

# LANGUAGE CHANGE AND LANGUAGE CONTACT

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Mainstream historical linguistics came rather late to the knowledge that language contact can, and often does, lead directly to structural linguistic changes. Leading figures expressed a firm belief in severe constraints on structural interference; Meillet, for instance, believed that grammatical loans can only occur when the source and receiving systems are very similar (1921:87), and Jakobson argued that ‘a language accepts foreign structural elements only when they correspond to its own tendencies of development’ (1962 [1938]:241). These beliefs probably arose ultimately from a conviction that the Comparative Method would be threatened by the existence of extensive structural diffusion. It is no accident that Hugo Schuchardt, a major critic of what he saw as the Neogrammarians’ intellectual rigidity in ignoring foreign interference, was the founder of pidgin/creole studies, because mixed languages like pidgins and creoles challenge the universality of the tidy family tree (see Thomason & Kaufman 1988). In general, however, historical linguists have long tended to argue that a contact explanation for a change should be proposed only when all attempts to find a language-internal explanation have failed. Research over the past half-century, starting with Weinreich’s classic 1953 book *Languages in Contact*, has brought about a recognition of the importance of language contact for explanations of many linguistic changes. In recent years the trickle of monographs and even textbooks on language contact has become a flood (two of the most recent important treatments are Winford 2003 and Clyne 2003).

The following sections will address the general problem of how to determine, after the fact, that contact-induced change has occurred. Section 1 focuses on the clearest cases, those for which no one would deny the effects of contact. In §2, less obvious cases will

be considered, with conclusions on methods for establishing the existence of prior contact-induced changes. Contact-induced changes that do not involve actual interference will be considered in §3. The concluding section, §4, will offer some comments on the prospects for predicting what kinds of contact-induced changes will occur when.

Before turning to a detailed discussion of the issues that arise in this area, we need a definition of contact-induced language change: Contact is a cause of ‘any linguistic change that would have been less likely to occur outside a particular contact situation’ (Thomason 2001:62). This definition covers all changes in which foreign material is transferred from one language to another, i.e. all cases of linguistic interference, but it also includes some less obvious types of change. First, some changes that occur in some cases of slow language death fall into the category of attrition—loss of linguistic material—but do not make the dying language more similar to the language that is replacing it; these are nevertheless contact-induced changes by my definition. Second, intentional linguistic changes, for instance in cases where a speech community deliberately distances its language from neighboring languages, are contact-induced but do not involve diffusion. And third, some changes occur as an indirect result of interference, typically when a borrowed morpheme sets off a chain reaction that has a snowballing effect on the receiving language’s structure. Finally, the definition does not exclude contribution from internal pattern pressures in a relevant change: multiple causation is always a possibility, whether the causes are all internal or a mixture of internal and contact factors.

### **1. Contact-induced change: uncontroversial cases.**

A great many instances of contact-induced change will of course be accepted by all historical linguists without hesitation. The vast majority of these are changes in which morphemes are transferred from one language to another—namely, lexical borrowing and

the borrowing of grammatical morphemes, both particles and affixes. No one questions whether English words like *shah* (from Persian) and *chaise* (from French) are native or of foreign origin; similarly, no one doubts the foreign origin of English suffixes like *-able* in words like *readable*, which has a native Germanic root, or of particles like the Huastec (Mayan) conjunction *pero* ‘but’ (from Spanish). Borrowings like these arguably have no immediate structural consequences in themselves, because they don’t alter native morphosyntax.

Other borrowings, however, have a clear structural effect on the receiving language. So, for example, the Indic language Bengali has borrowed the suffixes *-ra:* ‘human plural’ and *-gulo:*, *guli* ‘non-human plural’, together with the noun-class categories they express, from Dravidian (Andronov 1964:124). The development of a vowel harmony rule in some dialects of Asia Minor Greek surely started with Greek suffixes added to Turkish loanwords and then spread to native Greek vocabulary; Dawkins, who reports this phenomenon, comments that ‘the fullness with which vowel harmony is observed clearly depends on how far the individual speaker is accustomed to talk Turkish and has the Turkish ear for these distinctions’ (1916:68).

Examples of both types, with and without immediate structural effects on the receiving language, can be multiplied endlessly. The most extreme of the clear cases are mixed languages—the small set of bilingual mixed languages and the much larger set of pidgin and creole languages. For all the languages in these sets that arose abruptly (including most known bilingual mixed languages and most pidgins, but apparently fewer creoles) there is a question as to whether one can reasonably talk about language change at all: processes of language creation closely resemble processes of language change in less dramatic situations, but the end result is a new language, not a changed later form of a single language. This is not the place to try to answer this question, but mixed languages are worth mentioning here because they enjoy a privileged position among the linguistic outcomes of contact. One

might imagine (with difficulty) an argument that Asia Minor Greek just happened to develop vowel harmony, and that the development had nothing to do with Turkish influence, in spite of all the Turkish loanwords that display vowel harmony. But unlike other products of language contact, mixed languages declare their mixed origin as soon as any attempt is made to include them in an application of the Comparative Method, because they always display a striking discrepancy between one (or more) grammatical subsystems and the rest of the language. They are therefore the easiest products of language contact to detect retrospectively, provided that at least some of their source languages are still available for comparison. Pidgins and creoles usually (though not always) draw their lexicon primarily from a single language, but the grammar as a whole comes neither from that language nor from any other single language. Bilingual mixed languages differ in their make-up: Michif, a French-Cree mixture spoken mainly in Manitoba and North Dakota, has noun phrases (lexicon, phonology, morphology, and syntax) from French and the rest of the language (lexicon, phonology, morphology, and syntax) from Cree; Mednyj Aleut, once spoken on one of the Commander Islands off the far eastern coast of Russia, has Russian finite verb morphology but other grammatical components (including most of the lexicon) from Aleut; Media Lengua (Ecuador) has Spanish lexicon and Quechua grammar; and so forth.

For all these cases of contact-induced change and language creation under contact conditions, no special methodology is needed to identify the effects of language contact, always assuming that the source languages, or their relatives, are known. In other contact situations, however, the picture is less clear, and the need for rigorous methods for establishing the existence of contact-induced change is evident.

## **2. Less obvious contact-induced changes.**

In the borrowing situations just described, contact-induced change is signalled by the

presence of foreign material incorporated into the receiving language, and is therefore uncontroversial. In other cases, structural features are transferred without morphemes. In fact, this is very common in three kinds of contact situations. First, when the source language and the receiving language are very closely related, with essentially no typological distance separating them and largely shared lexicon and structural features, structural diffusion from one to the other often happens without any morphemic exchange. This is perhaps most obvious in cases of dialect borrowing, as for instance when a Standard Serbo-Croatian pattern of syncretism in plural oblique cases (genitive vs. dative/instrumental/locative) replaced the native syncretic pattern of the Hvar dialect (genitive/locative vs. dative/instrumental), though Hvar speakers retained their own case suffixes, which differ from those of the standard dialect (Hraste 1935:17-25).

The second type of contact situation in which there is very often structural interference without morpheme transfer is in cases of language shift (typically substratum interference). In borrowing situations of the sorts discussed above, where morpheme transfer accompanies structural interference, nonbasic vocabulary is the earliest and the predominant linguistic effect; structural interference is likely only with increasingly intense contact involving widespread bilingualism. In sharp contrast, phonological and syntactic features predominate in shift-induced interference. The reason is that imperfect learning of a target language plays a (or the) major role in shift-induced interference and, as is typical in second-language learning, vocabulary is learned first (see Thomason & Kaufman 1988:ch. 3 and Thomason 2001:66-76 for discussion of this distinction). (Inflectional morphology tends to be least common in both types of interference, for reasons having to do with its typically tight-knit integration into the grammatical framework of a language.)

The third type of interference without morpheme transfer is (at least as far as is currently known) less common than shift-induced interference, and much less common than

borrowing between closely-related languages. This is the convergence of structure through mutual or one-way borrowing in a highly organized intense bilingual or multilingual contact situation in which each speaker group is concerned to preserve its own heritage language—sometimes, though by no means always, with a reluctance to engage in any lexical borrowing. A small number of cases have been reported in the literature for which word-by-word or even morpheme-by-morpheme intertranslatability is claimed for the languages; unfortunately, however, few thorough detailed case studies are available for any of these situations (but see Aikhenvald 2003 for a report on an Amazonian contact situation).

The most famous case is the village of Kupwar in India, where the Indic languages Marathi and Urdu and the Dravidian language Kannada are said to have converged drastically in their structures (Gumperz & Wilson 1971; see also Thomason & Kaufman 1988:86-88 for discussion). It is unclear just how drastic the convergence was in this case, given that Urdu and Marathi are related and that Dravidian and Indic languages have been in such close contact for so long that the typological distance between the two groups has been lessened by much contact-induced change. Even so, the typological match in the Kupwar languages is striking. Of the sixteen features discussed by Gumperz & Wilson, all of them morphosyntactic, Kupwar Urdu has converged toward Kupwar Kannada and/or Marathi in twelve, Kupwar Kannada has converged toward Marathi in five or six, and Kupwar Marathi has converged toward Kannada in four features. Among the features are gender categories, an inclusive/exclusive ‘we’ distinction, specific subject-verb agreement rules in several constructions, and yes/no question marking. Only one of the changes, the adoption by Kannada of an Indic subordinator *ki* together with some (not all) of its syntactic features, involves a borrowed morpheme.

The difficulty with interference that does not include transferred morphemes is that those who consider contact-induced change an exotic and inherently unlikely explanation for

structural change find it easier to maintain their skepticism about contact explanations in these cases. The Ethiopian Highlands, the best-known linguistic area in Africa, comprises Ethiopic Semitic languages in contact with Cushitic languages (see especially the groundbreaking work of Leslau 1945, 1952). Semitic and Cushitic, in spite of their genetic link as coördinate branches of the Afro-Asiatic language family, are typologically quite different in many respects. Ethiopic Semitic shares a sizable number of structural features with Cushitic, in contradistinction to the rest of Semitic, and Leslau attributes these sharings to the influence of Cushitic speakers who shifted to Semitic. Although Ethiopic Semitic also has numerous Cushitic loanwords, the most striking morphosyntactic interference features employ native Semitic morphemes. The most-affected Ethiopic Semitic dialects share with Cushitic otherwise un-Semitic features like labialized velar consonants, a distinct future tense, new morphological means of expressing the causative, negative perfect, and frequentative in verbs, noun plurals formed by reduplication of the root-final consonant, subordinate clauses expressed by nonfinite gerund constructions, and several linked word-order features—SOV sentential word-order, auxiliary following the main verb, relative clauses preceding the head noun, and postpositions instead of prepositions.

The problem of establishing the existence of contact-induced change is especially acute when the changes could easily have happened through internally-motivated change. When the proposed interference features are universally marked, as with the Ethiopic Semitic labialized velars, or when they belong to the most tightly organized closed grammatical subsystems, like the causative, negative perfect, and frequentative verbal formations and the reduplicative plurals of Ethiopic Semitic, the chances of independent internal innovation are less; but when the possibilities are limited, as with basic sentential word order and linked word-order features (postpositions vs. prepositions and the like), internal motivations could easily have produced the same outcome as contact. Adopting a rigorous methodology

will help in such cases. It will not always provide a definitive answer to the contact-and/or-internal-causation question—many things are unknowable in historical linguistics, as in other historical sciences—but it will at least show whether a definitive answer is possible (see Thomason 2001:93-94).

First, it is necessary to look at the whole picture, not just a single piece of the puzzle. If one syntactic feature has diffused from language A to language B, other syntactic features and some phonological features as well will almost certainly have done so: a contact situation intense enough to permit structural interference at one structure point also permits structural interference at other points. Second, we need to identify a source language for the set of features we wish to attribute to language contact. Appeals to unidentified substrata are justifiably viewed with disapproval by historical linguists, because they do not advance our knowledge. In cases of language shift, of course, the whole point is that the shifting group's language often disappears; but if another subgroup of the speech community maintains the same language, or if there are closely-related languages that can be investigated, this problem can be overcome. Third, we need to prove that language B has changed (no change, no evidence for interference); and fourth, we need to prove that the proposed interference features are old in language A (if they're innovative in A, then A is hardly likely to be the source of the features in B). A complete investigation will also consider the possibility of multiple causation and search for potential internal motivations as well.

Attempts to apply these criteria will not always be successful. The languages of the famous Pacific Northwest linguistic area of the northwestern U.S. and neighboring British Columbia are a case in point. They share many striking features (some of them highly marked universally): labialized dorsal consonants, velars vs. uvulars, ejectives, verb-initial sentential word order, sentence-initial negation, many suffixes but relatively few (or no) prefixes, a weak noun vs. verb distinction, the use of reduplication to mark a distributive

plural, numeral classifiers, large sets of lexical suffixes (with meanings like ‘long object’, ‘belly’, and ‘face/fire’), etc. But since all these features must be reconstructed for all three proto-languages of the core families in the area—Salishan, Wakashan, and Chemakuan—evidence for the original source(s) of the shared features is lacking, and in fact there is no evidence for **any** diffusion involving these features. This does not of course mean that the Pacific Northwest is not in fact a linguistic area; it does mean that we can’t prove it at present, for the area as a whole. It seems extremely unlikely that all these features just happened to arise independently in the three families. But distant genetic relationship is a possibility, though solid evidence for that is also lacking, so that ancient areal diffusion is still the most likely explanation for the typological congruence.

Although sticking to a rigorous methodology sometimes precludes a firm conclusion about the linguistic results of a historical contact situation, it will help to evaluate poorly-supported proposals of contact-induced change.

### **3. Contact-induced changes that do not involve direct interference.**

As noted above, several change processes that fall under my definition of contact-induced change do not result in the diffusion of any lexical or structural features from one language to another. The first of these is connected with language death. Not all dying languages undergo the kinds of changes that are the focus of most of the literature on language death (see e.g. the papers in Dorian 1989); some languages vanish without undergoing any significant changes at all, especially in rapid shift situations. But languages that lose speakers gradually very often also lose their lexical and structural resources gradually, through two quite distinct processes. First, their speakers replace native lexicon and structure through borrowing from the dominant language to which they are shifting; and second, speakers abandon native lexicon and structure without any replacements—a process known as **attrition**. These two

processes are often responsible for the same changes, specifically when a borrowed structure is simpler, or less marked universally, than the structure it replaces in the receiving language. A detailed study of one case, a Hungarian-American community near Pittsburgh, Pennsylvania, provided very few structural examples of attrition alone (that is, examples in which the lost structures did not bring Hungarian closer to English structure); more examples of borrowing alone (closer to English but no simpler than the replaced Hungarian structures); and still more examples, though not many more, of attrition plus borrowing (closer to English and also simpler than the replaced Hungarian structures) (Fenyvesi 1995). So, for instance, this variety of American Hungarian has reduced the inherited system of preverbs, a change that is possibly due to attrition alone but is probably best analyzed as a combination of attrition and borrowing (since English has no comparable preverb system).

Another class of contact-induced changes without interference is to be found in certain instances of intentional change. These fall into two different (though related) categories: cases in which a group deliberately alters its language to make it more different from the language(s) of neighboring groups, as a means of underlining in-group identity; cases where a group invents a secret language in order to keep conversations from being understood by hostile outsiders. Examples of the former often involve massive distortion of the lexicon. Speakers of Lamayeqe Quechua, for instance, metathesized certain vowel-consonant sequences in words because they felt that their language was too similar to their neighbors' language ((Dwight Shaver, as reported by David Weber, p.c. 1999). And in an instance of the latter type, the Lōr̄is of what is now Pakistan are reported to have invented a secret jargon, Mōkkī, by distorting their lexicon (including loanwords from Baluchi- and Brahui-speaking neighbors) by metathesis and by adding prefixes and suffixes (Bray 1913:139-140). This example might have only passing interest as a curiosity rather more elaborate than Pig Latin and other language games, except that Bray reports that Mōkkī is 'acquired naturally

and as a matter of course by Lōṛī children; ...it is becoming a language for the home-circle...’ (ibid.).

A somewhat different sort of language-distortion for privacy purposes is reported in a number of cases from several different continents, cases in which groups deliberately simplify, or pidginize, their native language in order (as they assert) to keep outsiders from learning it. The Delaware Indians did this with their language, and although some foreigners (traders and missionaries) didn’t notice the distortion, others did: the Dutch missionary Michaëlius commented in 1628 that they ‘rather design to conceal their language from us than to properly communicate it, except in things that happen in daily trade; saying that it is sufficient for us to understand them in that’ (Jameson 1967[1909]:128). Similarly, a field-worker in Ethiopia reported that, after spending seven months working diligently to learn the Hamar language, she realized that what she had actually learned was ‘a kind of “Pidgin Hamar” which is used only for and by policemen, traders, and non-Hamar settlers’ (Lydall 1976:128). And an early missionary to the Motus in New Guinea discovered to his chagrin that—as he was informed by his young son, who spent much time with the village boys—the language he had struggled to learn was ‘a simplified form’ of the Motu language, because the Motus were reluctant to teach him their “true” language (Dutton & Brown 1977:760-761, citing Chatterton 1970:95-96; the missionary was W. G. Lawes, who arrived in Port Moresby in 1874).

The third category of contact-induced change without interference requires a modifier: changes in this category do result from linguistic interference, but the structural effects are delayed, not immediate. That is, the borrowed element (these changes are typical of borrowing situations, not of shift-induced interference) does not in itself constitute structural change, but its presence triggers a series of changes that do eventually bring about significant structural change, in a kind of snowball effect. The borrowing of conjunctions into languages

in which subordination was traditionally expressed by nonfinite clauses often leads to an innovative system with finite subordinate clauses. A comparable example is the change in Siberian Yupik (Eskimo) from a suffixal NP coördination pattern, with a comitative suffix added to each noun, to a coördination pattern in which the two NPs are linked by a conjunction ‘and’ borrowed from Chukchi. Menovščikov (1969:124-130) observed three different coördination patterns that apparently marked a transition from the old to the new pattern: the old construction alone, with the comitative suffixes; a mixed construction with the suffixes and the conjunction ‘and’; and an innovative construction with the conjunction alone. The development of this innovative end-stage construction was not itself due to borrowing from Chukchi, but the process that led to the current situation was set in motion by the adoption of the Chukchi conjunction.

Caution is required in the analysis of chain-reaction changes in this category: as Mark Hale has observed (p.c. 2002), in principle there is no limit to how far back one could reach into a language’s history to find a borrowed element and then argue that it motivated a late change in a chain reaction. Few historical linguists would wish to argue for a Greek source for a change in (say) a modern Portuguese dialect, even if a morpheme involved in the change can ultimately be traced back to a Greek loanword in early Latin. The most convincing cases involve relatively shallow time depths, with chain reactions stretching back a few hundred years at most.

#### **4. Conclusion: Can we predict what kinds of contact-induced changes will occur when?**

Historical linguists tend to be pessimists when it comes to predicting change. Nevertheless, we are always on the lookout for linguistic and social predictors for change, and especially for constraints on what changes are possible. In language contact, the safest prediction

is completely trivial and therefore uninteresting: no language contact, no contact-induced change. More substantive predictions and constraints are hard to find. A common assumption is that contact-induced change is inevitable under conditions of intense contact, i.e. when there is very widespread bilingualism in a speech community. But even this common-sense position is not a safe assumption, because there are well-documented cases of bilingual speech communities whose members do not engage in lexical borrowing, and in some of these situations there is also no solid evidence of structural interference. Montana Salish, for example, does not in general borrow words from English (or French, the other European language that has played a prominent role in its contact history), and it has acquired no structural features from English (or French) either. There has certainly been a great deal of cultural assimilation to the dominant anglo culture over the past hundred and fifty years or so, but the words that are used to designate new items are created from native material; the word for ‘automobile’, to give just one of many examples, is *p’ip’úyšn*, which literally means ‘it has wrinkled feet’. Moreover, this appears to be an areal feature of the U.S. Northwest, because Nez Perce and other languages of the region also tend not to borrow words from English or French. A few current Montana Salish speakers occasionally produce sentences that show some English influence, e.g. with SVO word order. But although such sentences are fully grammatical in Montana Salish, they are stylistically marked. They occur very infrequently in naturally-occurring data, such as stories, and are common only for a few speakers and only under sentence-elicitation conditions. It seems risky, therefore, to suppose that contact-induced change of any sort is inevitable in intense contact.

Strenuous efforts to identify unborrowable linguistic features have also proved fruitless so far: all the constraints that have been proposed so far can be, and indeed have been, proved to be leaky. But even if we can’t talk safely about possibilities, we can still consider probabilities. There is strong evidence to support the claim that social factors outweigh

linguistic factors in predicting the linguistic results of contact. It is unfortunate, therefore, that our understanding of the crucial social factors remains fragmentary. The distinction outlined above, between borrowing (adopting a feature from one language into another, where the borrowers are fluent in both languages) and shift-induced interference (where imperfect learning of a target language is crucial), correlates robustly with linguistic effects: non-basic vocabulary first and most in borrowing, with structure and basic vocabulary borrowed later if at all; phonology and syntax most prominent in shift-induced interference, with lexical transfer lagging behind or absent altogether. One implication of this distinction is that it permits an educated guess about the type of contact that was responsible for contact-induced changes in a long-vanished contact situation: if we can establish a number of structural interference features but no lexical interference, we can be almost certain that the process was shift-induced interference. (A rare exception might be borrowing by bilinguals into a language whose speakers have an explicit or implicit ban on borrowing vocabulary.)

Other social factors, most notably intensity of contact, have been mentioned above and in the literature, but the concept is distressingly vague. In borrowing situations, it has to do in part with levels of bilingualism in the speech community. In shift situations, the relative sizes of the two speech communities and the speed of the shift contribute to the level of intensity: the more shifting speakers there are relative to speakers of the target language, and the more rapid the shift, the more interference features one can expect in the target language.

Linguistic factors, though important, are easily overridden by social factors. For instance, typological distance between source language and receiving language affects the likelihood that structure will be borrowed—the more similar the systems are to begin with, the easier it is for a feature to diffuse from one to the other—but with intense enough contact, **any** feature can be transferred from any language to any other language, no matter how different

the two languages are typologically.

Considerations of universal markedness also play a role, but mainly in shift situations. In borrowing situations, where the receiving-language speakers are fluent bilinguals, knowledge of the relevant structures can safely be assumed, so there is no knowledge-based barrier to borrowing. In shift situations, by contrast, markedness plays a role in the learning process: highly marked target-language features are less likely to be learned by members of the shifting group. On the other hand, when shifting speakers carry over features of their heritage language into their version of the target language, these features may be marked or not; but the unmarked first-language features are less likely than the marked ones to be adopted by original target-language speakers if the two speech communities coalesce into a single integrated speech community. That is, in such cases the original target-language speakers will adopt some, but not all, of the innovative features in the shifting group's variety of the target language; and the less marked features, being easier to learn, are more likely to survive in the eventual integrated target language.

Markedness itself is affected by various specific linguistic factors. To give just one example, one common-sense and valid proposal is that sharpness of boundaries makes affixes easier to borrow (Heath 1978:105, Comrie 1981:202-203). This leads to a prediction that affixes from flexional languages, and also from agglutinative languages where morpheme boundaries are obscured by morphophonemic alternations, will be less often borrowed than affixes from agglutinative languages with transparent transitions from one morpheme to the next in a string of stem and affixes.

Various authors have proposed borrowing scales, correlating expected (or permissible) interference features with increasing intensity of contact: the more intense the contact, the more kinds of features can be borrowed (see e.g. Moravcsik 1978 and Thomason & Kaufman 1988:73ff.). These scales are roughly predictive, in that they embody a claim that, for in-

stance, basic vocabulary will not be borrowed before non-basic vocabulary, and inflectional morphology will not be borrowed before derivational morphology. Occasional exceptions to these predictions sometimes turn up, for complex social and linguistic reasons, so no borrowing scale is completely accurate. Perhaps the most common reason for out-of-scale borrowings is close typological congruence between the source and receiving languages, which can facilitate types of borrowing under less intense contact conditions than the scale predicts. Finally, different authors' borrowing scales often make different predictions; Romaine predicts, for example, that morphology will be borrowed before syntax (1995:64), while Thomason & Kaufman predict the opposite borrowing order.

The conclusion, then, is that rough predictions can be made about the likelihood of different kinds and degrees of both borrowing and shift-induced interference, under varying social and linguistic conditions. Many of these predictions are for the most part borne out by the available empirical evidence, and some are strongly supported. But the possibility for exceptions always exists, because no aspect of language change is, in the end, completely predictable.

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