

## **Some new perspectives on sound change: sociolinguistics and the Neogrammarians**

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### *1 Introduction: sociolinguistics and Neogrammarian theory*

This paper is about a very traditional topic –the theory of sound change– and its purpose is to work towards an account of sound change that is more explicitly *sociolinguistic* than those that have been used to date. We have elsewhere been concerned chiefly with the social side of this enterprise discussing *speaker variables* such as social class and network (J. Milroy, 1992a: 164-222; Milroy and Milroy, 1992); in this paper, my main focus is on patterns of language, rather than society. I begin with some general comments.

Sound change is probably the most mysterious aspect of change in language, as it appears to have no obvious function or rational motivation. In a change from [e:] to [i:], for example (as in such items as *meet, need, keen* in the history of English), it is impossible to see any progress or benefit to the language or its speakers –the use of one vowel–sound rather than another is purely arbitrary: there is apparently no profit and no loss. Of all the theoretical questions about language variation that we might wish to address, the question of sound change seems to me the weightiest, and the greatest challenge to our powers of explanation.

The traditional apparatus for dealing with sound change is largely derived from, or related to, the late nineteenth-century Neogrammarian movement. Their basic

axiom is that sound change is 'regular': sound 'laws' have no exceptions. Thus, when a sound is observed to have 'changed' in a particular lexical item, the regularity principle predicts that it should also have changed in the same way in all other relevant items: for example, items like (general) English *hat*, *cab*, *have* are believed to undergo same particular vowel-change (e.g., front-raising, as in New York City: Labov, 1966) all at the same time. If there is an apparent exception, this will be accounted for by another regular change.

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The Neogrammarians were also interested in how 'sound change', in the narrower sense outlined above (i.e., excluding analogy and borrowing), is implemented. One important Neogrammarian claim is that regular sound change is phonetically gradual but lexically abrupt. According to Bloomfield (1933), it proceeds by 'imperceptible degrees'. Thus, the change from Middle English /e:/ to later English /i:/ (in words of the type *meet*, *need*, *keen*) is assumed not to have been sudden: according to this view, speakers pronouncing these words did not make a sudden leap across phonetic space from [e:] to [i:], the change was so slow and so slight at any given time that it was not noticed by speakers. It is also assumed to have affected all relevant items in the same way at the same time: they all start off from [e:] and, after a slow progress, all reach [i:] at the same time. It will be clear in the remainder of this paper that I do not think that this is a plausible scenario for sound change. However, we must first notice that aside from their prominence in recent sociolinguistic discussion (with which I am mainly concerned here) the Neogrammarian axioms are still very much to the fore in several other branches of linguistic inquiry.

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Phonetic gradualness appeared to be a feasible proposition to nineteenth-century scholars because of their tendency to separate languages from their speakers and to

focus on language as an object –often likening it to a living thing (for a discussion see Milroy, 1992a: 22-3). When speakers are excluded in this way, it becomes easy to believe that linguistic change is language-internal, independent of speakers and imperceptible. For the Neogrammarians it proceeds 'with blind necessity' (*mit blinder Notwendigkeit*). It is obvious that sociolinguistic approaches, which necessarily deal with speakers, are not very likely to give support to the idea of 'blind necessity', and we shall return to this point in Section 5, below. First we consider the main general characteristics of the Neogrammarian axioms.

The Neogrammarian axioms have at least three characteristics that are worth noticing here:

1. They tend to be dichotomous;
2. They are non-social in character;
3. Although the Neogrammarians recognized the importance of listening to present-day dialects their main sources are written.

At various points I shall mention dichotomies relevant to sound change. It is the third characteristic, above, that I should like to consider first.

The Neogrammarians and nineteenth- to early twentieth-century scholars generally depended on documentary records of (of ten ancient) languages and could not adequately observe language in the community as we do today. Thus, patterns of linguistic change that they identified (by using the comparative method for the most part) consisted of completed or nearly completed changes in languages that were usually definable as discrete entities (Sanskrit, Gothic, Old Church Slavonic and so on): they could not identify change in progress at early stages and in localized varieties (such as New York City or Belfast). Thus, they did not actually *know* whether sound change was implemented in a phonetically

gradual manner: phonetic gradualness was a hypothesis. For similar reasons, social explanations could not be used except in the most generalized ways, and as late as the mid-twentieth century, American structuralists were still assuming that social explanations were not usually feasible. Indeed, quite recently, Lass (1987: 34-5) has dismissed 'external (i.e., socially or politically-based) explanations as inherently unsatisfactory. Thus, the orthodox non-social view of language change is still very much alive.

Present-day sociolinguistic research differs from the Neogrammarian position in a number of fundamental respects. These involve the data-base available for study and the methods used to study the data-base. For example, scholars now have access to bilingual and multilingual speech communities, in which cross-language patterns of variation can be studied. These approaches strongly question the principle that linguistic change is best studied by reference to monolingual states, as the Neogrammarians and others' have assumed. Most relevant here, however, is research on social dialectology following the pattern set by Labov (1966) in New York City. Studies of this kind do not focus on whole languages, but on localized varieties in regional speech communities. It is in the localized variety, rather than in the 'language' (English, French, Spanish, etc) that they identify changes in progress. The contrast with orthodox historical methodology is quite evident here. In my own work, I have additionally tried to combine this type of research with a theory of language standardization (following Haugen, 1966 and others), to which I return in Section 5, below. Amongst other things I would like to know how changes originating in localized varieties of the kind studied in the 1960s and 1970s by Labov, Trudgill (1974) and others, succeed (or do not succeed) in entering supra-local or standard varieties of the kind studied by the Neogrammarians. In speech community researches, of course, we are not dealing with well-defined linguistic entities that can be regarded as uniform, but with highly variable states that do not

have clearly defined boundaries. Much of our effort has been directed towards developing methods of analysing and describing these highly variable states. Thus, there are clearly great differences in data-base and method between Neogrammarian and sociolinguistic studies of sound change.

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For these reasons it is quite illuminating to consider what we might have thought about sound change if recent studies of change in progress had been the first studies of sound change ever undertaken. Suppose that the Neogrammarians had never existed and their axioms about sound change had never been proposed, and suppose also that our knowledge of language change was based entirely on recent sociolinguistic studies of change in regional non-standard speech communities would we then consider the Neogrammarian axioms to be fundamental in our enterprise? If we had never heard of them, would we ever think of them as primary principles –and would we follow out our argumentation in the Neogrammarian framework? I shall suggest that the answer to this is no– and, further, that the orthodox framework of argumentation is not capable of dealing adequately with the phenomena that we actually do observe.

Sociolinguistic findings have in effect laid the groundwork of a new kind of discourse about language change, in which some of the old axioms are no longer axiomatic and in which the questions that we ask about sound change are a new set of questions, overlapping with the old ones but in a different distribution. In this new perspective the question whether sound change is phonetically gradual or sudden is no longer fundamental. What *is* fundamental in sociolinguistic inquiries is how we define sound change itself and, further, how we locate a sound change when it is in progress.

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## *2 Towards a sociolinguistic modelling of language change*

My account here is based on a sociolinguistic approach to the study of language change that I have been developing over the years in collaboration with Lesley Milroy (J. and L. Milroy, 1985b; J. Milroy, 1992, 1993; L. and J. Milroy, 1992), and which was partly motivated in the first place by my own dissatisfaction with well-known binary distinctions of types of language change ('blind' sound change *v* borrowing, conditioned *v* unconditional change, etc). This model is differentiated from other sociolinguistic models by its insistence on the methodological priority of the study of language *maintenance* over the study of language change. It is assumed that a linguistic change is embedded in a context of language (or dialect) *maintenance*. The degree to which change is admitted will depend on the degree of internal cohesion of the community (the extent to which it is bound by 'strong ties', which resist change), and change from outside will be admitted to the extent that there are large numbers of *weak ties* with outsiders. It also follows that if a change persists in the system, it has again to be *maintained* by social acceptance and social pressure; thus, we need to explain, not only how communities resist change, but also how a change is maintained in the system after it has been accepted.

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### *2.1 Linguistic change as change in community norms*

A second issue, which constitutes a sub-theme in this paper, is the place of *sound* change within more general patterns of language shift and language change. What we have traditionally called sound changes have usually been represented as taking place at the level of the classical phonemic segment - for example, the change from [e:] to [i:] in English cited above. In the words of Bloomfield (1933): 'phonemes change'. But we must consider the possibility

that sound change is not actually triggered at this level: a sound change perceived by observers at the segmental level may be a secondary, and not a primary, phenomenon: although we can observe it at the micro-level (e.g., as a change from [e:] to [i:]), it may be one of a number of a low-level manifestations of a change, or a shift, that originates at a more general level of language use. I have approached this point elsewhere by proposing that linguistic change in general is a result of changes in speaker-agreement on the *norms* of usage in speech communities (J Milroy, 1992a: 91), and there is plenty of anecdotal evidence that a whole 'dialect' can die out as another 'dialect' replaces it, leaving only a few traces behind (see below for some examples). It is fairly clear that the much greater access to spoken language that we now have gives us the opportunity to follow up such questions much more thoroughly than was possible for earlier scholars, and there is much scope for future research on this issue, using *inter alia* instrumental techniques and benefiting from advances in phonological theory.

### *3 Sound change in historical linguistics*

In dealing with sound change of the traditional type, the first substantive point that we need to notice is that there is, in reality, no such thing. Speech 'sounds' do not physically change: what happens is that in the course of time one sound is substituted for another; speakers of a given dialect gradually and variably begin to use sound X in environments where speakers formerly used sound Y. Historical linguistic scholars then observe the result of this essentially social process and apply the term *sound change* to the phenomenon. As Andersen (1989) points out, what historical linguists actually observe in data from the past is not a sound change, but a 'diachronic correspondence' between language states at two or more points in time (formally this is precisely the same thing as a *synchronic*

correspondence between two or more states of language at the same time). In effect, they use a system-based term (sound change) for a speaker-based event in time.

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#### *4 Social aspects of sound change*

We now turn to questions which seem to be more fundamental than the question whether the implementation of sound change is phonetically gradual or not. Among these questions the meaning of the term 'sound change' is crucial. We have argued elsewhere that it is not explainable as a wholly linguistic phenomenon: it is also inherently and necessarily a *social* phenomenon in that it comes about because speakers in conversation bring it about, speakers often have very strong feelings about it, and it is manifested in speaker-usage. It isn't languages that change –it is speakers who change languages. Such a view is obviously a very long distance away from the Neogrammarian notion that sound change is 'blind'. It does not make sense, from this perspective, to say that sound-change is phonetically gradual either. But it is definitely socially gradual: it passes from speaker to speaker and from group to group, and it is this *social* gradualness that sociolinguists attempt to trace by their quantitative methods.

It seems that scholars in the past may sometimes have equated phonetic gradualness with social gradualness; that is, when they have said that a change is phonetically gradual, they have 'really meant' that it spreads gradually in the social dimension - from speaker to speaker. On the other hand, as Ohala (1993: 266) points out, many have certainly believed in the imperceptibility of change –the idea that sound change takes place in phonetic steps that are too small for the ear to detect. It is surely clear now that this is a mystical view of change, more appropriate to a belief-system than to a science, for, as Ohala also points out, we



must surely accept that sound change by definition is implemented in phonetic steps that are large enough to be detected. If this were not so, we could not detect it in progress, as Labov claims we can, nor could speakers imitate it. And if it is not detectable why should we call it a sound change anyway?

The principle of social gradualness supersedes the binary division between 'regular' sound change and lexical diffusion that Labov (1992) discusses. Both processes are socially gradual, both are abrupt replacement patterns, and both can be shown to be regular in some sense. The difference between them in terms of phonetic change now becomes one of greater or lesser phonetic distance between State A (before the change) and State B (after the change). What we have traditionally called gradual phonetic change differs from lexical diffusion (following Labov's account above) in that the new form differs only slightly from the older one, whereas in lexical diffusion (as studied so far) it differs markedly. Thus, from this perspective, the two kinds of sound change are not two *opposing* types, as Labov claims. In phonetic terms, they are two ends of a continuum, with slight phonetic difference at one end and gross phonetic difference at the other.

The axiomatic distinction between regular sound change and lexical diffusion is further undermined by the fact that, as my own work and that of other sociolinguists has amply demonstrated, there is no evidence to support the Neogrammarian assumption that in regular sound change all items in the affected set change at the same time. On the contrary, sound changes have normally been observed to spread gradually through the lexicon. If we had never heard of the Neogrammarians, it seems very unlikely that we would now propose these two categories as axiomatic opposites. As sociolinguists we may now be inclined to propose some sub-divisions of types of sound change –some new taxonomies– but they will presumably be socially-based and thus quite different from the traditional taxonomies. But we must be careful not to propose premature classifications, and I

am therefore quite cautious here.

I shall return below to social processes, but first I would like to observe that sound-change is not necessarily a unilinear process either, and this becomes especially clear if we take a socially–or speaker-oriented point of view. It isn't just a matter of A becoming B in a unidirectional way in the course of time. What Le Page and Tabouret-Keller (1985) have called focusing and discussion and what I have sometimes called convergence and divergence, are also patterns of change.

#### *4.1 Varying patterns of change*

There are other patterns also: at a sub-phonemic level, sound-change can be manifested by reduction in the number of allophonic variants (as in outer-city *v* inner-city Belfast: J Milroy, 1982) - a trend towards simplification. At much more general levels there are patterns of dialect displacement –displacement of one dialect by another which is, for some reason, socially dominant at some particular time. For example, there is evidence from recordings of persons born around 1860 which can be interpreted as indicating that much New Zealand English in the nineteenth century was southern British in type (favoured by males), and that it was displaced by an Australasian type (favoured by females) with some effects of mixing and residue. The gradual displacement of heavily inflected West Midland dialects of Middle English by weakly inflected East Midland dialects is another example (J Milroy, 1992b) –one which led to morphological simplification of the grammar of English more generally. Changes from more heterogeneous to more homogeneous states (including the process of standardization) are also patterns of linguistic change –even though they are seldom recognized as such in orthodox historical linguistics.

## 4.2 *Changing norms of language*

According to our social view, language is a normative phenomenon. The norms of language are maintained and enforced by social pressures. It is customary to think of these norms as standardizing norms – norms that are codified and legislated for, and enforced in an impersonal way by the institutions of society. But the fact that we can recognize different dialects of a language demonstrates that other norms exist apart from the standard ones, and that these norms are observed by speakers and maintained by communities often in opposition to standardizing norms. It is convenient to call these *community norms* or *vernacular norms*. I have tried to show (J. Milroy, 1992a: 81-4) that these norms manifest themselves at different levels of generality. Some of them, for example, characterize the dialect as a whole and are recognized by outsiders as markers of that dialect. Others, however, are hardly accessible except by quantitative methods and may function within the community as markers of internal social differences, for example, gender-difference. We have elsewhere demonstrated stable markers of gender-difference in the community (L Milroy, 1982; J Milroy, 1981, 1992a), in which the pattern is maintained over both the generations studied. It follows from this that the stable speech community is not one in which everyone speaks the same way, but one in which there is consensus on a pattern of stable variation. Another way of putting it is to say that Community norms can be variable norms – in contrast to standard norms, which are invariant.

All these observations suggest certain important modifications to orthodox views of the nature of linguistic change, and these ultimately have to do with the definition of what actually constitutes a sound change, as distinct from synchronic variation. Just as language stability depends on speaker-agreement on the (variable) norms of language, so linguistic change is brought about by

changes in agreement on norms. In the solidary group, which agrees on a stable variation pattern, a linguistic change in progress will show up as a disturbance of this consensus pattern. Sometimes (when the direction of change has not yet been determined) this pattern may seem to be rather inconsistent and unpredictable: in Belfast we found in the outer city a number of patterns which did not seem to have much consistency to them. We interpret this kind of pattern as indicating the break-up of consensus norms of the kind we found in the inner city (see further 1 Milroy, 1992a: 105-109). At other times – presumably when the direction of change has been more clearly set– there will be a regular social pattern in terms of age, sex, social class and other social variables, and it is through this that we will recognize linguistic change in progress. It should also be noted that the starting point and the end-point of change are not necessarily uniform states. As I tried to show in a paper on /h/ - dropping (J Milroy, 1983), a change can persist as a variable state for seven or eight centuries without ever going to 'completion' in the traditional sense.

#### 4.3 Speaker-innovation and linguistic change

The distinction between innovation and change leads, as we have seen, to an associated distinction –the distinction between speaker innovation, on the one hand, and linguistic change, on the other. We have suggested (Milroy and Milroy, 1985b) that the terms *innovation* and *change* should reflect a conceptual distinction: an innovation is an act of the speaker, whereas a change is manifested within the language system. It is speakers, and not languages, that innovate. It should also be noted that an innovation, when it occurs, must be unstructured and 'irregular' and not describable by quantitative or statistical methods. It may be observable, but when observed, it is not known that it will lead to a change and is probably thought to be an error or defective usage of some kind (Trudgill, 1986b, discusses such a

case in Norwich - labio-dental /r/). It is also quite clear that this distinction between innovation and change has not been sufficiently carefully or consistently observed in historical linguistics, and that many discussions about linguistic change have been in reality about linguistic innovation. Indeed, partly as a result of this conceptual confusion, questions about how linguistic change is implemented have often appealed to phenomena that have to do with synchronic variability rather than change itself. The appearance of phonetic gradualness in the data (as discussed above) is a case in point. From a speaker-based perspective, we can think of sound-change as moving gradually through a population of speakers, assuming a regular sociolinguistic pattern, rather than postulating gradual movement within the language system (e.g., phonetic gradualness). Quantitative statements do not show how innovations occur; however, they can be interpreted as manifesting the *socially* gradual diffusion of changes. Bloomfield's account of how change may come about through gradual favouring of new variants at the expense of older ones is consistent with this position: 'Historically, we picture phonetic change as a gradual favoring of some non-distinctive features and a disfavoring of others (1933: 365)'. Although he was defending the Neogrammarians, Bloomfield's position is in certain respects also consistent with that of lexical diffusionists, as it can be disputed whether the variants involved must always be 'non-distinctive'. Bloomfield's position does not require an assumption of phonetic gradualness: it can apply equally well regardless of whether the two phonetic variants involved are closely similar or grossly different from one another, i.e., whether they are represented as resulting from gradual phonetic movement or from abrupt replacement - it is still a gradual favouring of new variants. But this gradual favouring is a speaker-based social process, rather than an intra-linguistic one. It must be speakers rather than languages who 'favour' the new variants. I shall return to this point.

It should also be noted that, although we sometimes say that sound-change can now be 'observed' in progress by sociolinguistic methods, this is a loose formulation which is not strictly accurate. Locating change in progress depends on extensive (normally quantitative) analysis of data that has been collected from a speech community, and the direction and patterning of a change in a monolingual community cannot usually be reliably determined until much careful analysis has been carried out. So we don't just 'observe' it in the community. However, as I have pointed out above and elsewhere (Milroy and Milroy, 1985b), we cannot *successfully* observe innovations either. To put it more precisely, although we can in principle observe linguistic innovations, we do not know when we observe them whether they are innovations that will lead to changes. It must be assumed that the vast majority of innovations are ephemeral and lead nowhere.

It is, however, clear that for a speaker-innovation to become a change, it must be adopted by some community. It must pass from one speaker to others. Thus, the adoption of a linguistic change depends at the speaker-level on a process of *borrowing*. It is appropriate therefore to consider more closely here the effect of our social approach on another Neo-grammarians dichotomy - the distinction between sound change and borrowing.

#### *4.4 Innovation, change and 'borrowing'*

The sound change/borrowing distinction is sometimes formulated as a distinction between 'internally' and 'externally' motivated change. This dichotomy has certainly been prominent in the work of many scholars, and although it is a well motivated distinction in certain respects (in vocabulary replacement, for example), it can be problematic at the level of phonological/morphological structure (for an especially clear discussion of important difficulties see Dorian, 1993). In

sociolinguistic investigations, what we call 'sound changes' in progress are of ten traceable to borrowings from neighbouring dialects. Bloomfield himself, in his defence of the Neogrammarians, cites an example that happens to show very clearly the difficulty of drawing the distinction between sound change and borrowing as it relates to gradual and abrupt change.

In various parts of Europe, for instance, the old tongue-tip trill [r] has been replaced . . . by a uvular trill. . . . Aside from its spread by borrowing, the new habit . . . could have originated only as a sudden replacement of one trill by another. A replacement of this sort is surely different from the gradual and imperceptible alterations of phonetic change (1933: 390).

From a sociolinguistic perspective, the difficulties with Bloomfield's assumptions here are very striking. First, the 'origin' of this abrupt change is equated with the change itself; that is, what Bloomfield calls a change is what I have called a speaker-innovation, and what has to be explained (in Bloomfield's account) is the phonetic event of abrupt replacement, not the adoption of this replacement by a community. Second, it is assumed that the spread of the change is by 'borrowing' and implied that the spread therefore *does not involve* sudden replacement –this is said to be 'aside from its spread by borrowing'. But in fact, whether we are dealing with some original event or with a concatenation of 'borrowings', each single event is equally abrupt - 'a sudden replacement of one trill by another'. In other words, it is possible to argue that each single event of 'borrowing' into a new speech community is just as much an innovation as the presumed original event in the 'original speech community (and even that some of these events are independent innovations). Furthermore, if we accept the Bloomfieldian distinction, we may be inclined to believe that we can locate the 'original innovation in some specific

community (perhaps Parisian French), when there can be no guarantee at all that this is the original 'sound change' –the *Urquelle* of all the 'borrowings'; we cannot be certain that it had not previously been imported from somewhere else where it was 'more original –and so backwards ad infinitum with the origin continuously receding and eluding our grasp. In other words, the distinction on which Bloomfield depends here (true sound change *v* phonological borrowing) is poorly motivated.

It is also possible that abrupt events of the kind envisaged by Bloomfield can occur without ever having a long-term effect on the speech community. Thus, a speaker-innovation of uvular [r] may happen again and again without resulting in a linguistic change in the speech community concerned. An innovation is not in itself a change, and it is linguistic *change*, not innovation, that we are trying to explain.

As I have noted above, many consonant alternations that have been studied are manifestly of this sudden replacement type: for example, alternation of alveolar with dental stops and alternation of dental fricatives with zero in inner-city Belfast (j Milroy, 1981, etc). In the work of Trudgill (1974), Mees (1990), Kingsmore (forthcoming) and others, alternation of [t] with the glottal stop (intervocally and word-finally) is a particularly clear example of sudden replacement and a very common one in British English. In recent years it has been noticed that this 'glottalling' (Wells, 1982: 261) is spreading rapidly in British English, and we hope to investigate this further. The work that has so far been carried out, however, raises a number of issues about the origin, spread and social correlates of glottalling that are relevant to the question of speaker-innovation and linguistic change. Here I can only summarize the main points briefly.

According to Andresen (1968, cited in Kingsmore, forthcoming), the earliest references to the glottal stop are from central Scotland in the 1860s, where it was



noticed by Alexander Graham Bell. Subsequently there are references to it in various parts of England, including the London area in the early 1900s. Therefore, it is suggested that from an origin in Central Scotland it spread rapidly to locations in England. This raises some obvious sociolinguistic questions, such as the following: Why should Central Scotland have the kind of 'prestige' required for this rapid spread to England? How could the glottal stop have become so stereotypical of London and East Anglian English in such a short time? Additionally, from the perspective of this paper, there are other questions to be asked. These are: 1) does the evidence show that the 'original' innovation was in Central Scotland? 2) does the evidence show that the glottal stop diffused by borrowing from Central Scotland to several other places in the period 1860-1900?

The answer to both of these questions must be no. There is no evidence to support a positive answer to either. When the phenomenon was noticed in Central Scotland, it was already a well-established variant that was socially salient. If it had been at a very early stage of development with no social salience, it would not have been noticed –not even by such an excellent observer as Bell. Therefore, the origin of the glottal stop is earlier than 1860. The fact that it is well established in the Ulster Scots of County Antrim suggests (but does not prove) that it may even pre-date the Plantation of Ulster in the seventeenth century. Taking all these matters into account, it seems most unlikely that it spread to other dialects (including London English) from Central Scots. There may be an ultimate common origin for the glottal stop in some variety of early Modern English, or there may be multiple origins. The point of primary innovation and the speaker-innovator are irrecoverable. However, as I have tried to show here, drawing a careful distinction between innovation and change makes a great difference to how we interpret these phenomena.

In many of the cases discussed (including some aspects of the spread of

glottalling in modern English), the most immediate explanation for the changes observed is dialect contact –externally motivated change. For Bloomfield and the Neogrammarians, this is not sound-change proper: as we have seen they tended to equate sound-change with innovation internal to the 'dialect' concerned. If Bloomfield's view is accepted, it follows that much of our sociolinguistic research has not been about sound-change at all, but about the diffusion of changes through 'borrowing'. But as I have already pointed out, the logically prior distinction between speaker-innovation and linguistic change greatly alters our understanding of this Neogrammarian distinction.

The main implication of the innovation/change distinction here is that when an innovation is taken up by a speech community, the process involved is fundamentally a borrowing process, i.e. the implementation of a sound change depends on the 'borrowing' of an innovation: all sound change is implemented by being passed from speaker to speaker, and it is not a linguistic change until it has been adopted by more than one speaker. Indeed, perhaps we need a stronger requirement: a change is not a change until it has assumed a social pattern of some kind in a speech community. To put it in another way –all sound-change must be socially conditioned, simply because those so-called changes that arise spontaneously are not actually changes: they are *innovations*, and they do not become changes until they have assumed a social pattern in the community. If, as often happens, these innovations are not adopted by some community, then they do not become changes at all. It is obviously important to try to explain how spontaneous innovations arise (and much of our intralinguistic research has been in reality about innovations), but this is not the central question that we seek to answer, which is: how do we specify the conditions under which some of these innovations, and not others, are admitted into linguistic systems as linguistic changes? From this perspective, a linguistic change is by definition a

sociolinguistic phenomenon (it has both linguistic and social aspects): it comes about for reasons of marking social identity, stylistic difference and so on. If it does not carry these social meanings, then it is not a linguistic change. Similarly, if we think in traditional terms about 'sound change' and 'borrowing', we must accept that all sound change depends on a process of borrowing. Change is negotiated between speakers, who 'borrow' new forms from one another.

I have discussed the innovation/change distinction more fully elsewhere (J Milroy, 1992a, b). Here, we need to recall that we have to determine whether and in what manner the innovation (say, a uvular [r]) will feed into the system as a patterned change. As long as it occurs as a variant, it is possible for it to feed into the system in this way, but although there are billions of occasions on which this is possible, it may not happen at all –even when favourable structural conditions exist in the language. For the change to take place it is necessary for the social conditions to be favourable. Thus, if we explain the phonetic and other intra-linguistic conditions that lead to this possible change, we have not thereby explained why this particular change took place, and not some other change: what we have explained are the linguistic circumstances that made possible a speaker-innovation. We have not explained why it entered the linguistic system at some particular time and place and in particular social circumstances. This, of course, is the actuation problem itself (why did it happen at this particular time and place, and not at some other time and place?). This is a problem that is not ever likely to be completely solved, but our empirical studies of language in speech communities have certainly enabled us to get considerably closer to it than was previously possible. From all this, we can reasonably conclude that, in micro-level studies of sound change, the traditional distinction between 'regular sound change' and 'borrowing' is otiose, and to apply it at this level simply leads to confusion.

We have also tried to specify elsewhere (Milroy and Milroy, 1985b) what the

social conditions for linguistic change are likely to be, arguing that as close social ties tend to maintain stability, a large number of weak ties must be present for linguistic changes to be communicated between people. I believe that the 'weak-tie' model of change can lead us to more satisfactory accounts of change in many traditional areas of interest than have been offered to date, for example in the history of English and in some aspects of Indo-European studies (and I had these things in mind when I embarked on empirical sociolinguistic research in the first place). Here my main point is that a linguistic change is a change in linguistic structure which necessarily has a social distribution. If it does not manifest such a distribution, it should not be counted as a linguistic change.

*Some broader perspectives*

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It has become very clear that the historical linguistic tradition has itself been greatly influenced by the consequences of living in a standard language culture, and this has affected judgements on the implementation and diffusion of sound change. The main influence is what I have elsewhere called *the ideology of the standard language* (Milroy and Milroy 1985a). The principles of historical linguistics have been largely based on the study of uniform states and standard or near-standard languages. Therefore, changes have frequently been envisaged as originating in 'languages' (well-defined entities such as English and French) or in fairly widely spoken 'dialects' (i.e., in linguistic abstractions), rather than in speech communities.

[ . . . ]

From a sociolinguistic perspective, standard languages are not 'normal' languages. They are created by the imposition of political and military power; hence the sound-patterns in them and the changes that come about in these sound

patterns do *not* come about *through blind necessity*, as the Neogrammarians argued, and they are not wholly explainable by reference to phenomena internal to the *structure* of language. These language states are planned by human beings and maintained through prescription (Milroy and Milroy 1985a). The idea that there are discrete languages that can be treated as if they were physical entities is in itself a consequence of standardization and literacy –discreteness of languages is not inherent in the nature of 'Language' as a phenomenon. Standard languages are carefully constructed in order to appear as if they are discrete linguistic entities - and the ideology of standardization causes people to believe that they are indeed discrete physical entities –whereas dialects and languages that have not been standardized have fuzzy boundaries and are indeterminate. The idea that the sound changes differentiating these well-defined socially-constructed entities must always come about *blindly* and independently of socially-based human intervention is, on the face of it, absurd: it is another consequence of believing in the ideology of standardization. Standard languages are not merely the structural entities that linguists have believed them to be: they are also socio-political entities dependent on powerful ideologies which promote 'correctness' and uniformity of usage (it is likely that they are in some senses more regular than non-standard forms, but further empirical research is needed into this). Thus, although regularity of the Neogrammarian kind remains as part of the general picture, it can no longer provide an adequate backdrop for the study of the origins of sound changes in the variable language states that are found in real speech communities.

Another reason for this inadequacy is that whereas standard languages (being idealizations) provide the investigator with relatively 'clean' data which have already been largely normalized, the vernaculars that we actually encounter in the speech community are relatively intractable: the data we encounter is to a greater extent 'dirty' data. To the extent that the data-base of sociolinguistic investigations

presents itself as irregular and chaotic, progress in understanding linguistic change will largely depend on our ability to cope with these 'dirty' data and expose the systematicity behind them. To the extent that traditional thinking has been affected by the 'standard ideology', it has supported the emphasis on the uniform, unilinear and normalized language histories which have dominated the tradition. Now we may be better able to understand these histories for what they actually are.