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## THE SOCIOLINGUISTIC TYPES OF LANGUAGE CHANGE

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### 1. Introduction

Scholars who work on diachronic issues frequently find it necessary to distinguish various TYPES of linguistic change, usually for the purpose of establishing a theoretical contrast between structural effects of the different types, or between the different social circumstances surrounding them.<sup>1</sup> Theoretical proposals about change are then often limited to one particular type. One of the oldest such distinctions is that between internally developed changes, often called 'natural change', and those which arise from contact with another language, often generically termed 'borrowing' or 'interference'. Perhaps the best-known use of this distinction is in the work of the Neogrammarians: the famous axiom of 'exceptionless sound change' was held to apply just to internally developed changes, while borrowing was seen as a major source of irregularity in sound correspondences. And in more recent work by a variety of scholars such as Thomason & Kaufman, Van Coetsem, and Labov, one finds similar distinctions made for analogous purposes, dichotomies or trichotomies that seek to organize the multitude of change situations one encounters in historical linguistics, so that systematic properties may be discerned. In this paper I survey some recent proposals concerning the 'typologies' of change, and try to provide a synthesis identifying the major types which need to be distinguished, together with the constellation of factors each is associated with.

<sup>1</sup> The ideas on which this paper is based were first developed for a seminar on language contact and language change that I taught together with Frans Van Coetsem and John Wolff at Cornell University in 1987. Their comments and criticisms are gratefully acknowledged. An earlier version of the paper was presented at the LSA Annual Meeting, Washington DC, December 1989. I am also grateful for comments received from Elizabeth Traugott, and from the anonymous readers of the paper.

## 2. *The three major types*

I will begin by describing a basic classificatory framework (summarized in Table 1) that recognizes three major sociolinguistic types of change. I will refer to the types as *spontaneous* change, *borrowing*, and *imposition*, although these terms should be taken merely as convenient shorthand rather than essential parts of the definition.<sup>2</sup> The distinction between the first of these and the remaining two is just the contrast mentioned previously, that between internally developed changes and those that are contact-induced.

	----- CHANGE TYPES -----		
	Internally induced	---- Externally induced ----	
	<b>SPONTANEOUS</b>	<b>BORROWING</b>	<b>IMPOSITION</b>
Alternative terms:	untargeted, natural, 'from below'	targeted, 'from above', recipient lang. agentivity	substratum, source lang. agentivity
Language contact involved?:	no	yes	yes
Agents of change:	native speakers	native speakers	non-natives

Table 1: *The three sociolinguistic types of language change*

Spontaneous changes are therefore those that arise from within a single speech community, uninfluenced by an external linguistic model or target. That is, there is no other language or dialect available to speakers in the community which serves as the structural source or goal of such a change. Such changes are often considered the unmarked case in historical studies, and hence they are frequently dignified with the term 'natural change'. However, since there is nothing unnatural about the other types of change that involve contact, I prefer to avoid the use of the term 'natural', relying instead on the term 'spontaneous', which I adopt from Bickerton (1980).

<sup>2</sup> I restrict my attention to diachronic developments that come to regularly characterize the language of a speech community. Hence I ignore transitory 'changes' that occur during language acquisition (e.g., child language and interlanguage), or that occur sporadically (e.g., slips of the tongue) or idiosyncratically (e.g., idiosyncratic pronunciations, private lexical items). Of course, such things may eventually lead to community-wide change, so they merit further study in connection with the typology proposed here.

The contact-induced change types are borrowing and imposition. The crucial characteristic that they share is of course that more than one language is involved in their development. In other words, the linguistic features of one language serve as the model or source for alterations that occur in the other. Typically, contact situations arise when what were originally two entirely separate speech communities come into fairly close proximity and develop some level of verbal interaction. In the course of the change, these communities will often fuse into one, which will necessarily be heterogeneous. However, we must also recognize cases where 'contact' occurs entirely within a single community, such as contact between contemporary and archaic forms of the same language in diglossic situations like those of Arabic and Sinhala. In all contact-induced changes some degree of bilingualism by some fraction of the population must occur; these speakers will be the principal agents of the change, and the locus of the contact.

One problem that arises in making this distinction is the old question of language and dialect. Can contact-induced change occur between what are merely different dialects of the same language? The answer has to be yes, for two reasons: First, it is well-known that the borderline between 'dialect' and 'language' is fuzzy and scalar rather than discrete, and second, the phenomenon of 'dialect borrowing' is clearly established. But this still leaves us with the problem of how structurally different the contacting varieties have to be in order for us to say that TWO units are involved rather than just one. I cannot give a solution to this problem at present. I think it must be treated as the limiting case: at some level of similarity between the contacting varieties the distinction between internally-induced and externally-induced may be neutralized. Fortunately for the analyst, however, the bulk of contact-induced changes arise under circumstances where the separateness of the language varieties is not in doubt.

Turning now to the distinction between the two contact-induced types, borrowing and imposition, one finds that this contrast has been implicitly recognized for some time, but is made explicit and given some detailed analysis in two recent works: Van Coetsem (1988) and Thomason & Kaufman (1988). The crucial difference between the two types lies, in Van Coetsem's terminology, in the agents of the change: are they native speakers of the language being changed or not? In the borrowing case, which Van Coetsem labels 'recipient language agentivity', native speakers import into their language features from another language. In the imposition case, formally termed 'source language agentivity' by Van Coetsem, speakers who are learning a second lan-

guage impose onto it features of their first language, usually in the course of language shift.<sup>3</sup> This 'foreign-accented' variety then becomes the norm for a community of speakers for whatever reason (most commonly because of the numerical preponderance of the shifting speakers). To take some examples, the massive importation into English of French lexical items after the Norman conquest was a case of borrowing: the agents were native speakers of English who had learned some of the language of the conquerors (cf. Van Coetsem 1988:131-132). The Dravidian substratal influence on proto-Indic, however, was a case of imposition: evidently entire communities of Dravidian speakers shifted to Indic, imposing on it assorted Dravidian features, such as a retroflex consonant series (cf. Thomason & Kaufman 1988:140-143). The agents of this transmission were thus non-native speakers of Indic — the language being changed.

The use of this native/non-native distinction as a defining criterion leaves us with the problem of how to treat the balanced bilingual. Communities of speakers who are fluent from an early age in more than one language are not hard to find in the world, and contact-induced changes in such communities would be difficult to classify on this dimension. Van Coetsem cites this as the limiting case, under which this distinction is neutralized.

Van Coetsem, and Thomason & Kaufman, discuss these two types in considerably more detail, examining cases with greater and lesser degrees of borrowing and imposition, and exploring some of the social and linguistic parameters of each type. I attempt to treat some of these points in the discussion below. In what follows I relate the 'typological' statements of several other scholars to this basic framework of three major types, in order to delineate the pattern of linguistic and social characteristics associated with each. My hope is that this will allow us to compare findings from various subfields, and make testable predictions that may guide future sociohistorical research.

### 3. *The associated characteristics*

As we have seen, the three major types are defined essentially on social/psychological grounds, rather than in terms of linguistic structure: monolingual vs. bilingual speech communities, native vs. non-native agents. It is therefore not surprising that a number of typological proposals have come from scholars

<sup>3</sup> I will use the terms 'first language' or 'L1' as a convenient shorthand for a dominant language spoken with native-like fluency and generally learned in childhood, even though this may not literally be a speaker's first language; similarly 'second language' or 'L2' should be taken as any non-dominant language acquired after childhood.

working on sociolinguistic problems, such as social stratification, pidgin/creole formation, and the like. One of the best known of these typologies is Labov's distinction between 'change from above' and 'change from below'. These are defined by Labov in terms of '[above or] below the level of conscious awareness' (1966:328), but in what is perhaps a deliberate ambiguity of terminology, changes from above tend to find their social origin in higher-status groups, and those from below in lower-status groups.

Is this dichotomy compatible with the three types defined here? Most of the cases of change from below that Labov has identified (e.g., the vowel changes in New York, Philadelphia, and other English dialects; cf. Labov 1966, 1981a; Labov, Yeager & Steiner 1972) seem to be uncontroversially the same as the spontaneous change case. They are not directed towards any external model, and arise from within a single speech community. However, some of the ethnic differences he reports, e.g., the vocalic differences between Jewish and Italian New Yorkers (Labov 1966:292-310), are potential substratum effects, possibly arising from cases of imposition. Labov does not provide a distinct theoretical treatment of imposition, in these or other cases, but the present model would require them to be treated separately from other changes from below.

In the case of change from above, Labov's paradigm example is the re-introduction of post-vocalic /r/ in New York City English as a prestige feature. The apparent source is the /r/-ful pronunciation of general American English, so it is not a case of language contact. But it clearly is a case of dialect contact, involving the importation of a prestige norm from an external dialect, outside of the speech community undergoing change (Labov 1966:499, 575). There is no evidence that imposition occurs in any scale in the development of such changes from above (e.g., no large numbers of non-New Yorkers trying to learn the New York dialect, and imposing their /r/-ful pronunciation on the outcome), so I will provisionally treat change from above as falling under the major category of borrowing.<sup>4</sup>

<sup>4</sup> Labov's discussion (1966:325-326) seems also to allow the possibility that a prestige feature spreading in 'change from above' may come from the existing linguistic repertoire of the highest status group, rather than from contact with an external speech community. But since these features are explicitly characterized as "not used in every-day language by the majority of the population" (p.325), we may be justified in treating such cases as also involving dialect contact.

3.1 *Social characteristics*

Using the analytical framework sketched above, one can begin to derive from the extensive sociolinguistic literature on change-in-progress inferences about the social and psychological characteristics of the spontaneous and borrowing types of change. Although evidence concerning the imposition type is less-readily available, I will attempt to extend to this type the observations made here. Some of these results are summarized in Table 2.

	SPONTANEOUS	BORROWING	IMPOSITION
Social class origins: (Labov, Kroch)	lower/middle strata	upper stratum of borrowing group?	any stratum that undergoes shift
Age distribution:	peak among teenagers	peak among adults	peak among adults
Social motivation: to adopt (Labov) to resist (Kroch)	solidarity, local identity self-interest, ideology	prestige	communicative need (Van Coetsem)
Style shifting:	variable	more of innovation in formal styles	less imposition in formal styles

Table 2: *Social characteristics of the change types*

First consider the social distribution of the innovations. Studies of class distribution such as Kroch (1978), Labov (1980, 1981), Guy et al. (1986), report that changes from below regularly begin in the working or lower-middle classes (especially in the pattern Labov calls 'curvilinear'). Changes from above tend to begin in the upper class. But if one attempts to generalize the latter finding to other cases of borrowing, several complicating factors emerge. In the first place, there are many cases in which the dominant class are speakers of the source language rather than the borrowing language — for example, Norman England. Therefore, at a minimum this observation would have to be restated as the following conjecture: 'Borrowing begins in the upper stratum of the borrowing group', which may not itself be the highest status group in the community. Second, defining class in terms of a single scale may be problematic in contact situations: how would the traditional aristocracy in pre-1948 India rank with respect to the British colonial authorities? And third, there

is the issue of access. Speakers of the borrowing language who have a great deal of contact with source-language speakers will be strongly implicated in the borrowing process, regardless of their status in their own communities. In colonial societies these included household servants, army sergeants, and indigenous employees of the colonial government. So the general question of class in borrowing situations merits a more thorough treatment.

In the case of imposition, no regular class pattern emerges. The group that imposes is usually undergoing language shift, and many shifting populations are socially subordinate: immigrant communities, conquered peoples, etc. But since history records cases of socially dominant groups shifting, and serving as possible sources of superstrate interference (e.g., the Franks in France), it seems unlikely that a systematic class origin for impositions will be found.

While a change is underway, the age distribution of the innovation is also informative. Changes from below appear to be driven ahead by new native acquirers of the vernacular, and typically show a peak among teenagers (cf. Guy et al. 1986:36). Indeed, such a distribution in 'apparent time' is one of the ways such a change in progress is identified. But the age distribution of change from above is more complicated. It may often require the mature linguistic experience of adults to correctly identify and adopt the borrowed feature (cf. Labov 1966:342-355, for the case of NYC /r/), but note that the issue of access is important here as well. Extending this criterion to the imposition case, I think one could predict that impositions-in-progress should also show an age peak among adults, since children in a language-shift situation would be more likely to acquire a native-like (i.e., unchanged) variety of the L2.

Turning to the question of social motivation, one finds several different claims in the literature. Labov has long argued that spontaneous change often shows a solidarity-based motivation: the term he uses is 'local identity'. In his view this provides a positive impetus for the adoption and extension of the innovation. 'Changes from above', on the other hand, are motivated by prestige pure and simple (but note that local identity itself involves a kind of covert, local prestige).

Kroch, however, argues that spontaneous change is the natural condition of language, occurring without any particular social motivation, and that what needs an explanation is why some classes resist such changes. He proposes that a general social conservatism of the dominant classes accounts for their resistance to spontaneous innovation.

Finally, Van Coetsem has proposed a social motivation for imposition in terms of 'communicative need'. The idea is that people are driven to shift to an

imperfectly-learned L2 as their everyday medium only when there is some strong social necessity that they communicate in that language. Of course prestige might form a part of this social motivation, but coercion and/or economic survival might be more direct factors.

These motivations are not as well-established as the distributional patterns already noted. For one thing, a fuller examination is required of the possibility of multiple interacting motivations and causes. And other questions must be pursued. For example, can these motivations be justifiably extended to all cases of the types with which they are associated? In some respects, clearly not: no one would claim that all borrowings are motivated by the prestige of the source language. English-speakers borrowed the word *kangaroo* from Guugu Yimidhirr not for any reasons of prestige, but to label a creature they had never previously encountered. Such lexical borrowings to designate new objects or concepts illustrate another type of motivation (discussed in section 3.3 below). So this must be left as a point on which further investigation is needed.

The last purely social factor I will consider concerns style-shifting and register variation. One normally finds that people shift towards increased use of prestige features in more formal styles. This clearly entails that borrowings of prestige features should involve increased use of the innovation in the formal styles. However, spontaneous changes do not necessarily have any social evaluation on the prestige dimension. Some escape public attention and are subject to no stylistic variation, while others are evaluated positively or negatively, and style-shift accordingly. Finally, I propose that in imposition, at least in the initial stages, speakers normally will impose less in their formal styles, insofar as imposition is a non-native characteristic which will normally be socially disfavored.

### 3.2 Psychological characteristics

Another set of characteristics of the change types may be termed psychological; they are summarized in Table 3 (below). As noted above, Labov defines his two change types in terms of conscious awareness: change from below is unconscious and change from above is done consciously. Bickerton (1980:124) disputes this, asserting that "all linguistic processes [...] occur below the level of consciousness" and are assigned conscious social evaluations only *post-hoc*. But the weight of evidence appears to favor Labov's position. Many speakers do report conscious adaptations of their usage in the direction of acquiring prestige features (or other characteristics of a target language or dialect), such as the working class speaker of Brazilian Portu-

guese interviewed for the MOBREAL project (Lemle & Naro 1977; Guy 1981) who said "I do everything [I can] to talk right", and described how she imitated upper class speakers to 'improve' her own speech. To my knowledge, however, the sociolinguistic literature contains NO reports of consultants describing conscious efforts to adopt and extend a spontaneous change in progress. There is almost always social awareness of changes of the borrowing type (e.g., NYC /r/ or dialect accommodations by Americans in Australia), while many spontaneous changes proceed relatively unnoticed (e.g., the merger of /or/ and /ur/ in Philadelphia). Thus Labov's distinction may be adopted as a reasonable working assumption. To extend it to the imposition case, I propose that imposition be treated as unconscious. L2 speakers produce their accent without conscious effort: it is the suppression of it that they must do consciously.

	SPONTANEOUS	BORROWING	IMPOSITION
Consciousness (Labov)	unconscious	conscious	unconscious?
Saliency (Naro & Lemle)	least salient forms first	most salient forms first	less salient forms favored?
Frequency (Phillips)	variable (frequent forms first in phonetic change)	frequent forms first? (or irrelevant?)	minimal effect?

Table 3: *Psychological characteristics of the change types*

The second psychological factor is saliency: the perceptual prominence or 'noticeability' of a linguistic feature or context. A number of authors have dealt with this topic in various regards; I rely mainly on the work of Naro & Lemle (1976) and Naro (1981). Restricting their attention to syntactic change, these scholars propose that spontaneous changes begin in non-salient environments, while what they call 'conscious imitative' changes begin in the most salient contexts. Their example of the saliency effect on spontaneous ('natural') change is drawn from popular Brazilian Portuguese: verbs with an unsalient singular/plural opposition (e.g., *come-comem* "eats-eat"; final orthographic *-m* represents nasality on the preceding vowel) have a very low rate of agreement with a plural subject, while verbs with a highly salient opposition show a high rate of plural agreement (e.g., the suppletive case of *é-são* "is-are", and other

cases with highly distinctive desinences, such as *fez-fizeram* "made.sg--made.pl"). In Naro & Lemle's (1976) interpretation, this indicates a historical loss of agreement in the unsalient contexts.<sup>5</sup>

The effect of salience on changes of the borrowing type has been amply demonstrated in targeted changes such as standardization of regional dialects, L2 acquisition, and decreolization. For example, Jutronić-Tihomirović (1987) shows that Split Croatian borrows salient case features of standard Croatian ahead of unsalient ones, and Wolfram (1984) finds that L2 learners of English acquire the salient strong past tense forms of English ahead of the unsalient weak forms.

Although Naro & Lemle do not consider the imposition case, their model may be extended to include it, although with certain limitations. Consider that second language acquisition itself tends to be somewhat saliency-governed, so that more salient contexts are acquired earlier. Therefore the reciprocal distribution in L2 of impositions from L1 should broadly tend toward less-salient contexts. However, the question of ability also arises here. Some non-native features of adult L2 speech are very difficult for speakers to eliminate, even with great conscious effort. Thus salient impositions might survive in a community just because speakers found them hard to avoid. Furthermore, we must consider the question of 'salient to whom?' What is perceived as salient by a speaker experienced in one linguistic system might be quite different from what is salient to another. Therefore, to demonstrate saliency effects on imposition might require highly detailed analyses of particular cases, which task might not be feasible for language contact cases in the distant past. And finally, it is an open question whether saliency is a constraint on change in the non-syntactic domains of language.

A further factor which I will include here is the frequency of occurrence of a linguistic item.<sup>6</sup> In this case the picture is somewhat murky. In spontaneous change there appear to be divergent tendencies: both high frequency and low frequency have been cited as favoring change. For sound change, Phillips (1984) finds that those changes with physiological motivations (e.g., assim-

<sup>5</sup> But note that this case is treated by Guy (1981, to appear) as an instance of a borrowing type of change: nonstandard speakers who lacked agreement borrowed it from the standard dialect (where it is categorical), beginning in the most salient contexts. In this analysis it would count as an additional example of the saliency effect on borrowing changes.

<sup>6</sup> I treat frequency as a psychological factor because it is not inherent in the structure of the linguistic system, nor in the social context, but exists rather as a psychological percept created in the speaker/hearer by the experience of using language. In this it is like saliency.

ilations) affect the most frequent words first, but changes that are not physiologically motivated affect least frequent words first. And as for spontaneous changes in morphosyntax, the effect of frequency is an open question.<sup>7</sup> In cases of borrowing, it would seem reasonable to claim that, all other things being equal, more frequent items would be more likely to be borrowed, but it is not clear if frequency has a *direct* influence on borrowing. A single occurrence of a form is sufficient for borrowing to occur, and the partial bilinguals who are the borrowers could easily have quite different frequency distributions in their usage than native speakers. Finally, in imposition the effect of frequency is likely to be minor: lexical impositions are rare and culturally specific, and phonological and syntactic impositions involve structural characteristics of the linguistic system as a whole, rather than particular items. However, it might be worthwhile to ask whether an imposed feature was more frequent than other features in the L1 of the imposing group (for example, were retroflex apicals more frequent in Dravidian than non-retroflex in the contact with proto-Indic?)

### 3.3 Linguistic characteristics

The linguistic characteristics of the change types is the area in which some of the most interesting recent discoveries have been made; these results are summarized in Table 4 (below). First, consider the question of what areas of language are affected by change. Spontaneous change clearly involves all structural domains: phonetic, phonological, syntactic, lexical, etc. But the works of Van Coetsem (1988) and Thomason & Kaufman (1988) clearly indicate a sharp split between the contact-induced change types. Borrowing is most likely in the least stable domains of language: vocabulary items are the easiest things to borrow; many borrowed words may bring along certain bound morphemes, and perhaps certain phonemes or lexico-syntactic properties. But the basic phonological and syntactic systems of a language are less often affected, unless the borrowing becomes truly massive. Thus English shows substantial lexical borrowing from French after the Norman Conquest, and a modest number of borrowed morphological elements (e.g., agentive *-er*), but limited phonological or syntactic borrowing. The few examples of French influence on English syntax and phonology (e.g., non-initial stress patterns in Romance-origin words, possibly the phoneme /ʊ/, noun-adjective word order in *attorney general*) do not add up to substantial structural impact.

<sup>7</sup> Studies of syntactic change often make no reference to frequency, although Phillips (p.c.) notes that morphological change appears to affect least frequent words first.

	SPONTANEOUS	BORROWING	IMPOSITION
Structural domains: (Thomason & Kaufman, Van Coetsem)	all domains	unstable domains first (words, morphemes)	stable domains first (phonology, syntax)
Systematicity: (Neogrammarians, Van Coetsem, etc.)	systematic	random, sporadic	systematic
Generality: (Van Coetsem, Bailey)	generalizing, gets less constrained	initially ungeneral, acquires target constraints	generalizing?
Form/Function: (Bickerton)	old form gets new meaning/function	borrowed form used for old function	new function imposed on old form?
Linguistic motivation:	function, analogy, phonetics, etc.	none (fill gaps?)	interference

Table 4: *Linguistic characteristics of the change types*

Imposition, on the other hand, typically involves the most stable domains. Lexical items are not often imposed in large numbers (compare the absence of Dravidian loans in proto-Indic), but basic syntactic and phonological characteristics from L1 are typically the most persistent features in the usage of imposing speakers. Thus this criterion will be particularly useful in distinguishing borrowing from imposition, although it is less useful in telling either type of contact-induced change apart from internal developments.

Next, I consider the question of the systematicity of the change. There is a large class of spontaneous changes that proceed systematically across all forms and utterances. There are sound changes showing 'neogrammarian regularity' (e.g., Grimm's Law), and syntactic changes with similar characteristics (the elimination of 'pro-drop' in French). Imposition likewise, being an essentially structural phenomenon, will show a great deal of regularity. But there is no such thing as 'regular borrowing': by its nature borrowing is a random act. Accordingly, Table 4 (above) shows spontaneous and impositional changes as systematic, in opposition to borrowing. But one should bear in mind that there are clearly unsystematic spontaneous changes. Analogic changes normally have this character: thus English has developed a past tense *dove* replacing (or alternating with) earlier *dived*, by analogy with *drove*, *rode*, etc., but the same

change has not occurred in *hive*, *jive*, *guide*, etc. There also appear to be sporadic cases of imposition: Patiño (1983:141-146) describes the plural determiner *ma* in Palenquero Creole as a probable substratal imposition from the Bantu plural noun-class prefix *ma-*, but no other Bantu prefixes survive in Palenquero, and this one is used variably, alternating with zero or with other indicators of plurality which are Spanish (superstratal) in origin such as numerals.

Next comes an item I have labeled 'generality'. This is derived from the work of Van Coetsem (1988) and Bailey (1973). These scholars suggest that the natural tendency of spontaneous changes is to generalize, becoming less constrained, applying to a broader range of forms and contexts. Thus the tensing and raising of /æ/ that occurs in many English dialects evidently begins in a fairly narrow range of phonetic environments (before front nasals); in some dialects it spreads to additional phonetic environments (e.g., before voiceless fricatives, voiced stops), and in the extreme case of the Northern dialect of American English it becomes an unconditioned sound change, applying in all environments (Labov 1981b). By contrast, borrowings have no clear generalizing tendency. They are sporadic events to begin with, and more extensive borrowing may simply lead to the acquisition of the constraints or distributional patterns that are found in the target language, whether they are general or not (e.g., the English borrowing of Latin plurals, such as *corpora* and *alumni*).

In the case of impositional changes, I think there may also be a generalizing tendency. In a speaker's L1, some general pattern of the phonology or syntax might be subject to exceptions in specific lexical items; when such a pattern is imposed on L2 where these lexical items do not occur, it would be exceptionless, hence more general. However, this prediction is speculative, and awaits further investigation. In fact, the entire criterion of generality merits more examination. It is surely an oversimplification to characterize all spontaneous changes as tending towards generalization.

Next, let us turn to a proposal by Bickerton (1980) concerning the relationship between new forms and new functions. His purpose is to distinguish between spontaneous change on the one hand and decreolization on the other, and his focus is on morphosyntax rather than phonology. For the moment I will subsume decreolization under the borrowing type, since it involves creole speakers borrowing features from a prestigious standard language. Bickerton suggests that the two types can be distinguished as follows. In spontaneous change, an existing form in the language acquires a new meaning or function.

An example would be the untargeted rise of periphrastic *do* in English, where an existing construction with *do* as an auxiliary verb with a causative meaning becomes reinterpreted as having a merely periphrastic grammatical meaning, without any change in form (at least at first; see Kroch 1989).

In decreolizations, however, Bickerton claims that the first step in borrowing from the target language is to adopt a new form and use it to express an existing grammatical function or meaning, without changing the essential syntactic/semantic system of the recipient language. This is basically a new version of the old idea of relexification. Bickerton's example is the borrowing of English *did* into mesolectal Guyanese Creole, replacing the basilectal anterior marker *bin*. In the mesolect, the function and structure of *did* parallels that of basilectal *bin*, so it occurs predominantly in affirmative statements, and in negative statements it occurs after the negative particle; both patterns are markedly at odds with the English source.

Extending this notion to other changes of the borrowing type seems problematic. Bickerton is primarily treating the borrowing of grammatical words, which is rather rare outside of the decreolization situation. But the idea that a form may be borrowed without incorporating a full appreciation of its meaning and function is fully applicable to other borrowing situations.

Can Bickerton's model be enlarged to include the imposition type? He does not address this issue, but a logical extension presents itself. Since forms are not often imposed but functions and meaning are, it seems likely that impositional changes would share the characteristics of spontaneous changes on this point: i.e., impositions would involve the existing inventory of grammatical words (and morphemes?), but use them in new ways reflecting the grammatical system of the L1 of the shifting community.

It should be noted in connection with this discussion of creoles that the classification according to the present typology of the changes that occur in the course of the pidgin/creole life-cycle is not without problems. Pidgin-formation seems most similar to the imposition case, but if so, what language is it that speakers are acquiring? Decreolization I have treated here as a case of borrowing, but others have treated it as involving acquisition of the target language with renewed imposition of creole features. And creole-formation, in the classic sense of a pidgin language acquiring native speakers, may fall outside the present framework entirely. On the one hand, it may involve spontaneous change by the new L1 speakers, but at the same time they may be in contact with many different L2 (pidgin) varieties in their community. Thomason &

Kaufman (1988) provide a thoughtful treatment of some of these issues, but several open questions remain.

Finally, I turn to the issue of a linguistic motivation for innovation. We have seen that there are social reasons that might compel a speaker to adopt or resist an innovation. But are certain changes favored by the nature of the linguistic structure? In the case of spontaneous change numerous linguistic motivations have been proposed: ease of articulation, analogy, generalization, functional load, etc. Some of these are quite compelling for particular cases, but the matter requires a general treatment that is beyond the scope of the present paper.

The linguistic motivation for borrowing is unclear. Van Coetsem (1988) implies that the need to fill lexical gaps is itself a linguistic motivation to borrow words, but one could argue that this is really a social motivation: speakers develop words to talk about things their culture deems significant, but the mere absence of a word for a particular meaning does not compel them to do so. I would prefer to claim that borrowing is basically just socially motivated, not driven by any intrinsic structural characteristic of language. In this it would seem markedly different from imposition. The process of acquiring a second language is clearly substantively affected by the prior existence of the competing L1 grammar, so one can say that structural interference is the linguistic motivation for imposition.

#### 4. Discussion and conclusions

The summary presented here of the cases and their characteristics is clearly not exhaustive; no doubt other characteristics await discovery, and perhaps further type-distinctions will need to be made. However, the basic tripartite contrast seems to successfully accommodate all the theoretical claims examined here, and should provide a solid point of departure for future investigation.

The validity of the basic framework has recently received independent confirmation in the current work of Herold (1990) on processes of sound change. Investigating the problem of phonological merger, she finds that it is necessary to postulate three basic mechanisms, which are strikingly coincident with the three change types identified here. The mechanisms are: 'merger by approximation', which is internally induced and unconscious (i.e., equivalent to the spontaneous type); 'merger by transfer', which is externally induced and conscious, involving contact with a prestige dialect (i.e., a case of borrowing); and 'merger by expansion', which is externally triggered and unconscious, and appears equivalent to the imposition type of change. Herold's concept of

tions have a covert positive evaluation as markers of solidarity and group membership. Thus they may continue to expand even in the face of strong negative reaction 'from above'.

In conclusion, the basic framework of three major types seems to adequately incorporate all the analytical distinctions examined here. The model allows us to compare and contrast a variety of characteristics associated with the change types, and to make testable predictions for particular situations. Although much work remains to be done, the ramifications of these typological distinctions are potentially far-reaching. A clear and systematic treatment of change types will make possible much more precise statements of the domains and conditions under which the 'laws' of historical linguistics apply, and may suggest principled explanations of why they take the forms they do. And finally, this will aid us in the worthwhile enterprise of keeping historical linguistics firmly rooted in social history.

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### SUMMARY

Many studies of linguistic change have drawn distinctions between contrasting types of change. Examples are the Neogrammarian distinction between regular sound change and borrowing, and Labov's contrast between 'change from above' and 'change from below'. A basic criterion for many such distinctions is whether or not language contact is involved in the genesis of a change. Recent works by Thomason & Kaufman (1988) and Van Coetsem (1988) suggest a further important distinction between contact-induced changes that arise through borrowing and those that arise from the imposition of native language habits on a second language. This paper attempts to summarize and critique some major proposals concerning change types, and provide a systematic synthesis that identifies three basic types: spontaneous change, borrowing, and imposition. Each is associated with a distinctive set of social, psychological, and linguistic characteristics, such as the social class distribution, whether speakers are consciously aware of the innovation, and the domains of language structure that are affected. Certain variable parameters that allow the further differentiation of subtypes are also explored, such as (in contact-induced change) the degree of bilingualism and the demographic balance between the languages, and (in spontaneous change) the possible co-existence of contrasting social interpretations of the innovation.

### RÉSUMÉ

Dans les études consacrées au changement linguistique on trouve souvent un façon dichotomique lorsqu'on parle des différents types de changement. Les néogrammariens faisaient une distinction entre changement phonétique régulier et emprunt; Labov parle de l'opposition entre changement de 'en haut' et changement de 'en bas'. Le critère de base pour de telles dichotomies est si du contact linguistique est impliqué ou non dans la genèse d'un changement. Des travaux récents, notamment ceux de Thomason & Kaufman (1988) et Van Coetsem (1988), proposent une importante distinction supplémentaire, à savoir la distinction entre des changements provoqués par des contacts avec d'autres langues (qui prennent leur source dans l'emprunt) et des changements qui résultent d'une imposition des comportements linguistique d'un locuteur natif sur

une langue seconde. Le présent article essaie un résumé critique de certains propositions majeures concernant les types de changement et présente un synthèse de ces ouvrages en identifiant trois types de base, à savoir le changement spontané, l'imprunt et l'imposition. Chaque type est associé avec en ensemble particulier de traits sociaux, psychologiques et linguistiques comme, par exemple, la stratification sociale, la question si les locuteurs sont conscients d'une innovation, et les domaines de la structure langagière atteints par un changement. L'article examine également certain paramètres variables qui permettent la différenciation supplémentaire en sous-types, comme le degré du bilinguisme et la balance démographique entre les langues (au cas des changements provoqués par le contact) et la co-existence possible des interprétations sociales qui s'opposent d'une innovation donnée.

### ZUSAMMENFASSUNG

Viele Untersuchungen zum Sprachwandel haben eine Reihe von sich scharf untereinander unterscheidenden Arten der Sprachveränderung aufgestellt. Die Junggrammatiker unterschieden zwischen regulärem Lautwandel und Entlehnung; Labov unterscheidet zwischen einem Wandel 'von oben' und einem Wandel 'von unten'. Grundkriterium für viele solcher Unterscheidungen ist ob Sprachkontakt in der Genese eines Wandels eine Rolle spielt oder nicht. Jüngst erschienene Arbeiten von Thomason & Kaufman (1988) und von Van Coetsem (1988) schlagen eine weitere Unterscheidung vor, nämlich zwischen kontakt-induzierten Veränderungen, die durch Entlehnung entstehen, und solchen, die ihren Ursprung in der Imposition von spezifischen Sprachgewohnheiten auf eine zweite Sprache haben. Der vorliegende Aufsatz versucht, eine kritische Übersicht über die wichtigsten Vorschläge bezüglich Sprachveränderungstypen zu bieten und eine Synthese, die drei Haupttypen herausstellt: spontaner Wandel, Entlehnung und Imposition. Jeder Typ wird mit bestimmten sozialen, psychologischen und linguistischen Kriterien in Verbindung gebracht, z.B. solchen der soziologischen Schichtung, ob Sprecher sich einer Neuerung bewußt sind und welche Teile der Sprachstruktur betroffen sind. Ebenfalls untersucht werden gewisse veränderliche Parameter, die eine weitere Untergruppierung der Typen ermöglicht, wie etwa der Grad von Zweisprachigkeit und der demographische Ausgleich zwischen den jeweiligen Sprachen (im Falle von kontaktinduziertem Wandel) und die mögliche Koexistenz von sich widersprechenden gesellschaftlichen Auslegungen einer bestimmten Neuerung (im Falle spontanem Wandels).