An analysis of recent proposals concerning the typologies of language change attempts to provide a synthesis identifying the major types of change that need to be distinguished. The three major types of language change discussed are spontaneous change, borrowing, and imposition. Upon analysis, it is concluded that these three types of change adequately incorporate all the analytical distinctions examined, and that the model allows comparison of a variety of characteristics associated with the change types and the making of testable predictions for particular situations. The ramifications are seen as potentially far-reaching, although much additional work is needed. It is proposed that clear and systematic treatment of change types makes possible 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. Finally, the model is seen to aid in keeping diachronic linguistics rooted in social history. (MSE)
The sociolinguistic types of language change

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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.1 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'. We are all familiar with the use made of this distinction by 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 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. In this paper I will attempt to 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. The results of these efforts are summarized in Table 1.

The three major types.

I will begin by describing a basic classificatory framework that recognizes three major sociolinguistic types of change; I will refer to them as spontaneous change, borrowing, and imposition, although these terms should be taken merely as convenient shorthand rather than essential parts of the definition.2 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.

Spontaneous changes, therefore, are 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.

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 a problem: How structurally different must the contacting varieties 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 has to 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 Co. sem 1988 and Thomason and 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 language impose onto it features of their first language, usually in the course of language shift. 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 1988:131-2). The Dravidian substratal influence on prot. Indic, however, was a case of imposition: evidently entire communities of Dravidian speakers shifted to Indic, imposing on it 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 examining 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 sub-fields, and make testable predictions that may guide future sociohistorical research.

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 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, they also
tend to find their social origins at points above and below on the social hierarchy, those from above often being associated with higher-status, and those from below with lower-status groups.

Is this dichotomy compatible with the three types defined here? 'Change from below' seems uncontroversially the same as the spontaneous change case. However, 'change from above' requires more attention. Labov's paradigm case 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 this 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). Therefore I will provisionally treat 'change from above' as falling under the major category of 'borrowing'.

The case of imposition is not addressed in Labov's dichotomy. There is no evidence of imposition occurring in any scale in the development of 'change from above' (e.g. no evidence of non-New Yorkers in large numbers trying to learn the New York dialect, and imposing their /r/-ful pronunciation on the outcome), and of course 'change from below' does not involve contact at all. Although imposition may be implicated in some of the ethnic group differences Labov discovers (e.g. the vocalic differences between Jews and Italians), he does not give any theoretical treatment of such cases.

If Labov's categories are thus incorporated into the present framework, it becomes possible to draw on the extensive sociolinguistic literature on change-in-progress to build up a more robust picture of the social and psychological characteristics of the spontaneous and borrowing types, and perhaps to also extend these features to the imposition type. Some of these results are summarized in Table I. In the section on social characteristics.

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 this latter finding is to be extended from the dialect-contact situation to other cases of borrowing, it would have to be restated as: 'Borrowing begins in the upper stratum of the borrowing group', which may not itself be the highest group in the community. (Compare the case of Norman England, for example.)

What might the social class origin of impositions be? The group that imposes is usually undergoing language shift, and shifters are usually socially subordinate. However, 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.

Next, the age distribution of innovations 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. Indeed, such a distribution in 'apparent time' is one of the ways such a change in progress is identified. But the age distribution of changes from above is more complicated. It typically requires the mature linguistic experience of adults to correctly identify and adopt the borrowed feature. 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 now 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 (although local identity itself involves a kind of covert, local prestige).
Kroch however has argued 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 sociol conservatism of the dominant classes accounts for their resistance to spontaneous innovation.

Finally, Van Coetsem has offered 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, I think, less well-established than the distributional patterns already noted. Can their extension to other cases be justified? For example, can one claim that all borrowings are motivated by the prestige of the source language? I think not: one has only to cite the case of the word kangaroo in English, borrowed from Guugu Yimidhirr in order to label a creature English-speakers had never previously seen. So I leave this as a point on which further investigation is needed.

The last purely social factor I will consider has to do with style-shifting and register variation. One normally finds that people shift towards increased use of prestige features in their 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.

Let us now turn to consider psychological factors, summarized in the third section of Table I. As was noted, 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 takes issue with this, but I think there is sufficient evidence to adopt it as a reasonable working assumption. How would this factor extend to the imposition case? I propose that imposition be treated as unconscious in this context. L2 speakers produce their accent without conscious effort: it is the suppression of it that they must do consciously.

The next 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 and Lemle 1976 and Naro 1981. Restricting their attention to syntactic change, these scholars propose that spontaneous changes begin in unsalient environments, while what they call 'conscious imitative' changes begin in the most salient contexts. The latter claim has been amply demonstrated in targeted changes such as standardization of regional dialects, L2 acquisition, and decreolization.

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, such that more salient contexts are acquired earlier. This would mean that the reciprocal distribution in L2 speech of impositions from L1 should broadly tend toward the 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 'saliency 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 be undoable 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 psychological factor is the frequency of occurrence of a linguistic item. Here 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. assimilations) 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. 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?)

I now turn to the linguistic characteristics of the change types. This is where some of the most interesting recent discoveries have been made. First, consider the question of what areas of language are affected by change. Spontaneous change clearly affects all structural domains: phonetic, phonological, syntactic, lexical, etc. But the work of Van Coetsem and of Thomason & Kaufman clearly shows 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 then bring along certain bound morphemes, and perhaps certain phonemes. But the basic phonological and syntactic systems of a language are unlikely to be affected by any but the most massive borrowing.

Imposition, on the other hand, typically involves the most stable domains. Lexical items are not often imposed in large numbers, 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 Neogrammarians regularity, and syntactic changes with similar characteristics. 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 I shows spontaneous and positional changes as systematic, in opposition to borrowing. But one should bear in mind that there are clearly unsystematic spontaneous changes (e.g. analogy), and that sporadic cases of imposition probably also occur.

Next comes an item I have labelled 'generality.' This is derived from the work of Van Coetsem, as well as that of C.-J. 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. By contrast, borrowings have no clear generalizing tendency. They are sporadic events to begin with, and as borrowing progresses, if it becomes sufficiently extensive it can potentially lead to the acquisition of whatever constraints or distributional patterns are found in the target language, whether highly general or not.
What kind of trend would be expected for impositional changes? I think there may be a generalizing tendency here too. Some general pattern of the phonology or syntax of L1 might be subject to exceptions in L1 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 further 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).

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. 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.

What predictions would Bickerton make for the imposition type? He does not address this issue and I have left a question mark for this item in the table. But 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 criterion: 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 and Kaufman 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 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 pre-existence of the competing L1 grammar, so one can say that structural interference is the linguistic motivation for imposition.

Discussion and conclusions.

The summary presented here of the cases and their characteristics is clearly not exhaustive; no doubt other characteristics await examination, 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 most important steps to be taken next with this line of inquiry lie, it appears to me, in two areas. One remaining problem is the question of whether the characteristics reported here are also applicable to other structural domains or other change processes than the ones for which they are originally noted. For example, is saliency a factor in sound change or only in morphosyntax? To what extent are the characteristics of regular change also true of analogy? Such questions await a careful examination. But the more general task would seem to be the development of a principled account of the differences among subtypes. There is clearly a rich variety of change situations in the world, and reducing them all to three basic types is a substantial abstraction. It is not enough to say that decreolization and standardization are both cases of borrowing; one must also say how and why they differ. An adequate treatment is of course another whole paper (or book!), but I will briefly sketch out several variable parameters in the sociolinguistic setting of change which may give rise to different outcomes.

First, in contact-induced change, several obvious factors are the demographic balance between the contacting communities, and their differences in status and power. If one group is very numerous, its linguistic features are more likely to prevail in both borrowing and imposition; this should yield a different linguistic outcome from a case where two language communities were essentially equal in numbers in a contact situation. And if one group is powerful and socially dominant, their linguistic characteristics are likely to spread, especially through borrowing mechanisms. In the case where a group is both numerically dominant and socially powerful, one would expect minimal contact-induced change of any type in their language. This is true for example of the contact of English with indigenous languages in Australia and North America; aside from borrowings of some place-names and names for local flora and fauna, contact effects are essentially nil in English, (although they may be great in the Australian and Amerind languages involved).

Also in the contact types of change, access to the target language is a crucial variable affecting linguistic outcomes: borrowing requires at least some access, and imposition only occurs when the target language is actually being acquired, which requires extensive access. Access can be affected by numerical and social dominance: a language with many speakers should be more accessible as a source of change, but socially dominant groups can choose to limit contact with speakers of other languages. But access is also affected by other factors: social conventions governing the public and private use of language, marital and residential patterns, levels of segregation and integration, etc. In general one would expect that whatever limits access to a target language will tend to decrease borrowing, but increase imposition. Thus it would be predicted that creoles arising in slave societies with a very high demographic ratio of slaves to slave-holders, and rigid social segregation between the two groups, would be highly divergent from the target language. This was the case, for example, in Haiti. By way of contrast, however, a slave situation with more equal numbers of slaves and slaveholders, and closer social relations between them, should yield a less-divergent creole. According to Bickerton, this is exactly what occurred in Barbados.

Related to this problem is the degree and extent of bilingualism. A society with large numbers of fluent bilinguals should have different linguistic outcomes than a society with a
small number of bilinguals of very limited proficiency. In the former case borrowing might be quite extensive but imposition should be low, while in the latter case borrowing could be limited, and imposition would be extensive in the speech of a few, but these might be numerically insufficient to serve as a model for the whole community.

Finally what variable factors affect the internally-induced changes? This is an amply studied issue in historical linguistics, so I will not spend much time re-examining it here. But I will note one point that perhaps receives less attention than it deserves: the existence of conflicting social evaluations of innovations. There do occur spontaneous changes which eventually receive negative overt social evaluations, as evidenced by the fact that people minimize them in formal styles and react negatively to them in subjective reaction tests. Two examples are the ongoing vowel changes in Philadelphia English, /æ/ -> /iː/ and /u/ -> /iːw/. Yet such changes still persist and spread. Why should this occur? Why doesn’t the negative evaluation arrest the social spread of the form? The answer seems to lie in ‘local identity’ or solidarity. These innovations 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.

Notes

1 The ideas on which this paper is based first began to be developed for a seminar on language contact and language change that I co-taught with Frans Van Coetsem and John Wolff at Cornell. Their comments and criticisms are gratefully acknowledged.

2 I will restrict my attention to diachronic developments that come to characterize the language of a speech community. Hence I ignore the ‘changes’ that occur in language acquisition (e.g. child language and interlanguage), or that occur sporadically (e.g. slips of the tongue) or idiosyncratically (e.g. hypercorrections). Of course, since these are important potential sources of eventual community-wide change, they merit further study in connection with the typology proposed here.

3 Labov’s discussion (1966:325f) 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.

4 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.

5 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.
References


Table 1. A Sociolinguistic Typology of Language Change

<table>
<thead>
<tr>
<th>Change Types</th>
<th>Internally induced</th>
<th>Externally induced</th>
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<tbody>
<tr>
<td>SPONTANEOUS</td>
<td>no</td>
<td>yes</td>
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<tr>
<td>(untargeted, from below)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BORROWING</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>(targeted, from above, recipient lg. agent.)</td>
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<td></td>
</tr>
<tr>
<td>IMPOSITION</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>(substratum, source lg. agent.)</td>
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</table>

**Characteristics:**

**DEFINITIONAL:**
- Lang. contact involved? no yes yes
  - Agents of change native speakers native speakers nonnative speakers

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

**PSYCHOLOGICAL:**
- Consciousness (Labov) unconscious conscious unconscious?
- Saliency (Lemle & Naro) 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?

**LINGUISTIC:**
- Structural domains all domains unstable domains first (words, morphemes) stable domains first (phonology, syntax)
- Systematicity systematic random, sporadic systematic
- Generality generalizing, becoming initially ungeneral, acquiring target constraints generalizing?
- (Bailey, Van Coetsem) less constrained
- Form/Function (Bickerton) existing form acquires new meaning/function existing meaning/function acquires new form
- Linguistic motivation many (functional load, phonetics, analogy...) none (fill gaps?) interference

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