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129. Varieties of English: Diffusion

Abstract

The diffusion of innovative linguistic forms is discussed at three levels. Firstly, the chapter deals with terminological issues. What is the difference between an innovation and a change? How do we (and, indeed, should we) distinguish between changes diffused because of speaker migration, and those spread because of everyday human contact? Secondly, the chapter considers the spread of features from one individual to another. Is it possible to socially locate those who diffuse linguistic changes? Here, we consider competing arguments concerning the embedding of diffusers in local social networks of different strengths and structures. Finally, the geographical diffusion of changes is examined. By what routes do changes spread from place A to B? In this section, the different models of innovation diffusion are compared and critiqued. Throughout, studies on Englishes past and present are used to exemplify the arguments, models, and critiques.

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1 Introduction

This chapter examines, both at the level of a person's social network ties and at a broader spatial scale, how new linguistic items – new sounds, new grammatical forms – are diffused from one speaker to another and one community to another. It begins with some necessary terminological clarifications, before proceeding to an inspection of the (rather contested) role of social network strength in the spread of new forms. This is followed by an examination of the various models of innovation diffusion in the literature that have attempted to grasp how innovations spread spatially across the speech community, and applies the rather incisive critiques of innovation diffusion models in the human geographical literature to the models generally used in dialectology. The chapter concludes with an examination of the multiple possible outcomes of linguistic innovation diffusion.

2 Terminology

It is important to firstly and briefly address here the relationship between "innovation", "diffusion", and "change", as well as between different types of diffusion. Milroy (1992) argues forcefully that we should distinguish between "innovations" – novel linguistic outputs by speakers that may or may not be adopted by others – and "changes" – effects on the linguistic system caused by speaker innovations being adopted beyond the original innovator. Milroy suggests that we cannot observe change until it has already begun to spread from innovator to early adopters, but that we might (accidentally) be able to spot an innovation (without knowing whether it will, one day, be successful and be adopted by other people). From the social (-linguistic) point of view, then, the study of diffusion plots the paths by which innovations spread from the innovator to early adopters and beyond, but we must recognize that we've been more successful at understanding the diffusion from early adopters to later ones, than from innovators to early adopters.

The study of diffusion is interested in the socio-geography of interaction, in who speaks to whom, in what sorts of people are linguistically influential and whose innovations seem to be successful, and how those innovations reach different social groups (or not) and different geographical locations (or not). These issues form part of Weinreich et al.'s (1968) "embedding problem", one of five "problems" that they argued had to be addressed in order to fully comprehend language change. From the more purely linguistic point of view, the study of diffusion plots the path by which changes spread through the language: in which linguistic environments is the change found first and most frequently? Is the speed of its adoption in the linguistic system steady or is it rapid at certain stages and slower at others? Are changes abrupt or gradual? – and so on, thereby addressing elements of Weinreich et al.'s "transition" as well as "embedding" problems. The study of diffusion, then, reaches to the very heart of the sociolinguistic dialectological enterprise, addressing questions identified as core to understanding language change as a whole. In this section on Varieties of English and dialect contact, however, I focus on the socio-geography of diffusion, on the spread of new linguistic forms across the social and geographical dialect landscape, drawing on both historical and present-day examples.

Some authors (e.g. Gerritsen 1988) divide diffusion into two types: "relocation diffusion" and "expansion diffusion", depending on how the innovation moves from A to B. Relocation diffusion, it is argued, is the result of the actual movement of speakers from

A to B, carrying the innovation with them from A, and "implanting" it in the new location of B. Expansion diffusion, meanwhile, is the result of everyday contacts and interactions passing innovations on from one speaker to another. Whether the distinction is a fruitful one or not is questionable, since even expansion diffusion involves mobilities, albeit perhaps rather mundane, everyday, routine ones (though see Britain 2012a for an examination of the power and intensity of mundane mobilities in late modernity), some of these mobilities are hard to tease apart (e.g. long distance commuting [presumably a trigger for expansion diffusion] and urban to rural counterurbanization [relocation diffusion] are often engaged in by the very same people [Champion et al. 2009]) and the linguistic outcomes, although possibly less radical than those triggered by long-distance migrations, are nevertheless typologically very similar. Here, I will not be examining international migrations as a diffusion mechanism, but intra-national, intra-regional, and local ones instead.

3 Diffusion at the micro-level: the role of local social networks

There has been a certain amount of disagreement in the literature over the relationship between the nature of speakers' social networks and innovation diffusion. It is fairly well established that network strength plays an important role in determining the speed and likelihood of innovation adoption:

> the idea that *relative strength of network tie* is a powerful predictor of language use is implicit in the theoretical model we have used […] Many studies, both urban and rural, have shown that a close-knit network structure functions as a conservative force, resisting pressures for change originating from outside the network; conversely those speakers whose ties to the localized network are weakest approximate least closely to localized vernacular norms, and are most exposed to external pressures for change. (J. Milroy 1992: 176–177, emphasis in original; see also L. Milroy 1980; J. Milroy and L. Milroy 1985; Lippi-Green 1989)

Lesley Milroy (1980) found, for example, in her Belfast study that those with stronger network integration into the local Belfast speech community were more likely to retain traditional local dialect forms in the face of competition from dialect forms external to the community. Yet researchers disagree somewhat about the transmission of dialect forms into and between strong networks. James Milroy argues forcefully that the key to understanding the spread of dialect forms is understanding the weak ties that link together different strong networks. Drawing on Granovetter (e.g. 1973), he proposes that

> weak ties between groups regularly provide bridges through which information and influence are diffused […] these bridges cannot consist of strong ties; the ties *must* be weak […] Thus weak ties may or may not function as bridges, but no strong tie can […] the important point […] that follows from all this is that weak inter-group ties are likely to be critical in transmitting innovations from one group to another, despite the common-sense assumption that *strong* ties fulfil this role. (Milroy 1992: 178–179, emphasis in original)

This assumption has been adopted more widely in other parts of the related sociolinguistic literature, for example in contact dialectology, where it has been argued that typologically different types (and rates) of change are adopted in high-contact, mobile, typically weak-networked communities when compared with low-contact, relatively static, typically strong-networked communities (e.g. Trudgill, Chapter 130).

Others think differently, however. Labov's work in Philadelphia (e.g. 2001) led him to argue that innovations diffuse through the influence of people who have strong ties both inside and outside the local group: "the leaders are people who are not limited to their local networks, but have intimate friends in the wider neighborhood" (Labov 2001: 360). His research pinpointed a small number of "leaders" of linguistic change, whose use of vigorous and recent innovations was the most advanced in the community studied. What they had in common, according to Labov, was central roles in local community networks, as well as "the highest proportion of friends off the local block" (Labov 2001: 344). One leader discussed in detail by Labov is "Celeste S.",

> someone who unites several sub-groups through symmetric linkings, and is automatically mentioned by everyone […] We can then add the property of centrality to the characterization of leaders of linguistic change. Celeste's central position indicates that people look to her as a point of reference, and are likely to be influenced by her actions, behavior and opinions […] local social networks of this kind allow leading figures to exert linguistic influence on others […] the leaders of linguistic change who have emerged from the Philadelphia study show an unusual combination of centrality with a high frequency of social interaction outside of their immediate locality […] leaders of linguistic change are centrally located in social networks which are expanded beyond their immediate locality. (Labov 2001: 351, 364)

Milroy is not convinced, suggesting that Labov's innovator

> is a person who is sociable and outgoing, and who has many friends both inside and outside the local group […] it seems very likely that information of all kinds […] can be diffused by such persons, for the reason that they have many contacts. But, according to our account, such individuals could not be near the center of a close-knit group, and at the same time have many strong outside ties. (Milroy 1992: 183)

The literature on historical change has provided support for both proposals. Both Conde-Silvestre and Hernández-Campoy (2004) and Nevalainen (2000) have argued for the pivotal role that lawyers and other legal professionals played in the promotion of changes (in, of course, the written language), suggesting that, just as Celeste S. was an important and influential central figure in her neighborhood in Philadelphia, lawyers played crucially important roles as language brokers in the written linguistic marketplace at in early modern England. Furthermore, drawing on evidence from the *Helsinki Corpus of Early English Correspondence*, Raumolin-Brunberg (2006) was able to suggest that both the Labovian and Milroyian approaches to finding the social locus of the diffusers of change may be accurate, sometimes. For a number of different features, she examined the rates of change at different stages of progress, and was, thereby, able to shed light on the strength of innovators' network ties at those different stages. When changes were in their infancy, she found that it was those individuals who were highly mobile and who had social profiles characterized by many weak social networks that were leading the change. When the changes were somewhat more advanced, however, it was individuals who were influential central "pillars" of their communities, with strong multiplex social ties, that were leading. She was able to conclude, therefore, that the two positions are perhaps not mutually exclusive, but simply reflect the position at different points along the life-cycle of a change.

Both Labov and Milroy did agree, but coming to the position from different angles (see Britain 2012b for a discussion), that it is the *central* classes of society who tend to lead language change – the upper working and lower middle classes. Extensive evidence from earlier stages of English agrees with this view, with Raumolin-Brunberg (2006: 131), for example, arguing that change is led by "interior social groups" and "middle ranking people".

4 Diffusion at the macro-level: geographical pathways

Sociolinguistic models of the geographical spread of innovations have largely been influenced by developments in economic geography – how, for example, novel products, technological inventions, fashions, and healthcare treatments come to be adopted or not across geographical space. These developments have provided us with a number of diffusion paths that have come to be adopted in investigations of dialect change, too. Perhaps the most iconic model of the diffusion of an innovation is the *wave model*, whereby innovations spread out in waves from a central point, in a manner similar to that by which ripples spread out from the point where a stone is dropped into water. Nearby places are affected before places further afield, and the order of adoption is one purely determined by as-the-crow-flies distance. Despite its iconicity, however, relatively few studies have been able to persuasively demonstrate that actual linguistic innovations have diffused (approximately) in this way. Such a model depends entirely on a perfectly geographically even distribution of interactions and mobilities and a perfect pattern of denser interactions in locations geographically near to the origin of the innovation and evenly sparser interactions at ever greater distances from the core, regardless of terrain. Trudgill (1986), investigating linguistic innovations spreading from London into East Anglia in Southern England, showed that, although approximate, the wave model accounted best for the gradual geographical diffusion of fronted (i.e. [ɐ]) variants of /ʌ/ (in words such as *cup* and *fun*). Such fronting was found most in locations physically nearer to London, but was increasingly less likely the further the settlement was from the capital (see also Bailey et al. [1993] and Labov [2003] for further examples of innovations apparently diffused in a wave-like way). From a historical perspective, Nevalainen and Raumolin-Brunberg (2003: 170) have argued, in a discussion of the ways in which features of Northern English diffused to the "magnet" of London in the period between the 15th and 17th centuries, that the use of the indicative present plural form *are* of the verb *BE* gradually diffused southwards in a wave-like manner, reaching East Anglia before London.

Better attested is the *Urban Hierarchy Model* of diffusion, sometimes labeled "cascade diffusion". This model suggests that diffusing innovations usually begin in large urban centers and spread down an urban hierarchy of large city to smaller city, to large town, to smaller town, village and may, eventually, reach the deep countryside. It is an extension of the wave model, in that distance is still shown to play an important role. To a certain extent, though, and unlike wave model diffusion, urban hierarchy models reflect an understanding that the landscape is not evenly populated, nor evenly resourced with transportation networks and service infrastructure and builds on the idea that such infrastructure (and therefore the facilitation of interaction between geographically distant locations) largely connects urban with urban at the national and regional levels, with each urban area having its own sphere of economic and social

influence into the surrounding suburban and rural landscape, reinforced by infrastructure that perpetuates that influence. Urban to urban, then, is seen as a particularly well-trodden path, guiding future mobilities to re-entrench those same geographical routes of influence.

Two examples will suffice here. First, we can look to Kerswill's (2003) nationwide picture of the adoption of the fronting to [f] and [v] of /θ/ and non-initial /ð/ respectively in Britain. He shows, by plotting the size of a number of urban centers against the dates of the first reports of the adoption of [f v], that the spread of this (rather unmarked) innovation cannot be accounted for by geographical distance alone – though clearly distance plays a role – but also important is the size of the urban center receiving the innovation. Contrasting three urban centers in his survey, all roughly the same distance from London, he demonstrates that Derby (population 230,000, 210 km from London) adopted the innovation before Norwich (135,000 and 190 km), which in turn received it before Wisbech (20,000 and 170 km). Although slightly more distant from London, Derby is quicker to reach by public transport than either Norwich or Wisbech.

A somewhat different example of cascade diffusion in action comes from Hernández-Campoy's (2003) research examining the diffusion of standard forms of Castilian Spanish into the Region of Murcia in South-Eastern Spain, an area with a well-recognized non-standard dialect of Spanish. He showed that the standardization of a number of linguistic variables was most prevalent in the city of Murcia, the capital and by far the largest city of the region, with other larger urban areas showing more standardization than smaller towns in the region.

These examples suggest that a combination of population size and distance help account for the route of diffusion, and this combination was formalized in so-called gravity models, which quantitatively simulate the likelihood of one location influencing another. Trudgill (see esp. 1983) successfully applied such gravity models (and recognized the potential problems with them) to the diffusion of innovations in urban East Anglia in the east of England, and to the Brunlanes peninsula of Southern Norway. In both, gravity model projections accurately predicted the hierarchy of linguistic influence – which towns were more likely to be linguistically influenced by the main urban center – that the largest urban center (London and Larvik, respectively) would have on others in the region.

Whilst they found that some forms appeared to have spread from Northern England in a wave-like manner, Nevalainen and Raumolin-Brunberg (2003: 178) found rather more changes in the *Corpus of Early English Correspondence* had spread hierarchically from the North to London, reaching urban London before the geographically nearer rural East Anglia. The use both of *my* and *thy* in place of *mine* and *thine* and of third person singular present tense *-s* appears to have spread hierarchically in their data.

Another possible model was proposed by Barbara and Ron Horvath (1997, 2001, 2002) in their investigations of the vocalization of /l/ in urban Australia. They found that /l/ vocalization was used most in both urban and more rural areas of southern Australia and that it wasn't until the innovation had gained a solid foothold across the region around Adelaide that /l/ vocalization began to spread significantly to urban centers beyond South Australia. They labeled this pattern the *Cultural Hearth* model, recognizing that urban centers will indeed influence their nearby hinterlands before reaching (esp. in the Australian context) cities that are a significant distance from the center of the innovation.

Rare are *counterhierarchical* diffusions, features that spread from rural areas to more urban ones. Examples provided in the literature include Trudgill's (1986) demonstration that smoothing processes (turning triphthongs into diphthongs or long vowels) in East Anglia began in rural Norfolk and are spreading southwards and to more urban areas and Bailey et al.'s (1993) research showing the spread of *fixing to* from rural to urban in Oklahoma.

All of these models are supposedly reflections of the geographies of interaction, of who speaks to whom where – indeed Hägerstrand, probably the diffusion geographer that has had the most influence on sociolinguistic dialectology because of Trudgill's early (e.g. 1974) engagement with his work, argued that "the diffusion of innovation is by definition a function of communication" (Hägerstrand 1966: 27). But Hägerstrand's models of innovation diffusion have undergone severe and incisive critique in the human geographical literature in the last 40 years. Gregory (1985, 2000) is perhaps one of the most critical (see also Blaikie 1978). Some of the more important criticisms are presented below.

There is an implicit understanding that the central focus of enquiry in diffusion studies is how one conservative form is replaced by another innovative form. "This is supposed to consist of a cascade of systematic spatial regularities: local concentrations of initial acceptances; radial dissemination and the rise of secondary concentrations; saturation […] the explanation then is a strictly morphological one" (Gregory 1985: 303). Innovation diffusion has thus largely (and this is as true in the diffusionist geographical work as in the sociolinguistic) been treated as the replacement of one traditional form by another new form. This is problematic for sociolinguistics in (at least) two respects: firstly it ignores the fact that innovation diffusion leads to contact (between old and new), and contact has a fairly well-known set of linguistic outcomes (see Trudgill 1986; Kerswill 2002; Britain 2012a), including linguistic hybridity and simplification (see below). Secondly, there has largely been an assumption that the innovation will remain intact as it diffuses and won't have mutated en route. Linguistic examples of mutations will be discussed in greater depth below, but there is good evidence also that very often even the social evaluation of innovations may change as they diffuse. Glottal stops in England, stereotypically 'stigmatized' as characteristic of working class speech in the South-East have been found *more* among middle class (female) speakers than working class speakers in both Cardiff (Mees and Collins 1999) and Newcastle (Watt and Milroy 1999), upsetting the expected social stratification of a vernacular linguistic change. In Cardiff, Mees and Collins (1999: 201) argued that the adoption of London's glottal stops represented a shift to "more sophisticated and fashionable speech".

The spatial reach of a diffusing innovation is portrayed as being a function of the strength and influence of its promoting urban center (Wells 1982, for example, claimed that London was probably the most linguistically influential city in the Anglophone world), rather than being determined by resistance or acquiescence by speakers. As Gregory (1985: 322–323) argues:

> In even the most developed version [of Hägerstrand's diffusion theory – DB] it is axiomatic that 'resistance levels' will eventually diminish, and these are supposed to be a function of insufficient information – of ignorance – rather than of conscious collective action. There is a strong presumption that innovations are *pro bono publico*, therefore, and that their adoption is as uncontentious as it is unproblematic.

Diffusion theory, it is argued, has proceeded on the assumption that non-adoption of the innovation is a "passive state where the friction of distance applies a brake to innovation […] rather than 'an active state arising out of the structural arrangements of society'" (Gregory 1985: 319). Resistance to an innovation, he argues, "connotes a process of sustained struggle: considered and collective action on the part of people whose evaluation of the available information may be strikingly different to that of the 'potential adopters'" (Gregory 2000: 176). One innovative dialect feature which now appears to be remarkably stable, if not retreating, is the BATH /ɑː/ – TRAP /a/ split of Southern England. Britain (2001) showed that at least along the Eastern end of the isogloss between areas with the split, to the south, and those without it (where both BATH and TRAP have /a/), to the North, the split is not advancing northwards, and speakers to the North of the isogloss have been leveling away occasional uses of the /ɑː/ form to become more categorically 'northern'. Is this because the innovation has 'run out of steam', or because speakers reject the innovation? Wells (1982: 354), after all, did suggest that even middle class people in the north of England "would feel it to be a denial of their identity as northerners to say BATH words with anything other than short [a]".

Gregory argues that diffusion theory has demonstrated a fixation with the spatial, such that it has been insensitive to the social structure of communities affected by innovations. Gravity models, based on population and distance, used in the dialectology of diffusion assume that everyone who uses the innovation has an equal chance of transmitting it to non-users and that everyone in the geographical path of the innovation has an equal chance of adopting it. However, we live in a socially differentiated world, where access to the resources facilitating mobility and interaction are unevenly and unequally distributed (see Britain 2009a, 2010a, 2012a). That gravity models ignore the complexity of social structure led Gregory (1985: 328) to argue that they "failed to cut through the connective tissue of the world in such a way that its fundamental integrities are retained" and that there has been "no serious discussion of the structures of social relations and systems of social practices through which innovations filter" (Gregory 1985: 304). Few attempts have been made to enrich linguistic applications of spatial diffusion models with meaningful social information about the speakers involved.

There is also little sensitivity in such models to the historical geographies of interactions, and the fact that space is a process, always, to cite Pred (1985), in a state of "becoming". Gregory claims that

> diffusion theory […] is seen to be rooted in a stable rural environment where friction of distance is immensely high and the projects related to human action are on the whole strongly repetitive and restricted to compact space-time bubbles which are elongated in time but very narrow in space […] the casting and recasting of webs of interaction is clearly not independent of the production and reproduction of the locational structures which contain them. These are not constants. (Gregory 1985: 312–315)

The geographies of our mobilities, our contacts and our interactions change over time and in different social contexts, but the model building in studies of diffusion has not been sensitized to this (see, for example, Bergs [2006: 28] for a plea in historical sociolinguistic studies of diffusion to examine "the actual way(s) and path(s) of travelling speakers"). In England, for example, the 19th century was demographically marked by (largely working class) urbanization, but the 20th (and beyond) by (largely middle class) counter-urbanization; the invention of railways and cars has facilitated mundane

mobility that was previously much slower and more local, and it has facilitated longer distance commuting; more and more young people are leaving their homes for higher education; more and more enterprises are in the spatially flexible tertiary sector, demanding a mobile and skilled workforce. But these mobilities are both a product of our time, and could change, and are highly socially differentiated (see Britain 2012a). Diffusion models, then, need to keep pace with and be sensitive to the actual mobilities and interactions that speakers engage in. Urban hierarchy models, for example, are inadequate to deal with the linguistic consequences of middle class counterurbanization – an ongoing demographic trend of at least the past half-century – to (traditional dialect speaking) deep rural areas in Southern England. In so far as physical, attitudinal, social, economic, and political barriers cause barriers to interaction, so the ability of innovations to diffuse is likely to be affected (see, for example, Boberg 2000).

In general, then, the weaknesses of contemporary spatial diffusion models can be seen to result from their failure to adopt a richly socialized and interactional perspective on the spaces across which features diffuse. Society in diffusion models, Gregory (1985: 328–329) argues, needs to be conceived as a "multidimensional structure and not 'squashed into a flat surface, pock-marked only by the space-time incidence of events'".

5 The linguistic consequences of diffusion

As mentioned above, diffusion does not (always) result in the simple adoption of the innovative form. In many ways, diffusion can be best conceptualized, as Trudgill strongly argued (see Trudgill [1986: 42–82] for a detailed account of the different outcomes of diffusion), as one form of dialect contact, and in adopting this conceptualization, we can be open to the possibility of a number of typologically different linguistic outcomes from the diffusion process, outcomes typical of dialect contact in general (see also Britain 2010a).

One of the most prominent and likely outcomes is victory of the innovative form over other conservative variants, where the victor is often (but not always) unmarked, or used by a majority of speakers, or salient, relative to the loser. But even such apparently simple outcomes can lead to (possibly temporary and minor) complexification of the system. One such example is the diffusion of labiodental variants [f] and [v] of the English interdentals (θ) and (ð) in England (and beyond) (see Kerswill 2003 for an overview). On the surface, this appears to be a system-simplifying change. Two rather marked phonemes, acquired late in child language acquisition, succumb to less marked forms, and merge with them. The change appears not to be proceeding so straightforwardly, though. Despite being a vigorous innovation, spreading rapidly across the country as Kerswill shows, linguistically there is complexity in the detail. Generally, whilst the change affects (θ) in every phonological environment, word initial (ð) is not affected, retaining its interdental quality. Two parallel pairs of sounds have been replaced, then, not by just one, as would be the case in a straightforward merger, but by one merger and one partial, incomplete merger with a (rather frequently used, in words such as *the, this, that* etc.) residue. Similar stories can be told for other variables. The diffusion of a merged GOAT vowel (at the expense of the traditional split system of [ʌʊ] and [ʊu] deriving from ME [ou] and [ɔː] respectively) into East Anglia in England

has triggered a wide variety of contact phenomena (see also below), one of which is the relic use across a wide area of the region of the traditional [ʊu] variant solely in the (frequent) word *go* (and *goes, going* etc.) (Britain 2005), with, for many speakers, the merger successful in all other respects.

A further outcome of the arrival of an innovation is the emergence of hybrid interdialect forms rather than the simple victory of the innovation. Both Trudgill (1986) and Britain (2005), for example, discuss the hybrid outcomes of the diffusion of the merged and also fronted GOAT vowel mentioned just above. These include merged interdialect forms (i.e. phonologically similar to the innovation – a merger – but phonetically different) (Trudgill 1986) and the retention of the split, with fronting only affecting the lexical set of Middle English [ou] (Britain 2005), and not that of [ɔː].

Simplification is another possible outcome of innovation diffusion. This possibility has been examined most recently by Labov (2007). He showed how the New York system of tensing and raising of short /a/, determined by complex phonological, grammatical, lexical, and stylistic constraints has been simplified as it diffused to Albany, Cincinnati, and New Orleans. The simplifications triggered by the diffusion to the three cities are presented in Table 129.1.

Table 129.1: Simplification and the consequences of diffusion: the tensing and raising of /a/ in New York City, Albany, Cincinnati, and New Orleans (based on Labov 2007) (see also Britain 2010b).

Tensing contexts	New York	Albany	Cincinnati	New Orleans
Before: /b d m n g f s θ ʤ ʃ/	✓	✓	Not before /g/, but also before /v z/	Also before /v z/
Not in function words with simple codas	✓	✗	✗	✗
Not in open syllables without a morpheme boundary	✓	✗	✗	✓ (but weakened among younger speakers)
Not word-initially, except in frequent words (e.g. 'ask', 'after')	✓	✓	✓	Not in 'after'
Lexical exceptions (e.g. 'avenue')	✓	?	?	?
Other conditions (e.g. not in abbreviations, acronyms, learned words)	✓	?	?	?

Labov showed that the tensing and raising of /a/ is ongoing, but some of the more marked constraints on tensing have been lost in the diffusion process. He specifically contrasts these simplifying tendencies with the small but perceptible incrementations in changes that take place as a result of parent to child transmission in relatively stable communities, and accounts for the difference between diffusion and transmission by arguing that

> contact across communities involves learning, primarily by adults, who acquire the new variants of the originating community in a somewhat diluted form […] Adult learning is

> not only slower, but it is also relatively coarse: it loses much of the fine structure of the linguistic system being transmitted […] these contact phenomena share the common marks of adult language learning: the loss of linguistic configurations that are reliably transmitted only by the child language learner. (Labov 2007: 380–382)

One final possibility that, of course, cannot be ruled out here is the active rejection of the innovation through the use of hyperdialectalisms – dialect forms which, apparently diverging from the incoming innovation, overextend the traditional conservative form, often to linguistic contexts where it had not been historically attested. One often mentioned example is the hyper-rhoticity on the rhotic side of the rhotic/non-rhotic border in the south and west of England (see, for example, Britain 2009b), whereby [r] is inserted into words such as *wash* and *last*, as non-rhoticity spreads.

Trudgill (1986) mentions other, further, possible outcomes of diffusion, clearly demonstrating a wide array of possibilities beyond simple eradication of the conservative variant.

6 Summary

This chapter has examined innovation diffusion at the scale of individual social networks and from the perspective of changes across space, showing examples of a range of different outcomes of diffusion. A number of points of disagreement and conflict in the literature have been witnessed, notably concerning the locus of the social network embedding of innovators and the incisive criticism of diffusion models in human geography (a criticism that has largely not reached dialectological research). There is still a lot to be done and a lot to be understood about the diffusion of linguistic innovations at all scales and it is to be hoped that the recent revival of interest in the geography-dialectology interface (see, for example, Auer and Schmidt 2009; Lameli et al. 2010) will lead to these issues, fundamental to our understanding of language change, receiving further attention.

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