is important (Bolonyai, 2000, p. 86). The speaker sees a word in the borrowing language as more equivalent to its translation equivalent than it really is, and this leads this word to take over, for instance, shades of meaning, figurative uses, or, important for our present concerns, the subcategorization frame, associated predicate-argument structure and/or other structural characteristics of the other word. Bolonyai (2000, p. 95) offers quantitative data on the susceptibility to change of various aspects of Hungarian syntax in contact with English. Case endings and “preverbs” turn out to be the most affected categories. However, she shows that this still does not teach us much about attractiveness, because the abstractness of these categories masks the fact that the real differences in susceptibility are found *within* these classes, and that these are the differences that shed

<sup>16</sup> This explains why bound and functionally complex items are so hard to borrow: they are unlikely to have a corresponding substructure in the other language that is similar enough to inspire confusion.

<sup>17</sup> This notion only covers contact-induced change that results from actual borrowing from the other language. Other types of change (see Section 5) fall outside the model’s scope, or at least that is my understanding of Myers-Scotton (2002, p. 101).

light on what it is that determines the degree of attractiveness. For instance, in some clauses accusative case is missing. However, it is not just omitted across the board: it is omitted in clauses that match English word order. In such cases, objecthood is identified through word order and the accusative marker becomes redundant, matching English structure. The point is, just saying that American Hungarian is changing its case system because accusative case is under-marked, misses the more concrete generalization that the accusative case marker is lost in those contexts in which English and Hungarian are otherwise the same. In those cases, the accusative marker is redundant when seen through English eyes. In other syntactic contexts, the accusative case serves a clearer function, and there it is retained. This directly supports Johanson's contention that attractiveness must be relativized through the notion "perception of interlingual equivalence." Once again it is clear that "mistakes" *happen* to people. Similarity fools them into assuming identity. In this volume, both Türker and Treffers-Daller present cases where the difference between the languages (in compound noun structure) is obvious, and perhaps that is why the structures they discuss remain stable.

In other parts of the case system, different contact effects can be observed. Oblique case markers, which distinguish themselves from accusative in that they have concrete meaning, do not get omitted: if there is a change involving such markers, it tends to be that they get replaced by some other oblique case marker. The explanation lies again in the speakers' perception of equivalence where there is only similarity. The changes involved are individual, lexical changes. English "come to X," for instance, functions as the model for American Hungarian "jött X-hoz" (come X-ALLATIVE/'to'), which is a change from Standard Hungarian "jött X-ba" (come X-ILLATIVE/'into'). Though the allative and the illative both resemble English 'to' in meaning, the allative is closer to 'to', and, therefore, takes on some of the uses of 'to', which are expressed by the illative case marker in Standard Hungarian (in this case, that of "into a city"). Only if many cases of the same change (i.e., with different lexemes) were to occur, would it be likely that the change would become a generalized one (in this case, one would expect the ultimate demise of the illative case).

Another framework that illustrates the role of typological distance in making particular aspects of a borrowing language either prone or resistant to replacement with something equivalent from the other language is Muysken's (2000) model of bilingual speech. His is a model of CS, but he pays more attention to diachronic aspects than is usual. The central point of Muysken (2000) is that social and linguistic factors combine to bring about three different types of CS: insertion, alternation, and congruent lexicalization. Though all may contribute to diachronic change, congruent lexicalization in particular is relevant to our present concerns. It refers to a type of contact data in which a new system comes into being, consisting of grammatical patterns of both contributing languages. At least at this abstract level, the commonalities with Composite ML, koine formation (Siegel, 1993) and dialect leveling (Trudgill, 1985) are obvious. Systems that were already similar to begin with grow more similar through the elimination of patterns unique to one of the languages and of phonological differences between cognate functional elements. It results in clauses that are clearly bilingual, but seem to obey just one, mixed, grammatical system. Congruent lexicalization is a dominant pattern in CS between languages with little typological distance, for example, between related

dialects (or between a dialect and its associated standard language, see Sgall, Hronek, Stich, & Horecky, 1992) or between closely related languages (e.g., Sotho-Tswana, see Finlayson & Slabbert, 1997; Australian German/Dutch, see Michael Clyne's work). In other language pairs, it looks to be a possible development, but only after very intense or long contact has led to considerable convergence, essentially reducing the typological distance that the language pair started out with.

#### 4.4

##### **Thomason (2001)**

Much work in contact linguistics, including Croft's and Johanson's, is indebted to Thomason and Kaufman (1988) and its successor volume Thomason (2001). In addition to many of the points raised in the two preceding sections, this body of work offers at least two further relevant contributions to a theory of contact-induced change.

First, the results of contact are very different depending on one extremely important social factor: whether the language undergoing the changes is maintained while under pressure from a dominating language, or whether it is one a community has shifted to (p.86, 88). The former case is the one of interest for us here, as it leads to the borrowing of words and structures; the latter leads to substratum effects. Second, Thomason (2001, ch. 6) discusses a number of "mechanisms," the tools that speakers employ to effect change in language (i.e., what I have called "processual mechanisms"). The most important one of these is codeswitching (also see Sebba, 1998). Abstracting away from the subtle differences of what is meant by the different terms, this accords with Johanson's portrayal of code copying as the mechanism of change. The basis of Thomason's inclusion of this category is the commonly observed co-occurrence of codeswitching and structural change. She does draw attention, however, to the fact that there are speech communities where codeswitching is absent, and where structural borrowing proceeds nonetheless (2001, p.133; also see Aikhenvald, 2003a). Therefore, codeswitching can never be the only processual mechanism.

The other mechanisms are code alternation, passive familiarity (also see Weinreich et al., 1968, p.163), negotiation, second language acquisition strategies, bilingual first language acquisition, and deliberate decision. I will only discuss the first of these. Code alternation refers to situations in which a bilingual uses two languages in daily life but never at the same time, that is, she seldom codeswitches.<sup>18</sup> This applies, for instance, to diglossic situations. The sheer amount of practice such speakers get in one language can cause interference in the other language. Both codeswitching and code alternation as processual mechanisms are likely to be intimately related to entrenchment, Croft's nonintentional causal mechanism for normal replication and propagation. If code alternation works as a mechanism of change, it must be because elements from the other language, such as a word order, are so firmly entrenched in the speaker's mind that they cross over into the other language. The speaker uses them inadvertently in the "wrong" language.

<sup>18</sup> Mechanisms can work in conjunction (Thomason, 2001, p.152), so there is no need to make a strict cut-off point between codeswitching (alternation within a conversation) and code alternation (alternation between conversations).

If that is how it works, the relationship between causal and processual mechanisms is not linear, as was tacitly assumed so far, but involves a feedback loop. Social factors induce people to use two different languages in different situations in their everyday life. This leads to “local” causal mechanisms in actual conversation, such as accommodation. This produces a goal, to be achieved through the processual mechanism of code alternation, which in turn affects the degrees of entrenchment of individual elements. These then do their work as nonintentional causal mechanisms of change or stability.

## 5 Types of change

The chief difficulty in making sense of the vast number of contact-induced changes described in the literature on codeswitching, language contact, and diachronic linguistics, is that it is impossible to tie particular causes to particular mechanisms, and those to particular types of change (see Field, this volume).<sup>19</sup> No matter how we categorize the changes in our ever-growing joint database, we’re not going to be able to make such broad one-to-one mappings. In addition, one change often leads to another, and often various changes interact. Languages borrow something, find less need for its equivalent that thus undergoes attrition, and at the same time the new construction acts as a trigger for new changes. The descriptive problem we face is whether all changes that a certain change may trigger need to be taken into account. If that is so, where does it end? When can we call an associated change a change on its own terms (recall Problem ‘g’ in Section 2)?

A good illustration of how tangled this web gets is Aikhenvald’s (2003a) illuminating description of changes in the evidentiality system of Tariana, an Arawakan language in the Vaupès basin.<sup>20</sup> Before contact with Tucanoan languages, Tariana had one optional evidentiality category: like all Arawak languages it could mark knowledge as reported. East-Tucanoan, which exerts heavy influence on Tariana, has four evidentials, which are obligatorily marked in all clauses, and mark different kinds of indirect evidence. Tariana has essentially copied this system, by making the optional marker obligatory (a type of reanalysis), and by either reanalyzing or grammaticalizing three other morphemes. Note that these are all cases of generalized combinational copying (of the Tucano “habit” of always adding a marker to the verb to indicate the source of information). However, Aikhenvald’s point is that sometimes more precise terms such as “reanalysis” or “grammaticalization” need to be preferred for the distinct mechanisms that led to the distinct results of such copying. At such more precise levels, the term “copying” can sometimes be quite far-fetched, because the new structure can be quite different from the one it was modeled on. Tariana adopted the general pattern of marking evidentiality, but it did not adopt the actual East Tucanoan system. For example, Tariana employs internally complex enclitics with a transparent succession of tense and evidentiality morphemes, while the East Tucanoan model employs unitary suffixes in which tense

<sup>19</sup> I will only concentrate on contact-induced changes, and ignore “typical” monolingual changes, such as gradual sound and semantic change. Thomason (2001, p.62) characterizes contact-induced change as any change that would have been less likely outside the contact situation.

<sup>20</sup> The article actually describes many other contact-induced structural changes as well, for example, in case marking and aspect marking.

and evidentiality are fused. Still, the term “copying” seems justified as well, because ultimately, the whole idea behind the evidential system was taken from the contact language. It all comes down to the level of abstraction at which the analyst wants to work (Aikhenvald, 2003a, p.27).

Be that as it may, as linguists faced with the task of describing an instantiation of contact-induced change, we are likely to focus on some sort of “basic level,” usually just one generalizing step removed from the description of actual individual examples in the particular language under consideration. The question whether and how they fit in with what we know about contact-induced language change in general is not often discussed (see Problem ‘h’ in Section 2). Partly, this is because it is difficult enough to understand what is going on in that language, and partly it is because we lack the general cross-linguistic overview that makes more global analyses possible (as, for instance, in typology). Section 4 above was motivated by the desire to contribute to that goal.

Not every contribution about contact-induced change needs to be theoretical, of course; there is still a great need for data on which to base theory. However, there is also a need to enter accurately described changes into an ever-growing database of attested contact-induced changes in as many as possible languages in as many as possible socio-linguistic settings. Only then can we arrive at an assessment of what combinations of social factors, causal mechanisms, processual mechanisms, and types of attractiveness are likely to produce what kind of contact-induced change.

Various ways of classifying the data have been suggested. I particularly like Thomason’s (2001) simple division into addition, loss and replacement. Also promising is Aikhenvald’s (2003a, p. 2) distinction between system-altering and system-preserving changes, in which the former involves the introduction of a new category, and the latter a mere change in an existing category. In addition, we need to be able to compare things that change to things that remain stable (cf. Croft, 2000, p.4). Though it is entirely justifiable, reasonable and logical to focus on those aspects of a language that are undergoing or have undergone change, the simple fact that many aspects of the language do not change hides a lot of relevant information about what makes particular parts of a language “attractive.”

I believe a generally agreed upon descriptive framework of attested contact-induced changes would be of great help to the field of contact linguistics. I have neither the expertise nor the time and space to provide that here; the rest of this final section will merely provide some suggestions regarding a taxonomy of contact-induced changes, organized around Thomason’s and Aikhenvald’s classifications.

## 5.1

### ***Attested changes***

The various terms used to describe changes are many, mainly because of the various levels of abstraction at which description is possible, and the great number of legitimate foci, ranging from pure structural description to the uncovering of linguistic and social mechanisms and causes. Any particular change may be described as, for instance, a case of structural borrowing, as the acceleration of an internal change, as a change in the distribution and/or use of a particular morpheme or construction (i.e., reanalysis), as drift to analytic syntax, as the filling of a systemic gap, as an instance of calquing, as the loss of a certain distinction, as a mere change in frequency, and so on. In order

to make sense of these various types of change, I suggest the provisional taxonomy outlined in Table 1<sup>21</sup>:

**Table 1**

**Types of contact-induced change**

<i>Type of change</i>	<i>Likely Processual Mechanisms</i>	<i>Examples (discussed throughout this article)</i>
1. Calque	Mixed copying (MC), Semantic copying (SC), Individual Combinational Copying (ICC)	MC: 'be POSS <i>turn</i> ', 'be <i>right</i> ', 'take a <i>shower</i> ' in Australian German (Clyne, 1968; cf. Section 4.3) SC: the use of <i>denken</i> 'think' instead of <i>glauben</i> 'believe', on the basis of the usage of English 'think in Austr. German (Clyne, 1967; cf. Section 4.3) ICC (loan translation): allative instead of illative in Am. Hungarian translation of 'come to' (Bolonyai, 2000; cf. Section 4.3.1); changed usage of Turkish ablative to mean 'about' (Boeschoten, 1997; cf. (incl. this section)
2. System-altering changes (addition or loss) in the <b>inventory</b> of grammatical morphemes and/or categories	Combinational copying	evidentials in Tariana (beyond the inherited category of 'reported'; Aikhenvald, 2003a; cf. Section 5) necessitative in Karelian (Sarhimaa, 1999; cf. Section 4.2) possible loss of evidential in Immigrant Turkish (Pfaff, 1993; cf. this section)
3. System-preserving changes in the <b>distribution</b> of grammatical categories	Generalized combinational copying reanalysis)	Changes in pro-drop in LA Spanish (Silva- Corvalán, 1994; cf. this section) Changes in the pragmatics of two NP-internal word orders in immigrant variety of Serbo-Croatian (Skaaden, this volume) Overgeneralization of masculine pronominal reference in East Sutherland Gaelic (Dorian, 1993; cf. this section) Reanalysis of forms of verb derivation in Immigrant Turkish (this section)
4. Changes in frequency	Frequential copying	Increased use of diminutives in East Sutherland Gaelic (Dorian, 1993; cf. this section)
5. Stability: No structural change at all	n.a.	Turkish compound nouns in Norway (Türker, this vol.) Kanuri loan translations (compounds) in Nigerian Arabic (Owens, 1996; cf. this section)

<sup>21</sup> I ignore causal mechanisms here, since there seem to be few constraints on the type of change any causal mechanism can "cause."

Any contact situation is likely to give rise to all of these types, because they are associated with particular subsystems of the language rather than with types of contact situations (i.e., with social factors). What is more, since changes lead to further changes, many cases may be best described as clusters of changes, and the individual changes in such a cluster are unlikely to all fall under the same heading in this taxonomy (“Problem g” in Section 2).

For example, Dorian (1993) describes a complex cluster of changes in East Sutherland Gaelic. Pronominal reference to nouns has undergone a shift towards overgeneralization of masculine reference (change in distribution): many nouns that used to be referred to with ‘she’ came to be referred to with ‘he’ (Gaelic has grammatical gender). One could attempt to generalize, that is, lift the analysis from the concrete construction of pronominal reference to the more abstract category of gender agreement, and claim that Gaelic has lost gender agreement (change in inventory), no doubt because of English influence. However, elsewhere in ESG grammar, gender agreement turns out to be strengthened, also because of contact. ESG has increased its use of diminutives (change in frequency), under the influence of Scots English,<sup>22</sup> and in diminutives (the diminutive suffix has different masculine and feminine forms), gender agreement is robust. This second change has nothing to do with the first one, but the analyst is forced to consider them both together when striving for a generalization at the higher level of abstraction. The more sweeping the generalization one aims at, the more likely it is that different unrelated changes need to be considered.

Another major problem in arriving at a neat classification is that one change can induce another one. Just like the addition of a loanword may induce the loss, decreased usage, or changed usage patterns (i.e., changed meaning in the process often called “reallocation,” cf. Trudgill, 1985) of its native equivalent, the addition of a new construction, for example a new way of marking possession, will change the way in which other possessive constructions in the language are used. Similarly, a borrowed word may trigger a possible but marked word order (Myers-Scotton, 1997). Increased frequency of that word order then, in turn, functions as the causal mechanism of the next change, loss of markedness. The individual changes in the chain can be described as self-contained, but we should obviously not lose sight of what they do to the rest of the system. With those caveats in mind, the rest of this section will just briefly discuss the types of change distinguished in Table 1.

**Calques** include translations of actual word combinations in the other language. The causes of their selection are identical to those of lone foreign words, predominantly attractiveness (i.e.: you use the foreign combination because you like it, because it is transparent, because it is easy to use, etc.) and/or high degree of entrenchment (especially if there is no native expression to preempt its use). Many calques involve just the combination of two content words in, for instance, verb-object combinations or compound nouns (cf. Otheguy, 1992; Owens, 1996). Building on a subjective assessment of equivalence (see Section 4.3), the speaker just translates these words, thereby

<sup>22</sup> Both ESG and Scots English make much more extensive use of this category than other dialects of the two languages.

creating an innovation in the language. The way in which this is done leads to a range of subtypes, leading from faithful to rather loose translation. Loan translations are generally assumed to be relatively ephemeral and unsystematic, but individual calques may give rise to increased productivity of the syntactic pattern on which they are based, and, therefore, to generalized code copies, lacking a concrete lexical source in the other language. The change in question has then become a “change in inventory” or a “change in distribution.” However, this is only the case if the foreign structure is indeed different from the native one. In addition, grammatical change is not an automatic result of loan translation, even if the structures differ across the languages. The foreign structure may simply be ignored: calquing may consist of the translation of the co-occurring content words (such as the verb for “to play” and its associated object noun ‘piano’ in Dutch Turkish, where standard Turkish uses the verb for “to sound”). In such cases, there is no structural change despite frequent calquing. Owens (1996), one of the few systematic studies in this field, finds that most loan translations in Nigerian Arabic from the unrelated neighboring language Kanuri preserve Arabic structure. This case involves pervasive influence in “idiomatic structure,” not in syntactic structure.

The codeswitching literature is full of examples of calques, not surprisingly since the two phenomena are so closely related. In Johanson’s Code Copying model the only thing that distinguishes them is that in codeswitching (“global code copying”) everything in the B element is taken over, while in calques (“selective code copying”) everything except the actual morphemes is copied. The link is clearest in “mixed copies,” in which foreign structure is imported along with a borrowed word. Structural borrowing is visibly a nonintentional side effect (Croft, 2000, p. 148) of lexical borrowing in such cases (Hock & Joseph, 1996, p. 256).

Still, calquing is not likely to be the processual mechanism in each and every case of structural borrowing. Apart from the alternative possibility that structure might be borrowed directly (see Section 6), it is also likely that there are constraints on the process. Though idioms are often the input for loan translation,<sup>23</sup> not all idioms **can** be translated. First, the more internally complex an idiom, the less likely the rendition in the borrowing language will be a loan translation. Second, the metaphor underlying the idiom has to be accessible, that is, somewhat transparent (Bynon, 1977, p. 232). In the following case, loan translation is unlikely. The Dutch idiom in (7) is sometimes encountered in Turkish-Dutch bilingual data (Backus, 1992). The idiom is completely opaque: there is nothing in the meanings of “to fall” and “with” that suggests that their combination would mean something like “it turned out ok” or “it’s not so bad.”

- (7) Het val-t wel mee  
 it fall- 3.sg.PRES AFF with  
 ‘it’s not so bad’

<sup>23</sup> If the meaning is not figurative, the combination is unlikely to be recognized as a loan translation, on account of its familiar nature (Bynon, 1977, p. 234). On the other hand, it makes sense that loan translation would indeed specially target figurative meanings. Speakers may be drawn to the way the other language puts a certain concept in words (a form of attractiveness). I will leave this question for future investigation.

A possible loan translation into Turkish would be (8a)<sup>24</sup>:

- (8) a. \*o-nun-la o da düş-ür  
it-GEN-with it too fall-AOR.3sg  
b. \*o-nun-la o da *val-len* yap-ar<sup>25</sup>  
it-GEN-with it too fall-INF do-AOR.3sg  
c. \*o da *val-len* yap-ar *mee*  
it too fall-INF do-AOR.3sg with  
d. ?o da *meeval-len* yap-ar  
it too turn.out.ok-INF do-AOR.3sg

The construction in (8a) would be unintelligible, not just because it has never been heard before, but because there is no compositional path leading from the literal meanings to the idiomatic meaning. Attempts at partial translation still sound weird, compare (8b) and (8c), because the translated functional elements do not make the figurative meaning of the borrowed content word any more accessible. The option in (8d) is conceivable, but note that it requires considerable restructuring of the original in which the verb and the particle are separated. Therefore, any Turkish speaker who wishes to use this idiom is better off using the whole Dutch idiom (cf. Hock & Joseph, 1996, p. 265).

Given enough contact, though, speakers of two different languages can become so familiar with the idiomatic structure of the other language, that translatability poses few problems (this is the point of Owens, 1996). The Balkan languages share many idiomatic expressions (Bynon, 1977, p. 247; Symeonidis, 1997). Cross-linguistic and cross-setting studies of loan translations, and the amount of semantic opaqueness they allow, are needed to settle this issue. Recall that convergence often builds on previously established equivalence. This entails that the closer the languages are related, the greater is the chance that figurative uses of words are picked up easily and transferred. The semantic structures of cognate words across such languages are likely to be rather similar, partly through inheritance, partly through shared development, partly through earlier contact-induced change (such as semantic extension of the words involved). That's probably why Clyne's (1967) English-Dutch and English-German data contain so many loan translations, see (9) for a sample of phrases that were literally translated into German (also see Haugen, 1972).<sup>26</sup>

- (9) Loan translations in Australian German: “for better or for worse,” “have X to themselves,” “how do you mean?,” “if it were not for X,” “sit for an exam,” “look after,” “he feels like it,” “all around,” “and everything,” “this” (as in “this guy”).

<sup>24</sup> The genitive on the pronoun is needed if it is combined with the comitative postposition; the pronoun itself is necessary because the postposition cannot be used in the particle-like way its Dutch equivalent is used in the idiom.

<sup>25</sup> If Dutch verbs are to be used in Turkish, they need to be inserted in their infinitive form and followed by a form of *yap-* ‘do’.

<sup>26</sup> The Dutch idiom that proved so troublesome for Turkish, is probably instantly interpretable in German: *das fällt schon mit*.

Changes (addition or loss) in the **inventory** of grammatical morphemes and/or categories are among the more spectacular contact-induced changes. It is not always easy to say, however, whether a particular change really involves a new category or merely a change in the meaning or distribution of an existing one. It very much depends on how you analyze the category in question. If the use of a case marker is extended to a new function, this can be interpreted as change in distribution as long as the function was previously marked differently in the language, but as a change in inventory if it was not. An example of the former kind is the extension of the Turkish ablative to cover the meanings of German “von” in German Turkish, for example, to say what a story is “about” (German *handelt von X* ‘is about X’ vs. the Turkish postpositional phrase *X üzerine*; Boeschoten, 1997). An example of a change in distribution is the extension of an inherited locative marker in Tariana to mark nouns as topical or specific, a category presumably unmarked in the language before contact with East-Tucanoan (Aikhenvald, 1996, p. 84, 2003a, p. 8). The category “change in inventory” is best based on functions and meanings, not on actual forms, since the element selected to function as the new grammatical marker was probably already part of the language, either as a content word, or as a function word serving some other function. Still, sometimes the actual grammatical marker is also borrowed (e.g., the Spanish conjunction *que* and Spanish prepositions in many Amerindian languages, cf. Field, this volume).

Even then, authors are careful to note that the borrowed structure is not necessarily identical, both in form and in the way it is used, to the original. This is a central point in Johanson’s Code Copying model, and a good example can be found in Gomez-Imbert 1996, p. 448), who discusses the borrowing of the Baniwa (Arawakan) classifier system in Kubeo (Tucanoan), again in the Vaupès area.

The loss of a category is another type of change in inventory. It is sometimes claimed that the evidential mood is disappearing from Immigrant Turkish in Germany and Holland. Pfaff (1993) finds that those children who are not strongly Turkish-dominant avoid the category altogether. German influence may be posited, since German does not have a grammaticalized evidential. Pending full-scale investigation, which would have to ascertain whether the claim is correct and whether evidential functions are taken over by sentence-level adverbs, like in German, we could hypothesize that the change constitutes structural borrowing.

Much more frequent are cases where the category undergoing change is not really new to the language, but where certain changes in **distribution** are in evidence. This category is especially associated with changes in which an inherently variable system in the receiving language (e.g., gender allocation) undergoes changes that make that part of the language **converge** with the contact language, usually by increasing the occurrence of the category that happens to be most like the equivalent one in the contact language. The increased use of diminutives in East Sutherland Gaelic mentioned earlier is an example; another one is the increase in the use of overt subject pronouns in languages that have pro-drop, such as Spanish or Turkish, when they are in contact with languages that have obligatory subject pronouns, such as English. Though actual demonstration of this change is not easy (see Section 3.4), if found, it would be a clear case of a change in distribution. Once more, though, studies of this topic routinely point out that one change often entails another one. Loss of pro-drop entails the loss of

pragmatic constraints on the use of overt pronouns. A pragmatically governed system becomes a system with free variation.

It is somewhat paradoxical that the most frequently discussed change in Immigrant Turkish is a change that is on the one hand clearly contact-induced, but on the other hand clearly not a case of structural borrowing. It is, rather, an internal change that was triggered by contact. The categorical use of the auxiliary verb *yap-* ‘to do’ to incorporate foreign verbs, as in *reger-en yap-* ‘govern-INF (Dutch) do (Turkish)’ (i.e.: ‘to govern’) represents a clear change from monolingual Turkish, in which *yap-* only combines with nouns. It is contact-induced because without CS there would have been no change, presumably. The mechanism of the change is thus, unequivocally, codeswitching. But the path the change takes is a continuation of an internal ongoing grammaticalization chain (Backus, 1996). There is obviously no Dutch model that is being copied; rather, the need to adopt lexical material from the other language has put the derivational morphological system of the borrowing language under pressure. The result is reanalysis in its verb-formation system: the reach of one derivational morpheme has been extended, while others have fallen into disuse (also see Field, this volume).

It is quite possible that most changes are of the **frequency-changing** kind, but those are exactly the changes that are virtually impossible to demonstrate empirically. It is much easier to show a qualitative change in, for instance, the pragmatic or functional usage of a certain construction or word order, than that it has increased its frequency since the beginning of the contact situation.

## 6 Conclusion

All types of change reviewed in Section 5 are relevant for the central question of this volume: whether there is a direct relationship between codeswitching and structural change. I think enough evidence is in place to at least suggest that codeswitching will often function as one of the processual mechanisms for structural change. Because of this, it results from the same intentional or nonintentional causal mechanisms that are ultimately responsible for change. Codeswitching and change are just found at different levels of the descriptive chain visualized in Figure 1 in Section 4.3, codeswitching coming first. The changes it helps bring about tend to be by-products rather than specifically selected targets. The eventual change can be achieved in various ways, depending on the nature of the codeswitched element, as summarized in Table 2.

Codeswitching, that is, may have indirect effects on the structure of the borrowing language. Internally complex insertional as well as alternational codeswitching (Backus, 2003) function to model syntactic patterns which are then subsequently imitated in the base language (Thomason, 2001, also see Field, this volume). Indirect empirical evidence is provided in the very few studies that attempt to correlate CS and structural changes. Bolonyai (2000, pp. 94–95) found that deviations in Hungarian syntax were much more common in clauses that also contained English words (also see Savić, 1995, and Toribio, 2004). More common is the type of evidence provided by Fortescue (1993, p. 287), who shows that English word order influence on Inupiaq in Alaska is much more pervasive than Danish influence on West Greenlandic word order. This difference corresponds to a much more pervasive presence of English in the daily lives of Inupiaq speakers than

**Table 2**

Possible effects of codeswitching on grammar

<i>Foreign element</i>	<i>Effect on grammar</i>	<i>Examples</i>
<b>1. Single words</b>	In general, none	Simple noun insertion
1a. Exception		
-If insertion is derivationally marked	Increased frequency of particular declension/conjugation	Marking of foreign verbs with <i>yap-</i> in Turkish
<b>2. Chunks (complex lexical items)</b>	Calques	Increased use of prepositional phrases instead of instrumental case in Texas Czech (Dutkova-Cope, 2001)
<b>3. Clauses (alternational CS)</b>	Calques and/or direct structural borrowing	Indo-European subordination in Turkic, Dravidian and Amerindian languages

of Danish in that of Greenlandic speakers. Direct evidence, however, is relatively rare. Dutkova-Cope (2001) shows that in Texas Czech, nouns marked with instrumental case, for example “autobusem” (‘by bus’), have given way to constructions with a preposition. Generally, though, the link between lexical calquing and structural borrowing is not clearly visible in the contact literature. This is even more strongly the case when we look at sentence structure. Many languages have borrowed subordination structures, for example Slavic structure in the Turkic language Gagauz (Menz, 1999), Dravidian (Telugu) structure in Dakkhini Hindi-Urdu (Subbarao & Arora, 1988), or Spanish structure in numerous Amerindian languages (Stolz & Stolz, 1996). Exactly how foreign subordination structures enter a language is unclear. Crucial functional elements (such as conjunctions) more often seem to be reanalyzed native morphemes than borrowed forms. If a complementizer is borrowed, it often co-occurs with its inherited native equivalent, and often only the inherited element is obligatory (Stolz & Stolz, 1996). All this is not in itself evidence that many of the cases of structural borrowing may not have come about through the calquing of individual lexical chunks, but the hypothesis awaits closer investigation.

The alternative is that structure is borrowed directly (also see Skaaden, this volume). To Western linguists, this may seem counterintuitive in the light of speakers’ general inability to focus on linguistic structure very much while talking. Winford (2003, p. 64) notes that direct borrowing is often assumed but rarely demonstrated: “Hence the mechanisms involved might have included heavy lexical borrowing or code mixing on the part of recipient language speakers (...). The case for direct borrowing of structure in any of these situations has yet to be convincingly made.” Direct structural borrowing has not been suggested for many cases in the literature, unless the term is seen as equivalent to “interference” (see Bynon, 1977, p. 240). The best potential evidence is provided by situations in which there is not much lexical borrowing. The literature on CS understandably does not deal with such cases very much, but they are probably not all that uncommon. Social circumstances sometimes induce attitudes that promote selective rather than global copying (Johanson, 2002, p. 58). Though structural borrowing

may, in such cases, still be thought to be the result of concrete loan translations, in the absence of evidence for that, we have to assume that these structures were borrowed outright. Examples include Abkhaz influence on Mingrelian (Hewitt, 2001), and the Vaupès area (Aikhenvald, 2003b).

As mentioned earlier, the reason for skepticism is generally the paradox between the notion of direct structural borrowing and the idea that people do not seem to pay much attention to structure. Nevertheless, awareness of grammar has been demonstrated before: it is the whole point of Aikhenvald (2002), for instance, and Pandharipande (1989) notes that Marathi speakers recognize a variety of Marathi characterized by English-influenced sentence structure as “learned.” And Dorian (1994, pp. 677–679), when describing East Sutherland Gaelic speakers’ attitudes towards semispeakers, says that two norms are present in East Sutherland: geographical ones (conscious) and proficiency ones (less conscious). The emphasis in the latter is on the lexicon: that’s what people are aware of and comment on. However, to judge semispeakers, grammatical errors are taken into account: “but since the appearance of the relatively conspicuous errors in grammar coincides with a drop-off in the fluency of speech, a shrinkage in vocabulary, and a rise in codeswitching, it may be the unmistakable convergence of all these features that calls fluent-speaker attention to the breach of grammatical conventions among semispeakers” (p. 678). When people make judgments about good and bad speech, it is about mixing in too much English or alternating between English and Gaelic too much (also see Dutkova-Cope, 2001, p. 35 for similar attitudes in Texas Czech communities).

It seems to me that more systematic comparison of the findings of studies of codeswitching and of structural change in bilingual settings will illuminate many of the issues that have been raised above. Hopefully, the articles brought together in this issue of the *International Journal of Bilingualism* will have a beneficial effect on our joint efforts to understand the causes of change in general, and the relationship between codeswitching and structural borrowing in particular.

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