Introduction

The Uniformitarian Principle (UP), sometimes also referred to as the Principle of Uniformity, very simply claims that the processes which we observe in the present can help us to gain knowledge about processes in the past. The reasoning behind this is that we must assume that whatever happens today must also have been possible in the past; whatever is impossible today must have been impossible in the past. If we observe today that water (on earth…) boils at around 100 degrees Celsius, we can assume that it also did so at any given point in the past. This means that when we analyze a historical phenomenon we should first look at known causes in order to explain it, before we turn to unknown causes. This principle, which originated in the natural sciences, has also been applied in the humanities (and in linguistics) when looking at historical developments. In the humanities, however, the Uniformitarian Principle must be taken with a pinch of salt since there is no clear and simple correlate to the laws of nature. The aim of this chapter is to evaluate critically the usefulness of the Uniformitarian Principle in historical linguistics in general, and in historical sociolinguistics in particular. To this end, I will first discuss the history of this principle in linguistics and its traditional uses in historical linguistics. I will then proceed with a discussion of its usefulness in sociohistorical linguistics and the risks associated with it, in
particular, the danger of anachronism. Three case studies on the central and almost ubiquitous concepts of social class, gender, and social networks conclude this chapter.

The Uniformitarian Principle in Historical Linguistics

As has been mentioned in the introduction, the UP did not originate in linguistics, but in the natural sciences: in geology, to be precise. One of the earliest studies comes from James Hutton, a Scottish geologist (1726–97), but the principle itself was mainly made famous by Sir Charles Lyell (1797–1875) with his influential and very popular Principles of Geology (1830–33). Christy (1983: 1–11) offers a full account of the early developments. One should not forget, however, that some traces of the idea can also be found outside geology, as in David Hume’s A Treatise of Human Nature (1739). In his Treatise he is rather critical of the idea that the laws of nature do not change and claims that

\[ \text{[i]f reason determin’d us, it wou’d proceed upon that principle, that instances, of which we have had no experience, must resemble those, of which we have had experience, and that the course of nature continues always uniformly the same. [But o]ur foregoing method of reasoning will easily convince us, that there can be no demonstrative arguments to prove, that those instances, of which we have had no experience, resemble those, of which we have had experience. We can at least conceive a change in the course of nature; which sufficiently proves, that such a change is not absolutely impossible. (Hume 1739/2007: 76, Treatise, I, iii, 6) } \]

Apparently, for Hume it was at least possible that nature’s laws could change – however unlikely that may be. This appears to be somewhat plausible. At the same time, such an ‘anything goes’ approach is not really useful either in historical studies or in making predictions about future events and states. Thus, at least for practical purposes, we should assume that there are no miracles in nature – and there never have been.

Nineteenth century linguists were probably more impressed by geologists than by David Hume, and picked up the UP quite willingly (see Naumann et al 1992; Nerlich 1990; Christy 1983). Whitney was one of the most outspoken proponents of the principle, and suggested in 1867:

The nature and uses of speech […] cannot but have been essentially the same during all periods of history […] there is no way in which its unknown past can be investigated, except by the careful study of its living present and recorded past, and the extension and application to remote conditions of laws and principles deduced by that study. (Whitney 1867: 24)
Labov also discussed this principle in 1972 and came more or less to the same conclusion: that “the forces operating to produce linguistic change today are of the same kind and order of magnitude as those which operated five or ten thousand years ago” (Labov 1972: 275). Roger Lass offers some of the most recent and extensive theoretical discussions of the UP in his work (1980, 1997). On the basis of a thorough discussion of the natural sciences background, he summarizes two uniformity principles for linguistics: the General Uniformity Principle and the Uniform Probabilities Principle. These state that (Lass 1997: 28):

**General Uniformity Principle**
No linguistic state of affairs (structure, inventory, process, etc.) can have been the case only in the past.

**Uniform Probabilities Principle**
The (global, cross-linguistic) likelihood of any linguistic state of affairs (structure, inventory, process, etc.) has always been roughly the same as it is now.

The first principle obviously covers cases that were summarized before as “whatever is impossible today must have been impossible in the past,” or, alternatively, “whatever was there in the past must at least be theoretically possible today.” If all languages today have consonants and vowels, all historical languages must also have consonants and vowels. If there is no attested language that lacks negation, we must assume that all languages at all times had ways of negation. However, since our present-day knowledge may be imperfect – we haven’t really seen all languages past and present – we might soften this claim a little and say that whoever claims that there was such a language must face the question of why this very special situation should have been possible then and only then. And this is why the second uniformity principle, the principle of uniform probabilities, is so valuable. It does not per se and absolutely rule out any findings, but it puts a number on them. It is just as unlikely that there would have been a language with no vowels or no negation in 1066 as it is now – almost zero. But just as we discover new and exciting facts about present-day languages we can also discover them about past language stages, so we end up with what we said in our introduction: we should first check all known factors and causes, and only after that, once we have failed, turn for our explanations to unknown factors as causes.

**Anachronism**

What is anachronism? Anachronism in the literal sense translates as “against time” and usually means an error in chronology, typically placing some state or event earlier in history than it can actually have occurred. If you are shooting a movie about the Roman empire you certainly do not want any of the actors to wear wrist watches on the set – simply because these did not exist. And the Romans should not go to war with handguns – gunpowder did not reach mainland Europe or
even the Islamic world before about 1200. Similarly, potatoes probably did not figure in the diet of people in medieval Europe, because they come from South America and can only have been imported from there after 1492. If you want to claim that some John Doe in Worcestershire in 1275 had jacket potatoes for lunch, you may of course do that, but you need to show convincingly how those potatoes came to England before 1492.

But the danger of anachronism applies not only to historical “facts” such as potatoes and watches. Ideas and concepts also can be very tricky. When we look at how pre-modern parents actually treated their children and looked upon their development, we must not forget that pre-modern society did not view children in the same way as we do. In the Middle Ages, children before the age of seven were frequently seen as miniature adults who turned into adult humans upon reaching the age of seven (Aries 1962); our “modern” concept of childhood as such simply did not exist. Therefore, children did not possess the same rights as other human beings. The alternative view was to treat children as adults, and a society might take one or the other of these perspectives. The way people treated their children in pre-modern societies must be seen and evaluated in the context of that society’s own moral value system and ideologies (which is, of course, not to say that this system or ideology was or is in any way acceptable). But looking at people’s actions from a modern point of view does not do justice to those people and also blurs our view and makes analysis more difficult (since it might, for example, lead us to interpret many actions as wrong, irrational, or immoral). This can also be illustrated by looking at the history of animal rights. Historically, animals could be brought before a court and sentenced for the same offences as humans. Similarly, at certain times in history inanimate or dead things could be legally prosecuted – something we today find unusual or even upsetting. Despite Jardin’s convincing arguments (2000) that anachronisms need not always be a bad thing, this still goes to show that different times and cultures may have different perspectives on one and the same thing, and that universally describing – and judging – from one perspective or an other may run the danger of anachronism (historically) or perhaps chauvinism (synchronically).

In (historical) linguistics, the concept of anachronism has not been extensively discussed – which is surprising, given that it is a key issue in history as a scientific discipline. Still, one particularly obvious anachronism may be committed in historical linguistics and is occasionally an issue in discussions: that is, positing or assuming language structures which are neither attested nor plausible at the relevant point in time (like the watch in the movie on the Roman empire). So, for example, Old English simply did not have do-periphrasis or a fully-fledged system of modal verbs, nor did it have voiced and/or voiceless labio-dental fricative phonemes. Any analysis that assumes the existence of these would first have to justify this assumption in some detail. Conversely, someone who wanted to claim that something that is present in all languages today (such as negation) did not exist in Old English would have to give a detailed account for that. In a word, very unlikely assumptions do not come for free.
In historical sociolinguistics, however, the whole issue is much more complicated since we are dealing not only with linguistic issues, but also with questions of history and sociology (see Bergs 2005: 8–21). We need to distinguish here between “factual” anachronisms on the one hand (the “no watches in ancient Rome” type) and “constructional” or, perhaps better, “ideational” anachronisms (the “no modern childhood in pre-modern times” type). Many of the concepts and models that we use in history and sociology are only constructed during research and may not have any real-life correlates. So, for example, there is no measurable, testable thing called “social class” apart from the one that we construct and define. The presence or absence of something like “social class” thus depends both on the definition and the empirical data that we use to evaluate a given state of affairs in relation to our definition. One of the biggest problems that social historians face here is reliable data. With the advent of (modern) anthropology, ethnography, and sociology – among others, in Millar (1771/1990) and, of course, Durkheim (1893, 1895) – we have a metalevel of analysis, and thus also more reliable and comparable descriptions of social constructs such as class. Before that we need other sources to turn to. These include primary historical data, such as historical documents (charters and laws, for example) and archeological findings (tools, clothing, other artifacts, etc.), and secondary data, such as literary products that describe social life (such as Chaucer’s Canterbury Tales, or Langland’s Piers Plowman) and other contemporary descriptions of society and societal matters – for instance, William Harrison’s Description of Elizabethan England (1577), Samuel Pepys’s Diary (1660–69), or the thirteenth-century Speculum Doctrinale by Vincent of Beauvais (c. 1190–1264?). The problem with these sources is, of course, that they need to be interpreted very carefully. So, for example, we need to take care not to confuse historical terms (and their corresponding concepts) with contemporary ones. In the Old English period, before 1100, the term queen could refer to women in general. Today, this use is rather rare. But the term can be used today derogatorily for male homosexuals – an option that probably did not exist in Old English. According to the Oxford English Dictionary (OED), we find that the word knight started its life in Old English meaning “boy, lad.” It was then used as a term for military servants, and, after the feudal system was fully developed, as an honorable military rank to which only people of noble birth who had undergone an apprenticeship as a squire or page could be raised by the king or other “qualified persons” (OED). Today, the rank “is conferred by the sovereign in recognition of personal merit, or as a reward for services rendered to the crown or country” (OED, s.v. knight). This means that when we come across terms such as queen or knight in historical texts we must be aware of their historical meaning and we must not confuse this with what they mean today. Similarly, when we use these terms today to describe historical entities, we need to make sure how we want these terms to be understood.

In the following sections, I will present three case studies which may illustrate some of the limits and pitfalls of the Uniformitarian Principle in Historical Sociolinguistics.
Case study 1: social class

Social class has been one of the most discussed factors in modern sociolinguistics (see Ash 2002; Guy 1988; but also Chambers 1995: 34–101; Milroy and Gordon 2003: 88–115). It is used in very influential studies such as Labov (1972, 2001), Trudgill (1974), and Cheshire (1982), who found that a number of salient linguistic variables of English, such as postvocalic (r), (ing), and multiple negation correlate with social class in many varieties. However, social class, despite its conceptual productivity, has never been an easy construct. There is a vast body of studies in sociology, anthropology, political economy, and social history, among others, that discuss social class as a theoretical construct (for an overview, see Georg 2004; Ash 2002; Chambers 1995: 34–101; Marshall, Rose, Newby, and Vogler 1989). Even in contemporary studies, an endless list of complex factors have been suggested as determining an individual’s class membership: income, education, parent’s education, place of living, even seasonality in the incidence of birth and vacation patterns. While this is not the right place to develop this discussion in greater detail, I think one can still summarize the current situation by pointing out that despite all efforts there is no single, simple determining factor that helps us to utilize social class as a determinant in sociolinguistics. It is not very hard to imagine that the transfer of this complex synchronic concept to diachronic questions and problems is anything but straightforward. Just as there are probably some present-day societies which are not organized in social classes as we know them, there are also historical societies which were not organized along these lines (see Chapter 17 in this Handbook).

In the case of England, for example, historians suggest that the term “social class” only becomes applicable from about the late fifteenth century onwards, perhaps even much later (see Wrightson 1991; Corfield 1991; Britnell 1993). Before that we need to turn away from social class as a “modern” concept and instead look at how society was actually organized or at least viewed by contemporaries. Nevalainen (1996) and Nevalainen and Raumolin-Brunberg (2003) discuss several different options for Tudor and Stuart England (ca. 1491–1707) which are summarized in Table 5.1:

In her discussion of these three (four) models (Table 5.1), Nevalainen points out that they all have their advantages and disadvantages. Model 1 is obviously quite rough and general, but provides us with the opportunity to study the very important, but also very complex and diverse, group of merchants in greater detail without missing interesting generalizations. Model 2, on the other hand, is a little bit more detailed and distinguishes between “upper” and “lower” gentry and clergy – which is certainly justified when we look at the available socio-historical data. Nevalainen (1996: 59) argues that, on the basis of contemporary views, there could be even a third, middling group in the gentry section for esquires. Also, Model 2 introduces the new and interesting category of “social climbers.” The third model is certainly the most detailed. Like Model 2, it differentiates within the individual groups and it includes the new category of “social climbers.”
Dividing the professions, clergy and merchants into gentry and non-gentry reflects many of the social changes that we see during Tudor and Stuart England, particularly towards the end of the period when the gentry as a single distinguishable group is foregrounded. However, the complexity of the model also makes it somewhat more difficult to handle, and we need further and more fine-tuned diagnostics in order to determine the group to which somebody belongs. The fourth model arguably reflects a common contemporary, that is, Tudor and Stuart, perspective. Nevalainen (1996: 61) cites Wrightson (1991: 51) as the discoverer of the seventeenth-century writer George King, who had distinguished between no fewer than 26 different ranks in society, but also developed the three broad categories “better sort,” “middling sort,” and “poorest sort.”

It should be pointed out that the issue of social class or social stratification in historical communities is not only a matter of developing categories and labels for the different groups. Different groupings often go together with different attitudes towards societies, or even concrete rules for their organization. Broadly speaking we can say that medieval society in Europe recognized three estates: nobility, clergy, and commoners. Within these groups, people were born into a
certain sub-group and usually stayed there for the rest of their lives. For example, the son of a carpenter was usually bound to be a carpenter. The daughter of a spinner was usually bound to be a spinner. The modern concept of social (i.e. upward) mobility did not exist to the same extent as today which means that society as such was also much more stable than today. There were of course some “social climbers” or “social aspirers,” but these were much rarer than today and did not constitute a clearly defined sociologically identifiable group. The latter only began to form in Tudor and Stuart England with the rise of the middle class. For most of the Middle Ages, membership of a certain group was clearly marked, even through clothing. This becomes particularly apparent when these distinctions are lost from the fifteenth century onwards. Britnell explains:

> It was observed that, in spite of consumption laws, labourers and servants were dressing in more expensive cloth. One preacher of the early fifteenth century was dismayed that a ploughman who would once have been satisfied with a white kirtle and russet gown was now to be seen as proudly dressed as a squire. Peter Idley, writing about 1445–1450, grumbled that “a man shall not now ken a knave from a knight.” (Britnell 1993: 169)

All these different models are warranted in the given period, and historical sociolinguists can now choose which of the four models is the most suitable for their particular research question, that is, which of the four is best borne out by the linguistic data that we have. Note that this is also a very fruitful and productive point of collaboration between historians, sociologists, and linguists. Social historians usually develop their models on the basis of the sources mentioned above. These models can then be used by linguists in order to search for possible correlations between linguistic data and social categories. The existence or non-existence of these correlations may in turn serve as helpful clues and additional data for social historians who can fine-tune or revise their models accordingly.

Nevalainen and Raumolin-Brunberg (2003: 140) present the following analysis of the development of the verbal suffixes -(e)s and -(e)th in Early Modern English. Note that -(e)th is the older form and is being replaced by innovative -(e)s. They use model 2 presented above.

Stratification Model 2 with its fine distinction obviously proves to be very helpful. We can see that in the first period (1520–59), the innovative form -(e)s was used mostly by “other non-gentry” (58%), but also, and this is interesting, by the nobility (18%) and to a lesser extent also by gentry (8%) and merchants (10%). In general, however, we can say that the middle groups appear to be more conservative than the fringes of the spectrum. In the second period (1640–81) these differences have almost disappeared. However, royalty has not only caught up, but is now the only group with 100% innovative -(e)s. Nobility, gentry, merchants, and other non-gentry have also passed the 90% mark. Again, the middling groups are the most conservative, even though they, too, are clearly above the 80% line. This means, in turn, that the royal group must have seen the steepest increase, while the group of other non-gentry had the slowest. We can only follow Nevalainen
The Uniformitarian Principle and the Risk of Anachronisms

and Raumolin-Brunberg in their speculations on why this pattern emerges. It may have been the case that social aspirers (which included three elderly bishops) and clergy were affected by religious language and/or old age, while professionals and lawyers “may have been affected by the conservative language of legal documents” (2003: 140). Possibly -(e)s can even be analyzed as a social marker and more common in informal writing (though this hypothesis is very difficult, if not impossible, to test).

This example shows two important things. On the one hand, it provides clear evidence that social stratification of some sort was indeed an issue in medieval and Renaissance England. We might even be led to suggest that this was very likely to be true in the uniformitarian sense: probably all human societies exhibit social stratification of some sort. If we wanted to claim that a historical society did not exhibit any kind of social stratification we would have to justify this claim. However, human societies, then and now, are not necessarily all structured in the same way, and even analyses for a single point in time may differ considerably. The study by Nevalainen and Raumolin-Brunberg shows that Models 3 and 4 from Table 5.1 may not have led us to the same picture and the same conclusions, since they would have been too coarse-grained to help us to identify the leading groups in this case. So, in conclusion, we can say that we need to identify the relevant social categories which were important for each individual period and speech community. In a second step, we should also try and utilize these categories (by adjusting the scale on which we use them) so as to arrive at the best (most informative) correlations possible.

Case study 2: gender

The second case study deals with an equally important and productive category in current sociolinguistics: gender. Despite the fact that the concept of “gender” is anything but simple and straightforward in modern sociology, cultural studies, and sociolinguistics (see Eckert 1989; Eckert and McConnell-Ginet 2003; and the papers in Holmes and Meyerhoff 2005), it is also the basis for a large number of very valuable and stimulating studies in correlational and qualitative sociolinguistics.

Labov (2001: 263–65) studies the gender differentiation of stable sociolinguistic variables in Philadelphia. He analyzes the following variables: the realization of the voiced interdental fricative as either fricative, affricate/absence, or stop (dh); the realization of the final nasal as either apical or velar (ing); and negative concord (neg). Labov conclusively shows that for (dh), men in general (except for the lower working class group) use more non-standard forms and that this becomes particularly apparent among middle-working class speakers, both in careful and in casual speech. On the other hand, (ing) comes out as “a strong gender marker for the middle class,” where, again, males produce much more non-standard forms than women. Finally, we see that the use of negative concord is also gender-specific, with strongest differences in middle class speakers.
These and numerous other studies led Labov to the development of three principles regarding the linguistic behavior of men and women:

1. For stable sociolinguistic variables, women show a lower rate of stigmatized variants and a higher rate of prestige variants than men (Labov 2001: 266).
2. In linguistic change from above, women adopt prestige forms at a higher rate than men (Labov 2001: 274).
3. In linguistic change from below, women use higher frequencies of innovative forms than men do (Labov 2001: 292).

Ultimately, Labov formulates the corresponding Gender Paradox:

Women conform more closely than men to sociolinguistic norms that are overtly prescribed, but conform less than men when they are not. (Labov 2001: 293).

All these principles and the Gender Paradox itself appear to be fairly robust findings with almost universal applicability in contemporary sociolinguistics. In a word, they might qualify as “laws” across space, culture, and also time. We will now turn to the question of how far this is actually true.

The investigation of gender in modern sociolinguistics is methodologically quite easy. All it takes is a group of speakers which differ – sociolinguistically – only in gender. Roughly speaking, they would have to be from the same social class, from the same area, and they would have to use the same speech style. If we then notice any statistically significant differences in the use of certain variables this should be due to differences in gender. The investigation of gender in language history, in contrast, can be a methodological nightmare (see Chapter 17 in this Handbook).

First, we have to acknowledge that data from female speakers becomes rarer the further we go back in time. Cressy (1980: 177) estimates that before 1500 only about 1% of the female English population had something like “signature literacy,” that is, they were able to sign their own name. At around 1660, this figure rose to about 10%. By about 1800, the 50% mark may have been reached (cf. Schofield 1973). This has serious consequences for the availability of statistically significant data. However, this need not be a major problem. Even though we do not always have female scribes, we do have female authors, who dictated their texts to scribes. Bergs (2005; forthcoming) argues that the linguistic influence of scribes on the language of authors is not always as large as one might expect. In fact, in the Middle English Paston letters we can see that the morphosyntax of different authors is significantly different, even though the letters were dictated to and written by one and the same scribe. If the scribe had been more influential, we would expect to find more similarities. However, so far this has only been investigated for the Paston Letters and for some morphosyntactic variables (relative clauses and personal pronouns). Future studies could investigate this further.

Second, the data that we have from female speakers does not usually have any male counterparts, so we lack sociolinguistically “minimal pairs”. Normally we
see differences not only in gender, but also in style, text type, and/or region. These factors have to be considered when investigating gender as an external variable.

Third, and most importantly, the gender-related principles presented by Labov crucially rest on the notion of linguistic standards, prestige, stigma, and change from above or below. Generally, modern language communities (especially in the northern hemisphere) are massively influenced by the idea of linguistic standards, norms, and correctness (see Milroy and Milroy 1985/1999). In many studies, linguistic forms are described and analyzed in their relationship to such norms and standards. These, however, did not exist or did not operate in the past as they do now, simply because language standardization, despite its roots in very early language stages (Gneuss 1972; Samuels 1972), is mainly a post-medieval phenomenon. Many pre-modern societies did therefore not have linguistic standards and norms in the sense that modern societies do. This, however, does not mean that people in pre-modern societies did not have any norms they could either observe or deviate from, but the word “norm” in this case does not have a prescriptivist meaning, but rather should be understood in Coseriu’s sense (1962): norms reflect what is common, what is being used and widespread; in brief, the sum of all conventions. In practice, this means that in pre-standardized times we can postulate any number of linguistic communities which have their own specific norms: linguistic usages which speakers of that community expect because of their sheer frequency (but which are not explicitly prescribed). The fact that speakers were indeed aware of linguistic differences and even attached some value to this or that use or variety becomes very clear when we look at some (in-)famous quotes from literary works (cf. Machan 2003: 111–38):

“Symond,” quod John, “by god, nede has na peer. Hym bihoues serve hymself that has na swayn, Or elles he is a fool, as clerkes sayn. Oure manciple, I hope he wil be deed, Swa werkes ay the wanges in his heed; And forthy as I come, and eek Alayn, To grynde oure corn and carie it ham agayn; I pray yow spede us heythen that ye may.”

“Simon,” said John, “by God, need has no peer” / He has to serve himself that has no slave. / or else he is a fool, as clerks say. / Our manciple, I guess he will be dead, / So ache all the teeth in his head / And therefore have I come, and also Alain, / To grind our corn and carry it home again; / I pray you speed us hence if you please.


The two clerks, John and Aleyn, come from the north of England and are linguistically characterized as speakers of northern English. We find na, swa, ham instead of no, so, home, third person singular present tense is expressed by {s} as in werke-s instead of {-th} as in werke-th, and of course we find lexical items of northern origin: heythen instead of hennes “hence,” werkes instead of aches.
Now it is very tempting to think that Chaucer could have used the dialect features as normal sociolinguistic variables, either as indicators, depending solely on class, or as markers, depending both on class and style. However, this idea presupposes a class system and, more importantly, a linguistic standard that speakers aspire to. While it seems intuitively plausible to assume that at any given point in time speakers had a range of stylistic options at their disposal, it also seems highly implausible that we find social classes in the modern sense before about 1500 (see above). However, people clearly showed some language awareness – particularly an awareness of the differences in language between speakers, at least from different regions. The fact that writers of literature were able to play with dialect features and could actually characterize some of the *dramatis personae* by giving them specific dialect features clearly shows that people were aware of these differences and did expect certain features to be present or absent from the speech of certain speakers – even though there was no such thing as a linguistic standard in the modern sense. In modern sociolinguistics, Dennis Preston developed the concept of “perceptual dialectology,” the study of what people perceive as different dialects and what they associate with these dialects (Preston 1989, 1999; Niedzielski and Preston 2003). This association or evaluation is not necessarily linked to any standard variety and deviation from this standard, but it seems very likely that speakers who grow up in an environment where language standards and prestige are very highly regarded cannot easily free themselves of these influences when they evaluate language variation and varieties. Nevertheless, it is not unlikely that historical speech communities (whatever these were) also saw themselves in that way, to the point that certain features and varieties were found to be more or less pleasant, rude, honest, boorish, elegant, stand-offish, and so on. It would be worth studying these factors in greater detail – but, again, the problem is that historical periods do not offer much data for that purpose.

In 2003, Tim Machan introduced Einar Haugen’s (1972) concept of the ecology of language to historical linguistics (Machan 2003: 9). For Haugen, the ecology of language refers to a very broad sociolinguistic context which includes psycholinguistic, ethnolinguistic, and anthropological aspects of language. According to Haugen, the ecology of language looks at the interplay of language and its environment. The value of this approach is that it undertakes an analysis not only of the sociolinguistic and psycholinguistic aspects of a language, and also of the effects of those aspects on the language itself. The result is a comprehensive picture of language and language users in their “natural habitat.” Moving away from individual factors and their study in isolation and towards a broader picture thus gives us a chance of capturing even remote and unusual language states, or historical stages which do not offer us the same kind of data that we find in contemporary studies.

Eventually, therefore, we arrive at a point where we have to acknowledge that in all likelihood there was gender-specific language use in the Middle Ages and before, but due to the lack of data on the one hand, and the conceptual problem of standards and “prestige” on the other, it is hard, if not impossible, to say exactly what those gender differences looked like. The first reliable pieces of evidence
again come from Tudor and Stuart England. Nevalainen (1996: 84) demonstrates
that at least in the Tudor period we see a clear gender differentiation with many
morphosyntactic variables:

In Figure 5.1 we see the two variables *hath* versus *has* and *doth* versus *does* in
male and female speakers from six different social groups (note that, due to the
lack of data, merchants and professionals have no female representatives). It is
very clear that female and male speakers differ significantly in their speech, and
this underlines our initial claim that it is unlikely that we would not find any
gender related differences at all. Moreover, in Nevalainen’s study, women on
average use more innovative (*-s*) forms than men, except for the lower gentry.

Table 5.2. Approx. percentages of the verbal suffixes –
*(e)s* vs. –*(e)th* from male letter writers in the *Corpus of Early
English Correspondence* (CEEC), excluding *have* and *do* (on
the basis of Nevalainen & Raumolin-Brunberg 2003: 140)

<table>
<thead>
<tr>
<th>Social Group</th>
<th>1520–1559</th>
<th>1640–1681</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royalty</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Nobility</td>
<td>18</td>
<td>94</td>
</tr>
<tr>
<td>Gentry</td>
<td>8</td>
<td>92</td>
</tr>
<tr>
<td>Clergy</td>
<td>4</td>
<td>86</td>
</tr>
<tr>
<td>Social aspirers</td>
<td>3</td>
<td>88</td>
</tr>
<tr>
<td>Professionals</td>
<td>2</td>
<td>86</td>
</tr>
<tr>
<td>Merchants</td>
<td>10</td>
<td>92</td>
</tr>
<tr>
<td>Other non-gentry</td>
<td>58</td>
<td>92</td>
</tr>
</tbody>
</table>

Figure 5.1. *has* and *does* (%) as opposed to *hath* and *doth* in 1640–80 (adapted from
Nevalainen 1996: 84)
How far this has to do with prestige is very difficult to determine. What can be said, however, is that women are, on average, the leaders in this change process.

**Case study 3: social networks**

Our final case study deals with social networks. Social networks have been around in modern sociolinguistics for more than thirty years now (for an overview, see Bergs 2005: 22–82; Bergs and Schenk 2004; Freeman 2004). One of the most influential studies is Milroy’s work on Belfast (1980/1987). The key idea of social network analysis is that language use is not only determined by fairly stable speaker-related factors such as gender, age, class, education or speech-related factors such as register, genre, or style. Speakers also maintain relations with other people, and these relations form their personal social network. Networks are not fixed and stable entities, but relatively flexible, variable aggregates of relations. The two main factors which have been found to be important in social networking are quantity of contacts and quality of contacts. In other words, it makes a difference how many people somebody knows and how well this person knows his or her contacts. It is usually assumed that quantity and quality are inversely proportional, that is, the more contacts somebody has, the lower is the quality of those links, and vice versa. This is borne out well by our daily experience: you can not have 89 best friends (see Chapter 18 in this *Handbook*).

Determining network structures can be very difficult, even in modern sociolinguistics. There are numerous studies available in sociology which offer an endless array of tools and diagnostics (Wasserman and Faust 1994; Wasserman and Galaskiewicz 1994; Freeman 2004, the journal *Social Networks*, the *International Network for Social Network Analysis* INSNA, www.insna.org). In sociolinguistics, these factors have to be reduced and simplified somewhat in order to make them operable. Milroy, for example, suggests that for Belfast a large number of sociological factors can be determined, but that these need to be turned into a simpler social network strength scale which also reflects the density and multiplexity of an individual’s network (Milroy 1980/1987: 140–42). The network strength scale conditions in her study are:

1. Membership of high-density, territorially based cluster.
2. Having substantial ties of kinship in the neighborhood.
3. Working at the same place as at least two others from the same area.
4. Having the same place of work as at least two others of the same sex from the area.
5. Voluntary association with workmates in leisure hours.

Milroy quite rightly points out that “since personal network structure is influenced universally by a great many factors […] one cannot hope to identify and measure all relevant factors. The range of choice actually depends on the local cultural categories which reflect more abstract properties of network structure” (Milroy 1980/1987: 212). This means, in turn, that historical network studies, just
like contemporary ones, need to be very careful when they develop their criteria for measuring networks (see Bergs 2005: 31–37).

There is an ongoing debate in sociology and sociolinguistics about what effects different network structures can have on the behavior and attitudes of individuals. The very basic idea is that the number and the quality of the ties a person has should have some influence on the behavior and attitudes of that person. One of the main findings regarding contemporary networks is that dense, multiplex networks (as in traditional village communities where people know each other in a number of different capacities, such as friends, neighbors, workmates, and through joint activities) tend to enforce normative, conservative behavior while loose-knit, monoplex networks (in big cities, with mobile people who may know many people but know most of them in only one capacity or role) tend to foster innovation and change (Granovetter 1973, 1983). Moreover, social network analysis, with its focus on the individual, can go into greater detail about the functional roles of individual network members. We can usually distinguish between central participants, who are very prominent in the network and “extensively involved” (Wasserman and Faust 1994: 173), and average, marginal, and finally, peripheral participants. These can be defined through different degrees of centrality, prestige, involvement, and visibility. Individuals who have ties to two or more different networks can be defined as yet another group of network participants and are usually referred to as “bridges.” Bridges and peripheral members play an important role in linguistic change. They are the living sources of innovation in their networks as they feel less normative pressure from within their networks and can thus transport linguistic material from one network to another. Central members, on the other hand, are usually more conservative than other network members as they are clearly visible to the other network members and subject to normative pressure from within the network. But once an innovation begins to gain ground, they often change their behavior drastically and act as early adopters of the innovation, as avant garde leaders in the change.

It seems very plausible to assume that speakers have always had individual social networks, based on ties to other members of their speech community. And it seems equally plausible to assume that these networks and ties – despite different features on network strength scales – were basically characterized by very similar factors: the number of ties a given speaker has, and the quality of those ties (good friends, loose friends, socioeconomic dependency, etc.). This is certainly a way in which the uniformity principle makes a lot of sense, even though data problems can make the analysis of historical networks very difficult (see Bergs 2005: 45–52).

Now, it is very tempting to think that networks have also always operated in the same fashion: loose-knit networks facilitate change, tight-knit networks are norm-enforcing, central members are more conservative than bridges, and so on. This idea, however, is problematic. Once again, the whole concept of conservative versus innovative language use in relation to linguistic norms (such as a language standard) crucially depends on the existence of those overtly prescribed linguistic norms and the idea of a language standard as such. These, as we have discussed
before, did not exist as they do now before about 1500. This, however, does not necessarily mean that social networks did not play a role in language use and language change before that date, but their role certainly needs to be critically re-evaluated. Before the advent of overtly prestigious language norms, close-knit networks must have had norm-enforcing power in their very small, local communities such as villages and parishes, or perhaps even guilds or religious groups such as the Lollards. One can assume that deviance from these very local (unspoken) norms was not very well regarded. The result would be a number of individual linguistic systems across the country. Loose-knit networks, on the other hand, such as those with members who traveled a lot and did not belong to any particular community, would enable people to develop their own, personal linguistic systems. They could change and adopt their verbal behavior in deliberate acts of identity. Thus, members of close-knit networks felt normative pressures within their groups, and we see the development of group-specific “standards,” while members of loose-knit networks did not feel this pressure. Close-knit groups could exhibit language variation “to the point of deviance” without having to fear social sanctions. This can be illustrated on the basis of data from the Paston Letters. The collection of Paston letters contains, among others, the documents of two brothers: John II and John III. They were born in 1442 and 1444, respectively, and of course shared most traditional sociolinguistic factors such as age, gender, education, and place of residence. However, these two brothers had very different lifestyles: the older brother, John II, was a true bon viveur, who left the family home very early, traveled extensively, never actually settled, did not marry or have any children, and gambled and meddled in high-level politics. He often had to send letters home to ask for money. His younger brother was exactly the opposite. He stayed at home, apart from a two-year stay with the Duke of Norfolk, until about his mid-twenties, and acted as secretary to his mother. Later on he mostly stayed in Norwich, married and led a more stable, local life than his traveling brother. This, of course, had some consequences for their networks. John II had more contacts, which could have resulted in more loose-knit networks, and his contacts were of a more uniplex nature, in that they were not very intensive, strong links (see Conde-Silvestre and Hérnandez-Campoy 2004, 2005). John III, in contrast, had a more dense network, and his links as Justice of the Peace and Member of Parliament for his communities, for example, were multiplex and strong. The different lifestyles and networks of the brothers are reflected in their language use. John II uses, on average, more innovative forms such as the new pronouns *them* and *their* instead of *hem* and *here*. His letters exhibit more linguistic freedom and variability. The lack of dense network structures enabled John II to develop this great deal of variability, while the opposite, the dense, multiplex structures that John III found himself in, seem to lead to greater (local) uniformity.

However, all this changed with the development of supra-regional overtly prestigious language norms. Speakers in close-knit social networks like small villages were shielded, as it were, from these supra-regional standards and could maintain their own local norms. This is one reason why traditional dialects can still be found today in more rural areas, but less in urban centers. Today, however,
loose-knit networks facilitate innovation in the direction of the standard, at least with upwardly mobile middle class speakers. This means that before about 1500 or 1600, loose-knit networks must have led to greater language diversity; since that time they have led to widespread, supra-local language standards and less diversity. Today, close-knit networks help to maintain vernacular norms, and thus also language diversity, albeit perhaps not on the personal level.

### Summary and Conclusion

This chapter first presented an outline of the Uniformitarian Principle and its roots in eighteenth-century geology. It was pointed out that the principle is indeed helpful when studying language structures in isolation, but that its applicability in historical sociolinguistics must be viewed with much more caution. Indiscriminating application of the Uniformitarian Principle in this domain may easily result in anachronisms, which were introduced in the following section. It was shown that anachronism may arise both on the factual and on the ideational level.

The chapter concluded with three case studies which exemplify the opportunities and risks of applying the Uniformitarian Principle in historical sociolinguistics. We discussed the role and analysis of the major sociolinguistic factors social class, gender, and social networks in the history of English, mainly between 1300 and 1750. In particular, it became clear that some of the fundamental claims of modern (socio-)linguistics do seem to follow the UP. These include the fact that language must always have been variable, that different social groups and genders had different ways of speaking, and that people have always been aware of these differences, though they may not have evaluated them as we do today. Beyond these very basic facts, however, it seems that every language period and every linguistic community must be investigated independently and in its own right (pace Jardin 2000). The actual concepts and functions of class, gender, networks, and, most importantly, norms, standards, and prestige, differ radically in different communities. To assume that we find the rules and mechanisms of modern English in other communities or language periods leads easily to anachronism.

This, however, should not be taken to mean that, because of this implied danger, historical sociolinguistics is a doomed enterprise: on the contrary. With the development of new analytical tools and concepts, such as the ecology of language, we not only gain insights into the past stages of languages, we are also led to reflect on how we see, describe and analyze contemporary languages.

### REFERENCES


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