DIMENSIONS OF SPACE IN SOCIOLINGUISTICS

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DECLARATION

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ABSTRACT

Within the social sciences and humanities, adequate definitions and understandings of the concept 'space' have been debated for some time. However, until recently, this debate been neglected within linguistics, although it is generally acknowledged that understandings of space within sociolinguistic research specifically have not remained uniform over time. The research presented in this study focuses on the varying conceptions of 'space' in the development of variationist sociolinguistics. It specifically seeks to address the lack of a coherent account of the influence that the various dominant conceptualizations of 'space' have had on research design throughout the history of the field. Previous work on this topic, which until recently has been relatively scarce, has pointed out some fluctuations in the understanding of space that has been employed within sociolinguistics. Still, these changes over time have not yet been investigated in a systematic and chronological manner. Additionally, previous investigations of the concept 'space' in sociolinguistics did not situate themselves within the broader spatial rethinking that has occurred in the social sciences, and thus tend to employ the relevant spatial terminology in isolated and unstandardized ways.

The present study examines the conceptualization of 'space' in variationist sociolinguistics in a systematic and chronological manner, and situates changes in the understanding of this concept within the so-called "spatial turn" that occurred in the social sciences in the late 1970s/early 1980s. By examining the influential literature within four different variationist sociolinguistic paradigms and identifying the changes in dominant spatial understandings that have occurred over time, the impact of each dominant spatial conception on research design in variationist sociolinguistics is explicated. Ultimately, the study aims to clarify a topic that has previously been treated in largely incomplete and unsystematic ways. By presenting a partial chronicle of the history of 'space' in variationist sociolinguistics, the study will moreover serve as a basis for those working in the field to reflect on the directions this relatively young discipline has taken.

OPSOMMING

Binne die sosiale en geesteswetenskappe is toereikende definisies en begrip van die konsep 'ruimte' al vir 'n geruime tyd gedebatteer. Hierdie debat is tot onlangs binne die taalwetenskap afgeskep, alhoewel dit algemeen erken word dat die begrip van ruimte binne spesifiek sosiolinguistiese navorsing met verloop van tyd verander het. Die navorsing wat in hierdie studie aangebied word, fokus op veranderinge in die konseptualisering van ruimte in die ontwikkeling van variasionistiese sosiolinguistiek. Daar word spesifiek aandag gegee aan die gebrek aan 'n samehangende beskrywing van die invloed wat verskillende dominante begrippe van 'ruimte' gehad het op navorsingsontwerp in die veld se geskiedenis. Vorige werk wat oor dié onderwerp handel, en wat tot onlangs relatief skaars was, het daarop gewys dat daar wel veranderinge was in die manier waarop die begrip 'ruimte' binne die sosiolinguistiek gebruik is, maar hierdie veranderinge is nog nie op 'n sistematiese en chronologiese manier ondersoek nie. Vorige studies van dié onderwerp is ook nie binne die breër ruimte-debat in die sosiale wetenskappe aangebied nie. Daar is dus die geneigheid om die relevante ruimte-terminologie op geïsoleerde en nie-gestandaardiseerde maniere te gebruik.

Die huidige studie ondersoek die konsep 'ruimte' binne variasionistiese sosiolinguistiek op 'n sistematiese en chronologiese manier, en plaas veranderinge in die begrip van ruimte in die sosiolinguistiek binne die konteks van die sogenaamde "spatial turn" wat in die laat-1970's/vroeë-1980's binne die sosiale wetenskappe plaasgevind het. Deur 'n ondersoek van invloedryke literatuur binne vier verskillende variasionisties-sosiolinguistiese raamwerke, en die identifisering van die veranderinge in die konseptualisering van dominante ruimte-begrippe wat met verloop van tyd plaasgevind het, word die impak van elke dominante ruimte-begrip op navorsingsontwerp in variasionistiese sosiolinguistiek duidelik gemaak. Die uiteindelike oogmerk van die studie is om duidelikheid te verskaf oor 'n onderwerp wat voorheen grootliks onvolledig en onsistematies aangespreek is.

Deur 'n gedeeltelike kroniek van die geskiedenis van 'ruimte' in variationistiese sosiolinguistiek te bied, dien die studie voorts as 'n basis vanwaar taalwetenskaplikes kan besin oor die rigtings waarin hierdie relatief jong dissipline ontwikkel het.

CONTENTS

CHAPTER ONE

INTRODUCTION

1.1 Background to the research problem: the spatialization of the social sciences

The social sciences have, for the last century or so, awarded precedence to time and history in their theorizations of the development and organization of human society (Soja 1989: 1). However, as a result of a project of reconceptualization begun amongst philosophers and geographers (Middell and Naumann 2010: 155), the last three decades have seen a surge of interest regarding the role space has to play in these theorizations; not just within these two fields, but also within such diverse areas as literary theory (cf. Hess-Lüttich 2012) and anthropology (cf. Zhang 2002).

In its simplest form, the essence of the so-called "spatial turn", which is roughly estimated to have begun in the 1970s (Middell and Naumann 2010: 155), is a shift from a 'container' image of space, to a view that acknowledges space as something socially produced that has, in turn, the ability to shape human interaction (Kümin and Usborne 2013: 307). Whilst this debate has, as noted above, permeated many other disciplines within the humanities and social sciences some time ago, similar considerations have until recently remained largely unpursued within sociolinguistics. The advent of the new decade has seen sociolinguistics catching up, with the publication of a multi-volume handbook on language and space (cf. Auer and Schmidt 2010), as well as a 2014 sociolinguistics symposium organized around the theme of language, time and space.

Despite their somewhat tardy arrival to the theoretical party, Auer and Schmidt (2010: ix) state that "[n]o other dimension of variation so fundamentally shapes the diversity of human language as does space, both across and within languages". The authors make a strong point – although it may not have received much explicit theoretical attention, since the late nineteenth century (Koerner 1991: 59), scholars engaged in early sociolinguistic work such as dialectology or linguistic geography have been interested in how language varies according to area, and, as Johnstone (2011: 203–205) remarks, have often used geography (in terms of large distances, or barriers such as mountains and rivers) as an explanatory factor in accounts of how variation

in language arises. Indeed, space is arguably always a variable, and an important one at that, in sociolinguistic investigation – consider, for example, the importance of the position within 'social space' occupied by a speaker in correlational sociolinguistics, which seeks to establish links between the use of particular linguistic forms and a speaker's social class or gender; or, consider the more recent discipline of linguistic landscapes (LL) that focuses on the presence (and absence) of languages in particular spaces, and how such presence or absence may affect speakers' spatial and linguistic experiences (Johnstone 2011: 203).

A brief contemplation of early and recent moments within sociolinguistics should make it clear that it would not have been possible to employ identical theoretical and methodological approaches throughout. Early dialectological studies conducted in isolated rural areas, the results of which were easily presented in so-called "linguistic atlases", are a world apart (to use a spatial metaphor) from studies conducted in present-day urban areas, where, as a consequence of the movement of peoples, ethnic and linguistic diversity has reached such levels of complexity as to warrant the label of "superdiverse" (Vertovec 2007). The possibility of claiming 'These are the kinds of linguistic variants found here' that the former type of investigation offers is lacking in the latter, as it is impossible, currently, to say 'These are the kinds of linguistic variants found in London' – they would be simply too many to list.

We may recognize, from the above, a closely-connected alteration in the makeup of society (as the majority of the world's population is now concentrated in urban areas), and a shift in the direction of theoretical interest from the rural to the urban. As a result, the question of how language variation might arise and be structured in a community has had to be revisited – compare, as illustration, the disparate social frameworks employed in Labov's (1963) study of relatively self-contained and egalitarian Martha's Vineyard,[1] and his (2006)[2] investigation of the highly stratified Lower East Side of New York. It is clear that, to paraphrase Blommaert (2010: xiii), the transition towards a different kind of social system has forced us, and will force

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[1] Labov (1963: 6) notes that the 6 000 inhabitants of the island "fall into four ethnic groups which are essentially endogamous".

[2] Note that the second edition, consulted for the purposes of this study, was published in 2006. The first edition was released forty years earlier, in 1966.

us again, to redefine our theoretical tools. This redefinition necessitates an examination of the variables that inform our research. Prominent amongst these is the variable of space.

The acknowledgement of physical barriers as impetus for the development of regional dialects, and the recognition that the social spaces within which one moves make a difference to the kinds of linguistic forms to which one is exposed and is likely to adopt (to name but two space-related considerations in sociolinguistics), clearly indicates that there has been some fluctuation in how space has been conceptualized in this broad and multifaceted discipline. What is not clear, however, is whether there has been any decisive alteration(s) in how the concept of 'space' is employed in sociolinguistics from the inception of the discipline up until the present day. Put differently, it is not certain where sociolinguists stand on the definition of the concept. This uncertainty is not limited to sociolinguistics, however. Following the spatial turn, Hess-Lüttich (2012: 3) points out that a "common theoretical background for a system of space-related terminology" across all social scientific disciplines is still lacking, resulting in widespread uncertainty as to how the concept of 'space' should be defined trans-disciplinarily.

The research presented here aims to address the conceptual ambiguity regarding the understanding of 'space' in sociolinguistics that has been pointed out above. Accepting the premise that "notions of space [and] relevant spatial frameworks have changed over time" (Middell and Naumann 2010: 155), this thesis aims to pinpoint exactly which notions of space have been employed in the history of variationist sociolinguistics, and how those notions employed have shaped the research that has been conducted.

1.2 Statement of problem

It is noted above that, firstly, the conceptualization of 'space' within sociolinguistics has not remained constant over time; and, secondly, that these changes in conceptualization have been necessitated by changes in the location of investigation, and in the general makeup of society. It has also been established that, within the broader social sciences and humanities, suitable definitions and understandings of space have been debated for some time, but that this debate has, until recently, been neglected within linguistics. The problem that this research seeks to address is the lack of a coherent account of the influence of the various dominant conceptualizations of 'space' on research design throughout the history of variationist

sociolinguistics, specifically, where "variationist sociolinguistics" is defined as a field "interested in accounting for linguistic variation and change, at least partly as a product of the social distribution of language varieties" (Heller 1984) (and thus not to be solely equated with the Labovian tradition).

It was mentioned in the previous section that one of the central features of the spatial turn is its derision of understandings of space that define the concept as a container for human action and nothing more. In line with this turn, it can be stated with confidence that space is currently by no means solely understood within sociolinguistics as "a blank stage on which sociolinguistic processes are enacted" (Britain 2004: 603). The concept has evolved to incorporate different (and often metaphorical) aspects – consider the social place of speakers within society referred to above or, on a related note, the position of speakers within social networks that affects with whom they interact, and to what linguistic forms they are exposed (cf. Milroy 1987).

In addressing the problem identified at the beginning of this section, three sub-problems must be attended to. Firstly, a clear characterisation of how 'space' has been understood within variationist sociolinguistics over the course of the discipline's development must be sought. Secondly, one must be able to identify how the conception of space most prevalent at a particular time can be shown to have influenced research design in variationist sociolinguistics during that period in terms of directing the attention of the researcher and shaping her research questions, and thirdly, one must be able to pinpoint how the dominant spatial conceptions may have contributed to omissions that may have arisen in relation to the relevant research findings.

1.3 Specific research questions

1. To what extent is there evidence of a shift in the conceptualization of 'space' in variationist sociolinguistics?
2. If there is indeed evidence of a change, how did it factor into the research paradigms that informed significant research in variationist sociolinguistics? In other words, how has variationist sociolinguistic research been shaped and constrained by our understanding of the effect of space on linguistic behaviour?
3. Finally, to what extent is space as a variable still relevant in current and future variationist-sociolinguistic investigation?

1.4 Research aims

It is believed that an investigation of the nature outlined above will serve as a fascinating chronicle of the developmental history of the discipline of variationist sociolinguistics. Indeed, if Koerner (1991: 58) is to be agreed with, the study presented here will go so far as to contribute to the maturation of the field, as he argues that "a scientific field reaches its maturity only by becoming aware of its history and by becoming interested in having it documented". Furthermore, the study also aims to act as a useful speculative instrument, in that it can hope to shed some light on the influence of the concept of 'space' on research trends in variationist sociolinguistics, and by so doing predict the concept's future role in sociolinguistic investigation.

1.5 Scope of the study: demarcating the fields of sociolinguistics and variationist sociolinguistics

The above has made clear that the scope of the research presented here does not extend beyond the field of variationist sociolinguistics. There are two reasons for this delimitation: the first is the desire to keep the study to a manageable length. The second is that investigation into language variation is the oldest form of sociolinguistic research, and thus, an exploration of this field provides a large temporal range in which to consider chronological developments in the conceptualization of space. This section will define the fields of sociolinguistics and variationist sociolinguistics.

1.5.1   Sociolinguistics as field of study

Sociolinguistics is somewhat vaguely defined as a discipline – as Trudgill (1983: 1) remarks, "while everybody would agree that sociolinguistics has *something* to do with language and society, it is equally clearly not concerned with *everything* that could be considered under the heading of 'language and society'". What is needed is a demarcation between sociolinguistics and the study of language and society. In order to establish such a demarcation, Trudgill (1983) suggests that one examines the objectives of studies done under the heading of 'language and society', and then determines which of these groupings of objectives could reasonably be categorized under the heading of "sociolinguistics".

The first grouping of research objectives that Trudgill (1983) identifies within the study of language and society is "purely linguistic"; the second, "partly linguistic and partly sociological"; and the third "wholly sociological". Studies of the first type conduct an empirical, formal investigation of language as it is used in its social context, such as those for which Labov is most well-known. Crucially, the objective of these studies is not to gain insight into the functioning of a particular society, or to merely establish correlations between linguistic forms and social phenomena. Such studies are interested only in learning about language, and thus takes as their focus topics such as "the mechanisms of linguistic change, the nature of linguistic variability; and the structure of linguistic systems" (Trudgill 1983: 2–3). Investigations that fall within this category, whilst they may legitimately be called "sociolinguistic", primarily use a sociolinguistic approach as a methodology (such as Labov's interview method), rather than actually taking an interest in the content of the social context within which the language in question is found (Trudgill 1983: 2).

Studies of the second type that are "partly linguistic and partly sociological" do not fall quite as clearly under the banner of "obviously sociolinguistic". Studies conducted within this category may fall under such diverse disciplinary headings as "the sociology of language", "the social psychology of language", "anthropological linguistics" and "the ethnography of speaking" (Trudgill 1983: 3). Whilst Koerner (1991: 57) assigns Fishman's work to the category of "sociology of language" and excludes it from sociolinguistics simply because Fishman is a sociologist by trade, a dismissal on such simplistic grounds is not necessary according to Trudgill's classification system. The decisive criterion that determines whether "partly sociological and partly linguistic" studies can be termed "sociolinguistic" is the presence of a *linguistic* research interest. Fishman's work of course displays such an interest; as another example that would fall within this category, Trudgill names Labov's (1963) Martha's Vineyard study, which takes as its focus language attitudes as instruments of linguistic change. (Although Trudgill notes that, because the latter has both sociological and linguistic research interests, it can fall within both the social psychology of language and sociolinguistics.)

Studies of Trudgill's third type that are purely social in objective are, he argues, to be denied the label of "sociolinguistics". He offers ethnomethodological research as an example, which he characterizes as a "way of doing ethnography or sociology which studies people's practical reasoning and common sense knowledge of their society and the way it works". Amongst the

kinds of data typically collected within this kind of research deals with the use of language in social interaction, which is supposed to shed light on individuals' understanding of the way their society works. This may at first seem to be a form of sociolinguistic investigation, but Trudgill (1983) argues that ethnomethodologists are not interested in speech, but rather in talk – what people say, not *how* it is said. The disqualifying characteristic here is that "[l]anguage ('talk') is employed as data, but the objectives are wholly social scientific"; no outcome of the research is linguistic in nature (Trudgill 1983: 5). For this reason, such investigations cannot rightly be called 'sociolinguistic'.

1.5.2   Variationist sociolinguistics as field of study

Variationist sociolinguistics, which Chambers. Trudgill and Schilling-Estes (2004: 1) place "at the core of the sociolinguistic enterprise", considers how linguistic variants are understood as possessing social meaning (Chambers 2004: 3), and is typically closely linked to the study of linguistic change (cf. Heller's (1984) definition offered in section 1.2). The foundational observation upon which the field rests is that "variants that exist in everyday speech are linguistically insignificant but socially significant" (Chambers 2004: 3). Consider the following pair of sentences:

1. I could have done better.
    I could of done better.

These sentences are considered to be linguistically equivalent for, as Chambers (2004: 4) states, no competent English speaker would dispute that they convey an identical grammatical meaning. However, they are clearly not socially equivalent – that is to say, "they carry *socio*linguistic significance" (Chambers 2004: 4). The first sentence, which belongs to Standard South African English, is typical of formal, educated speech, while the second is typical of "uneducated… colloquial speech" (Chambers 2004: 4). A social evaluation of this sort, as Chambers (2004: 4) notes, is a matter of convention – the same kind of convention that decrees that it is impolite to wear a hat indoors – and is therefore by no means indicative of objectively superior linguistic forms. However, and importantly for our purposes, judgements like these are often used to assign speakers to or locate speakers as members of particular geographic regions, particular occupations, or particular social classes, or to all of the above,

simultaneously – Johnstone et al. (2006: 84) give the example of monophthongal /aw/ in the United States, which can serve to identify a speaker as either from south-western Pennsylvania, as working class and/or as male.

It is the case that social evaluations such as these are prevalent in "all developed societies" (Chambers 2004: 4), and thus their status as object of study also has a long-standing history. In addition, it is true that, as Heller (1984) notes, variationist sociolinguistics typically has a social aspect to it. However, as will be discussed in chapter three, early research into language variation focused on regional differences, with an interest in social differences arising slightly later (cf. section 3.4.4).

1.5.3   Approaches to space within other areas of linguistics

The previous two sub-sections have delineated the area of sociolinguistics that will be considered in the rest of this study. However, issues of space have been dealt with in other fields of linguistics; some of them closely related to sociolinguistics and some of them not. Amongst the latter grouping, cognitive- and psycholinguistics may be counted. Here, the focus is often on the intersection between language and space; that is to say, in 'spatial language', or "systems of spatial reckoning and description" across cultures (Levinson 1996: 353; see also Moore 2014).[3] Whilst these kinds of approaches fall widely outside of the scope of this study, it would be remiss to ignore more closely-related contributions completely. This sub-section will very briefly discuss works dealing with space within historical linguistics and linguistic anthropology.

1.5.3.1 Historical linguistics: investigating linguistic diversity in space and time

The question of geography as it relates to language perhaps arises in its least complicated form within historical linguistics, which is defined as "the study of the history of language and languages, and how languages have changed over time" (Swann et al. 2004b). Historical

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[3] Interestingly, Levinson's (1996) term "the language of space" has also been used as a title in the field of architecture (cf. Lawson (2001)), where terms such as "spatial morphology" and "spatial syntax" misleadingly imply the presence of a linguistic aspect to the research.

linguistics is also interested in conducting comparative studies of languages with the aim of determining which languages are related and, in addition, in reconstructing related languages as they existed at earlier stages (Swann et al. 2004b). As Nichols (1992) notes, somewhat at odds with its name, historical linguistics, when working "at great time depths", can no longer employ the standard comparative method, as beyond this point there are not enough linguistic data to support any kind of hypothesis. Rather, when hypothesizing about language as it existed more than 8 000 years ago (the cut-off point that Nichols (1992: 2) identifies beyond which sufficient data do not exist), one must turn to *space* as an explanatory factor. Indeed, what Nichols proposes is that linguists think of language as a "population… characterised by diversity", and approach linguistic typology in the same way that geneticists approach the study of populations, by analyzing variation "within and between populations of organisms" and using the results as supporting data for hypothesizing as to the pathways along which linguistic evolution has progressed. This is opposed to the typical historical-linguistic approaches, which employ models such as lineages and family trees which rely on time. Thus, Nichols (1992) focuses on issues of migration and spread of languages, and employs geography as a "predictive factor" that can sketch correlations between the location or character of a region and the distribution of linguistic traits within or between the populations of that region. In such analyses, Nichols (1992: 12) makes reference both to location, which encompasses cardinal coordinates, direction and distance, and area, which denotes groups of neighbouring languages "limited… but not defined by geography", that can be characterized in terms of spatial features such as centres, peripheries, and directions of movement.

Nevalainen (2011: 280) points out that the concerns of (variationist) sociolinguists and historical linguists are not entirely disparate, as the groups share an interest in language change. However, whilst sociolinguists typically analyze the processes of language change as they are happening, "traditional historical linguists work with the results of these processes". Sociolinguists, therefore, work with "present-day spoken language" instead of the written records relied upon by traditional historical linguists (a group to which Nichols, with her geographical/genetic approach, does not belong). Consequently, the questions of space with which sociolinguists must deal are more complicated − whereas historical linguists must assume that the language in process of evolution that they are studying belongs to a "strictly monoglot community", made up of Chomskyan 'ideal speaker-hearers' (Chomsky 1965) whose language use is unaffected by social context (Martinet 1964 in Nevalainen 2011: 279),

modern sociolinguists must "look at linguistic phenomena from within the social, cultural, political and historical context of which they are part" (Blommaert 2010: 3).

1.5.3.2 Language and space from the perspective of linguistic anthropology: the construction of racialized spaces

Although Trudgill (1983) would not allow it, Bucholtz (2003: 398) takes linguistic anthropology to be sufficiently similar to sociolinguistics, in that they share an interest in "real language" (that is, language that is used by "authentic speakers" in "authentic contexts"), so as to allow the term "sociolinguistics" to include both fields. Within linguistic anthropology, that studies "language as a cultural resource and speaking as a cultural practice" (Swann et al. 2004d), there has been some writing on how language, and more importantly ideologies of language, have been used in the construction of "White public space", which is defined by Page and Thomas (1994 in Hill 1998: 682) as "a morally significant set of contexts that are the most important sites of the practices of a racializing hegemony, in which Whites are invisibly normal, and in which racialized populations are visibly marginal". Hill (1998), with reference to Spanish in the United States, argues that the pressure on Spanish speakers to use "cultivated English" in the official sphere, where they interact with strangers and gatekeepers such as court officials, stands in stark contrast to the freedom with which White speakers use 'Mock Spanish', a grammatically incorrect, often mixed code claimed to be a sign of cosmopolitanism or affiliation with the Spanish-speaking population, but frequently used in "jocular" and "pejorative" ways (Hill 1998: 682–683). Furthermore, this 'Mock Spanish' is generally accompanied by "negative racializing representations" of Spanish-speakers (Hill 1998: 683). This exclusion of Spanish from official spheres, coupled with its negative associations, serves to "elevate Whiteness" and excuse "linguistic disorder" (i.e. the use of ungrammatical Spanish and code-mixing) amongst Whites (Hill 1998: 684).[4]

The above is a useful illustration of how space, and consequently individuals' spatial experiences, is socially constructed; and in turn acts to affect individuals' social behaviour (as

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[4] See Meek (2006) for a similar discussion of representations of American Indian English.

evidenced in the anxiety around the use of 'good English' amongst Spanish-speakers). This is an intimation of the diversity of understandings of space within linguistics as a whole.

1.5.4   An introduction to the spatial turn

As mentioned in section 1.1, from as early as the 1970s, the concept of 'space' and its role in the understanding of social patterns has been problematized by philosophers and human geographers. Historians, sociologists and political scientists are said to have picked up on this academic exercise by the 1990s, when a change in the understanding of space became widely accepted (Middell and Naumann 2010: 154). As a precursor to the following chapter, which will give an overview of the literature that has been produced regarding the relationship between language and space within sociolinguistics, it will be useful to provide a thorough explanation of the so-called "spatial turn" in the humanities.

1.5.4.1 The spatial turn: temporal change in the theoretical understanding of space

According to Middell and Naumann (2010: 155), competing understandings of what exactly was involved in the so-called "spatial turn" abound, but are unified by several key arguments and observations. Kümin and Usborne (2013: 307) offer a simple definition that would seem to capture the central aspects of the notion, namely "the move from a "container" image of space toward an acknowledgement of its mutability and social production". These authors remark further that although the advent of debate around notions of space in the humanities is usually dated to around the 1970s (Middell and Naumann 2010: 154), the conflict has its roots in seventeenth-century natural philosophy and the competing spatial interpretations of Newton and Leibniz: whereas the former understood space as "absolute", the latter argued for a "relational" understanding, which viewed space as constituted through "the respective arrangement and kinetic powers of objects and bodies" (Kümin and Usborne 2013: 307).

Despite this early dispute around how space should be conceptualized, the conversation lay largely dormant until relatively late in the twentieth century. "Modern humanities", Kümin and Usborne (2013: 307) state, "centred on human agency… and prioritized the dynamic variable of time (whereas space appeared to be static or given)". Along similar lines, it is stated in one account of the development of the social sciences that, as a consequence of the

compartmentalization and resulting specialization of the social science disciplines in the nineteenth century, geography, because it made broad, general, and non-analytic statements, was viewed as "anachronistic". Furthermore, it is argued in this work that

> [p]robably in consequence, geography remained all through this period a sort of poor relation in terms of numbers and prestige, often serving merely as a kind of minor adjunct to history. As a result, treatment of space and place was relatively neglected in the social sciences… If processes were universal and deterministic, space was theoretically irrelevant. If processes verged on being unique and unrepeatable, space became merely one element (and a minor one) of specificity.

> (Gulbenkian Commission on the Restructuring of the Social Sciences 1996: 26)

Such views predominated until around the late 1960s,[5] when Michel Foucault, credited as an important and initiatory thinker in the spatial turn, highlighted the importance of progressions in the understanding of space in the history of science by pointing out the impact of the Copernican Revolution, as well as Galilei's revelatory discovery of the infinity of the Universe (Hess-Lüttich 2012: 3). It may be argued, however, that advancements in spatial thinking only really came to the forefront with the 1974 publication of Henri Lefebvre's *La production de l'espace*, which was available only in French until the English translation was published in 1991 under the title *The Production of Space* (Lefebvre 1991). Considering that this work has provided the foundation for much of the thinking within social and cultural geography over the last three decades (Unwin 2000: 11), the following sub-section will highlight some of its key theoretical contributions, which are picked up on by other, later spatial thinkers. This overview will, of necessity, be brief, focusing only on those aspects relevant to later chapters in this study.

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[5] Although Unwin (2000: 11) contends that the emergence of a "distinctive humanistitc tradition" within geography in the 1950s can be seen as a forerunner to Foucault's spatial thinking.

1.5.4.2 Lefebvre (1991): *The Production of Space*

Importantly, the penetration of Lefebvre's seminal work into the Anglo-American academic world occurred at a time when the postmodern influence was at its height in social theory, and the "fluidity" of Lefebvre's monograph is said to have lent itself to assimilation into postmodern approaches (Unwin 2000: 12). The central tenet of Lefebvre (1991), if one central tenet can be identified, is that space, as understood and inhabited by humans, is not given, but rather *produced* by social forces. Soja (1989: 79) makes this distinction terminologically, distinguishing between "space", the "contextual given" that is understood as a container for human activity, and "spatiality", which is "the created space of social organization and production". In brief, what both Lefebvre (1991) and Soja (1989) wish to emphasize is that space understood as contextual given is not and cannot be the space inhabited by people, for social actions and relationships *create* spatiality, which, in turn, "socializes and transforms both physical and psychological spaces" (Soja 1989: 129), thereby altering individuals' understanding and perceptions of the world around them. Soja and Lefebvre also recognize that although we produce our own geography, we cannot do so just as we please (Soja 1989: 129), for there are certain societal structures in place that limit our access to and movements within certain spaces. Taking a Marxist perspective, Lefebvre (1991) argues that these structures are the manifestations of capitalism. Capitalism takes "concrete space" (that is, everyday, inhabited spaces) and makes it into "abstract space" – space that is commodified and bureaucratized (Agnew 2011: 18), and within which individuals' behaviour is highly regulated.

The establishment of the distinction between space and spatiality has become a foundational premise of contemporary social and cultural geography (Unwin 2000: 11), and has produced a wealth of diverse work considering the spatiality of human life, ranging from investigations into the spatialities of aging (for an overview of such work, see Schwanen, Hardill and Lucas 2012) to examinations of the constraints placed on citizens' political action by the spatial organization of states (cf. Zhang 2002).

In summation: the recognition of space as something produced has served to destabilize the view of space as "primordial" and objective (Soja 1989: 79), and, consequently, has brought to light new considerations in the social sciences.

1.6   Towards a definition of "space"

It was noted in section 1.1 that a unanimous approach to the use of space-related terminology in the social sciences does not exist (Hess-Lüttich 2012: 3). The previous section lays out one terminological distinction – that between "space" and "spatiality" made by Soja (1989). However, in much of the small amount of writing that exists regarding space from a sociolinguistic perspective, a further distinction, borrowed from the field of human geography, is made within the category of spatiality. This section will lay out three understandings that are encompassed by the term "space". Subsequently, related terms, namely "place" and "landscape", will be defined and distinguished from "space".

David Britain, in his discussion of space and spatial diffusion in sociolinguistics, borrows from human geography in distinguishing three types of space. These three types are as follows: 1) Euclidean space, which refers to "the objective, geometric, socially divorced space of mathematics and physics", and may therefore be equated with the "container" view of space referred to thus far; 2) social space, which refers to "the space shaped by social organisation and human agency"; and 3) perceived space, which refers to how people experience space and how their perceptions both shape and are shaped by their physical environment (Britain 2004: 604).[6] The latter two types may be recognized as kinds of what Soja (1989) terms spatiality, for they are clearly *created* spaces, whether they be created by social forces or according to how they are perceived.

Importantly, these three types of space are intertwined and dependent on each other. Britain (2004: 604) points out that whilst geometric space is "appropriated and made social" when it becomes a site of human habitation, this socialization does not strip geometric space of its power, for the "physical friction of distance" plays a role in how people interact with one another. In the same way, human perceptions of what a particular space is and the position that that space occupies in our value system determines how it will be appropriated and used – consider, for example, the differing legislation regarding pollution in industrial and in

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[6] This three-way distinction echoes, to an extent, John Agnew's (in Withers 2009: 629) tripartite distinction between place as location, place as locale and sense of place; despite the of course significant use of "place" instead of "space".

conservation areas. The management of each space is dictated by what people perceive its purpose to be.

For the purposes of this study, it is important to point out that no single "working definition" of space can be adopted for use throughout. What this study seeks to do is to identify the conceptions of space operational within different sociolinguistic research paradigms, and so cannot identify prior to investigation those understandings that will arise. However, it is equally important to be rigorous in one's use of terminology, and so "space" must be distinguished from terms similar in meaning that are often used interchangeably with "space".

To begin with, the concept of 'space' should be distinguished from that of 'place', which is typically understood within other social science fields such as anthropology as inextricably linked with a "specific (subjective) vantage point" (Hirsch 1995: 8). Thus, it is clear that were 'place' rather than 'space' under discussion, reference to 'Euclidean space' as defined above in Britain (2004) would be excluded. Consequently, any research employing the "container" understanding of space would need to be omitted from the present study. This would presumably serve to discard a significant portion of early sociolinguistic work such as that conducted within dialectology, which would certainly detract from the rich overview that is aimed to be presented here. Problems such as this one that arise from the use of a conception of 'place' rather than 'space' in an overview of sociolinguistic research will be picked up on in section 2.3.

Both 'space' and 'place' can also be distinguished from the concept of 'landscape', which typically refers to the interaction between the "foreground and background of social life". There is a temporal aspect to this definition – "foreground" is said to refer to "the here and now", the movement and change wrought by individuals in their environment; whereas "background" corresponds to the static, pre-existent backdrop of space (Hirsch 1995: 4). "Landscape" thus refers more to a relationship than anything else; it is a dialectal interaction between place and space. Cosgrove (1984 in Hirsch 1995: 9) also contends that 'landscape' possesses an aspect of meaning not amenable to scientific explanation, which serves to imbue the concept with a phenomenological hue.

The research presented here will, it is likely, encounter all three kinds of spatial understanding listed explained by Britain (2004). However, it is expected that Euclidean space on the one

hand and social and perceived space on the other will, for a large extent, be present in temporally discrete research moments. Additionally, it is expected that Euclidean space will be in use prior to the two other understandings.

1.7   Methodology

The present study is entirely literature-based. The method it employs is a form of conceptual analysis, focusing on the concept of 'space', which is performed by consulting a number of studies conducted within variationist sociolinguistics which follow chronologically upon one another. Each group of studies that is consulted is selected in order to give a sufficient indication of the broad trends within a particular sociolinguistic research paradigm.

Each substantive chapter, following chapter two, discusses a particular research paradigm within variationist sociolinguistics, consults a number of studies conducted within that paradigm, and analyzes these studies in order to extract the understanding of space that they employ. The spatial understandings that are extrapolated from the works consulted are related to the three kinds of space listed by Britain (2004). The concepts of space that are found are also considered in light of the initial neglect of space in the social sciences, which was followed by a renewed interest in space after the 1970s. As a result of the method of analyzing works that follow chronologically, it will become evident whether any significant changes in the understanding of place have occurred within variationist sociolinguistics

Subsequently, it is determined how the understanding of space that is evident influenced the research design of the variationist-sociolinguistic studies within the research paradigm in question, and, furthermore, how that understanding limited the sociolinguistic insight that could be delivered by the results of the studies conducted within that paradigm.

Finally, part of the last section of the thesis is given over to speculation, as it poses possible scenarios in relation to the space and the investigation of variationist sociolinguistics in future.

1.8   Structure of the thesis

The thesis is divided into seven chapters. Chapter one, the introduction, presents the background to the study, sets out the objectives which the thesis aims to achieve, clarifies certain key theoretical matters (such as the background to the spatial turn, and approaches to language and space in other areas of linguistics), and explains the methodology the thesis will employ. The contents of the remaining seven chapters are briefly set out in the paragraphs that follow.

Chapter two, a slightly unconventional literature review, presents an overview of two recent chapters in sociolinguistic handbooks that explore the variables of space and place in sociolinguistics. These two chapters are Britain's (2004) 'Space and Spatial Diffusion' and Johnstone's (2011) 'Language and Space'. It is acknowledged that the discussions in each of these chapters are similar to the matters covered in this study. For this reason, a brief overview is given of each chapter; subsequently, criticisms of both approaches are made, and the gap in the study of space in relation to sociolinguistics that the present study hopes to fill is made clear.

Chapter three focuses on early sociolinguistic investigation in the form of linguistic geography. After giving a description of the field, its background and aims and its close academic relations, the chapter discusses one method of data presentation within this field that is of interest in relation to spatial conceptions, namely the linguistic atlas. The dominant spatial conception employed within dialectology is then identified, and criticized in light of the difficulties of establishing concrete boundaries that divide the use of one language from another.

Chapter four takes as its topic space in quantitative sociolinguistics. An overview of the background of this approach is given that relates this field to dialectology. This is followed by an exploration of the urban focus within this paradigm that brings with it a greater emphasis on the social significance of linguistic forms. Subsequently, two quantitative approaches to the study of language spread, namely Trudgill (1974a) and Horvath and Horvath (2002), are examined. The dominant spatial conception within quantitative sociolinguistics is then explored and criticized.

Chapter five explores variationist-sociolinguistic work that employs the approach of social network analysis. Again, this approach is related to the preceding studies that were influential in its deployment in sociolinguistic investigation. An overview of the key concepts of social network theory is given, as well as an introduction to other instances of its use in the social sciences. Three examples of the use of social network analysis in variationist sociolinguistics are discussed, namely Milroy (1987), Edwards (1992) and Evans (2004). The chapter's attention is then briefly turned towards virtual networks, where Paolillo (2001) serves as an illustration of this research area. Subsequently, the dominant spatial conception within sociolinguistic social network analysis is identified and criticized.

Chapter six situates itself both within the current era of globalization, and within the context of the relatively recent so-called "mobilities turn" in the social sciences. The chapter uses Blommaert (2009) as an illustration of the consequences of globalization and increased mobility for sociolinguistics. Subsequently, a discussion of the debate regarding how best to manage multilingual spaces is presented, where the perspectives of 'linguistic human rights' and 'linguistic citizenship' are played off against one another. Then, an example of a study, namely Stroud and Jegels (2014). that focuses on mobility and employs the technique of 'narrated walking' is given. Finally, the dominant spatial conception at work in these approaches is analyzed and criticized.

Finally, chapter seven concludes with a presentation and discussion of the results obtained, some speculation as to the implications and significance of these results, an examination of the limitations and weaknesses of the study, and suggestions for further research.

CHAPTER TWO

LANGUAGE AND SPACE IN VARIATIONIST SOCIOLINGUISTICS: ESTABLISHING THE GAP

2.1 Introduction

The previous chapter (see section 1.5.3) gave an overview of work focusing on the variable of space conducted in other areas of linguistics, namely psycholinguistics, historical linguistics and linguistic anthropology. However, as explained in section 1.5.2, the present study is interested in how the variable of space has been conceptualized within variationist sociolinguistics, or that area of sociolinguistics that considers the social evaluation of linguistic forms. Taking into account that, until recently, the academic study of language and space has been negligible in volume and significance, it is not possible to present a conventional and comprehensive literature review in this chapter. What this chapter does instead is extract, for further exploration, two key arguments that arise in the little research on space and variationist sociolinguistics that exists. The first argument to be considered puts forward that there were discrete stages in sociolinguists' understanding of the concept of 'space' that overlapped closely with the development of the concept in human geography. The second argument proposes that certain sociolinguistic concepts that are not explicitly linked to spatial understandings, such as the social network, are in fact deeply spatial. In analyzing both of these arguments in the form in which they have been stated, this chapter aims firstly to give an indication of the kind of thinking that exists in connection with the topic of space and sociolinguistics, and secondly, to establish that there are gaps in the understanding of this topic that this thesis can fill.

It has been remarked already that not much research has been produced regarding the matter of space in sociolinguistics; for this reason, the work of two authors, namely David Britain and Barbara Johnstone, will be relied upon fairly heavily in this chapter. The discussion will, however, be bolstered with reference to works by other authors where possible.

2.2 Discrete stages in the understanding of space within sociolinguistics

Both Britain (2004) and Johnstone (2011) posit that there have been identifiable stages, each dominated by a particular conception of space, within the history of sociolinguistics. Furthermore, it is also argued that these stages are closely related to similar moments in the field of human geography which, Johnstone (2011: 204) claims, has "ridden the same political and intellectual currents" as sociolinguistics over the past two hundred years.

Britain (2004) and Johnstone (2011) identify differing stages in the development of spatial thinking within sociolinguistics. Britain (2004) transposes human geographer Doreen Massey's identified periods in the development of the spatial in the social sciences onto sociolinguistic research. This results in the identification of an initial focus on the region as a specific, unique and distinct unit before the 1960s. During the 1960s, as a result of the quantitative revolution in the social sciences, interest shifted to "the regular, the general and the neutral" (Britain 2004: 607). The next development identified is dated to the mid-1970s, where sociolinguistics, and particularly the sub-field of dialectology, was seen to borrow heavily from human geography and its posited laws of spatial causes and motivations. Trudgill's (1974a) application of the Swedish human geographer Torsten Hägerstrand's diffusion model to the study of the spread of linguistic innovations serves as an illustration of trends within this period (see section 4.5.1 for extensive discussion of this study). Finally, Britain (2004: 610–611) makes passing reference to human geography's interest in the 1980s in spatiality "as a contingent effect" that shapes the particular context of an area, without being an all-determining factor or merely a social construct (Britain does not, however, link this position in human geography to any particular investigative trends in sociolinguistics).

Johnstone's (2011) identified stages differ from Britain's, firstly because she considers a broader sample of sociolinguistic work than that included in Britain's chapter, which focuses, albeit not always explicitly, on studies of language variation. Again, the early focus on the region as the spatial level at which language was studied is highlighted. However, Johnstone (2011: 205) adds here that before World War I, political boundaries were taken to be indicative of language boundaries, as language was thought to be constitutive of the nation-state. After World War II, the location of sociolinguistic interest shifts from the rural to the urban, and the challenge of finding "underlying order" (Johnstone 2011: 208) makes the use of quantitative

methods a popular choice. The 1970s and beyond then saw rising distrust in the power of empiricist models to generate explanation in the social sciences. This resulted in two branches of approach, which were not both incorporated into sociolinguistics to the same degree: firstly, there was a trend towards methods with a phenomenological aspect to them, that were thought to be able to incorporate the human perspective on place; secondly, there was a proliferation of (neo-)Marxist views of the spatial organization of society that emphasized "struggle", "change" and "the competing pulls of social structure and human agency" as an attempt to address the "static" and "consensual" nature of models that, for example, simply assigned individuals to particular class positions, thereby ignoring their agency (Johnstone 2011: 209). Whilst the Marxist perspective is not overly relevant to studies of language variation (this is of course not to say that class and wealth do not feature in sociolinguistic investigation – these are certainly variables in Milroy's (1987) study of Belfast), the phenomenological approach most certainly is – examples provided are the capacity of discourse to assign meaning to places, and, furthermore, to languages in relation to places (Johnstone (2011: 216) gives the example of how English is portrayed as a global and universally useful language on television travel programmes). Another example of how language is studied as it is experienced in a particular space/place is the field of linguistic landscapes.

2.2.1   Filling in the gaps: considering virtual space and 'space as flow' in sociolinguistics

It is acknowledged that Britain (2004) and Johnstone (2011) have highlighted some important moments in the development of spatial understanding in sociolinguistics. However, there are also some significant areas of sociolinguistic investigation that are missing from the enumeration above. One surprising oversight is the study of 'virtual space' in sociolinguistics – the Internet has made it possible for geographically-dispersed people to connect and so to create shared online cultural spaces (cf. Androutsopoulos' (2006) study of websites created for diasporic groups in Germany). Online language use, furthermore, is a rich source of information to investigate the relationship between language and identity; in connection to this field, it is also a source of data regarding the ways in which people use their speech to indicate where they are from (section 5.8 presents an introduction to the study of virtual social networks in sociolinguistics).

21

Another sector of sociolinguistic research that is omitted from the two chapters covered in section 2.2 includes the recent interest in language and globalization. Globalization, it is argued, has resulted in the widely-held notion that the world has undergone some "shrinkage" (Coupland 2010: 4). Consequently, a change in our understanding of space is necessitated – as Coupland (2010: 7) remarks, "contemporary information and communication structures are reconstituting the world as *networks of flow*" (my emphasis). Thus, sociolinguistic studies that situate themselves within the investigation of language and globalization place emphasis on the mobility of speakers, and how entering into different spaces changes the value and possible uses of the languages the speaker has at her disposal (Blommaert 2010: xii) Chapter six presents an exploration of sociolinguistic studies under the recent period of globalization).

2.3 Making the case for the importance of space in sociolinguistic research

Auer and Schmidt (2010: ix) are quoted in section 1.1, stating that space is the greatest determiner of variation in human language. The authors continue by saying that one of the key problems in research into language and space that remains unsolved is "how to obtain data on language use and language competence that are both reliable and comparable (across space)" (2010: ix). Here, one motivation for the importance of space in sociolinguistic research is made clear: space is a complicating variable that compromises the generalizability of sociolinguistic theories, and it will continue to do so unless a thorough understanding of the role it plays in shaping the "social and contextual dimensions" that in turn shape variation and diversity in language is acquired (Auer and Schmidt 2010: ix). The remainder of this section lays out other motivations that have been offered for the study of sociolinguistics and space.

Britain (2004: 612) argues that it is the "geographies" of social life that create such sociolinguistic units of study as the speech community and the community of practice (CofP), which are often used in accounts of why variation is structured in a specific way. He refers in particular to the sociologist Anthony Giddens' concept of 'routinization' to make his point. 'Routinization' refers to the "habitual taken-for-granted character of the vast bulk of activities of day-to-day social life" (Giddens 1984 in Britain 2004: 612). Routines contribute to the creation of social structures, and, furthermore, to the creation of norms of behaviour that are monitored and enforced. Thus, those individuals who, through a process of routinization (going to the same place, to partake in the same activities, week after week), come to form a CofP,

may eventually have aspects of their language use shaped and monitored by this routine interaction. Britain (2004: 616) refers again to the role of routinization when he discusses contact and migration as "catalysts of change". Here, it is crucial that when individuals find themselves in new communities, they seek to "reroutinize" their lives. This leads to the formation of altered and diverse social clusters, which has a corresponding effect on the nature of interaction within those clusters.

Space, therefore, is seen to be a fundamental determiner of how language variation is shaped, both from a geographical and a social perspective. This matter will be further explored in the course of the study presented here; for now, it should be sufficient to point out that space is not a negligible aspect of sociolinguistic research.

2.4 A pervasive issue: conflating 'place' and 'space'

Due to the partial and fragmented focus of much writing on language and space, it is often found that spatial terminology is not used in a rigorous or systematic manner. This is not to unduly criticize a relative new research area, however. The lack of a "system of space-related terminology" has already been pointed out by Hess-Lüttich (2012: 3) in section 1.1 above; and Britain (2004: 603) too argues that space has been "untheorized", not only in sociolinguistics, but even in human geography, where although it is a most central concept to their discipline, they have struggled to conceptualize space,. This section will highlight some of the difficulties that arise when space and place are conflated in discussions of language and space. It is of course a determination of the present study to keep conceptual distinctions as clear as possible.

Johnstone (2011) declares that her chapter takes as its focus 'Language and Place' and, furthermore, that it will refer to dominant conceptions of place in geography as well as in sociolinguistics; in turn showing how these disciplines' approaches to place have developed along parallel tracks over time. However, she uses 'place' in such a way that it is not always clearly distinguished from either 'Euclidean space', 'social space' or 'perceived space' as distinguished in Britain (2004) (see section 1.6). For this reason, Johnstone's discussion is somewhat muddled; as some conceptions of place that she refers to would not be denoted by the term "place" in geography or other areas in the social sciences, but rather by another label,

23

and so the parallels that she attempts to draw are sometimes drawn between non-identical concepts.

To clarify: it has been made clear in section 1.6 above that social space and perceived space are necessarily bound up with human involvement, for without the individual, there would be no one to experience the lived experience, and without societies, there would be no social relations to shape the arenas for social interaction. They are therefore, as with the understanding of place put forward in anthropology, linked with a "specific (subjective) vantage point" (1995: 8). Euclidean space, on the other hand, understands the physical environment as "divorced as much as possible from a subject-position" (1995: 8). What is important here is that Euclidean *space* has long been distinguished from (and indeed is temporally prior to) subjective understandings of *place* in the social sciences. Although sociolinguistics itself may not have explicitly made that distinction, to use the term "place" as an umbrella term that covers Euclidean space is not reflective of the terminological and conceptual practices in geography that Johnstone claims to refer to. It is thus perhaps a better approach to make the tripartite distinction from the beginning, and show how sociolinguistics, originally making use of the concept of Euclidean space, caught up with the theoretical distinctions made elsewhere in the social sciences over time.

2.5 Conclusion

It is hoped that what has been set out in this chapter so far will have established two foundational premises: one being that there have been significant changes in the dominant spatial conception employed in sociolinguistics over time, and the other that an understanding of the role space has to play in sociolinguistic investigation is desirable. Furthermore, the preceding sections of this chapter aimed to establish a gap created by previous treatments of the topic of language and space that the present study hopes to fill. Firstly, although it has been argued that space plays a significant role in shaping not only the circumstances under which linguistic variation occurs, but also the approach that is followed in investigating linguistic variation, at present a sustained illustration of how exactly spatial understandings translate into specific theoretical frameworks and research designs is lacking. Furthermore, a coherent account, making consistent and systematic use of spatial terminology, of the chronological development of spatial thinking in sociolinguistics (taking into account both the study of

language in 'virtual space' and language in the present stage of globalization) does not yet exist. The present study will address these gaps.

CHAPTER THREE

SPACE IN EARLY SOCIOLINGUISTIC INVESTIGATION: LINGUISTIC GEOGRAPHY

3.1 Introduction

Koerner (1991: 58–59) traces the development of what is now termed "sociolinguistics" along three main lines – one is dialectology, one is the reaction against the view that "linguistics ought to be thought of as a natural science", and the third is the growing interest, from the nineteenth century onwards, in bi- and multilingualism. Dialectology, defined as "systematic study… focused on the description and documentation of regional… dialects" (Swann et al. 2004a), may be considered (see the following section) to be a precursor to, or foundation of, linguistic geography. It is also, out of the three lines of development mentioned above, the one that falls within the variationist tradition in sociolinguistics. Thus, whilst the second two of these lines could certainly form the basis of an interesting investigation into language and space (for example, the approach followed within (socio)linguistics could be seen as becoming more distant from that followed in the natural sciences; and bi- and multilingualism could be studied from the perspective of multiple languages encountering one another in mental and social space), this chapter, in keeping with the thesis' focus on the area of variationist sociolinguistics, will take as its focus classical approaches within both dialectology and linguistic geography.

Trudgill (1983: 31–32), in agreement with Koerner (1991), asserts the importance of linguistic geography to, at the time of his writing, the "relatively new" discipline of sociolinguistics (here, it may be assumed that Trudgill takes Labov's approach to sociolinguistics, developed in the 1960s, to represent the birth of the discipline). In support of this assertion, he cites his own reliance on the 1930s dialectological work of Guy S. Lowman on the Norwich area for his study of the same area (cf. Trudgill (1974b)). In addition, he highlights Labov's use of the *Linguistic Atlas of New England* (cf. Kurath 1972) as a record of older forms of language use for comparison in his Martha's Vineyard (1963) and New York City (2006) studies. These two instances make it clear that linguistic geography has been and continues to be a valuable repository of data for those sociolinguists interested in language variation and change.

The layout of this chapter will be as follows: firstly, in order to clearly delineate its area of interest, the closely-related and sometimes overlapping fields of geolinguistics, dialect and linguistic geography and dialectology will be distinguished, and it will be made clear why this chapter focuses on linguistic geography. Brief reference will then be made to geographic determinism, a view (now fallen from academic grace) that accords particular power to space, and its influence on early linguistic geography will be pointed out. Subsequently, the central aims of linguistic geography will be identified, as well as the methodologies most commonly employed within the field to achieve these aims. The method of presenting language-geographical data in language maps that form linguistic atlases when put together will also be considered. The following section will extrapolate from the preceding discussion in order to identify the dominant conception of space that is active and favoured within linguistic geography. Finally, the shortcomings of research produced within this field will be considered: here, particular attention will be paid to how the dominant conception of space within the language-geographic paradigm contributed to these shortcomings.

Before beginning, it is important to note that the language-geographical works that are referenced in this chapter are all taken from the early, developmental stages of the discipline. This is because the research presented here is interested in linguistic geography as it relates to sociolinguistics; that is, as Koerner (1991: 58) argues, as a foundation of what we now call "sociolinguistics". At least from a terminological perspective, the fields of linguistic geography and sociolinguistics have long since diverged, and thus recent language-geographical research will not be considered.

3.2 Distinguishing geolinguistics, dialect geography, linguistic geography and dialectology

Dialect geography, linguistic geography, dialectology and geolinguistics are four sub-disciplines within linguistics that have similar interests and, furthermore, employ similar methodologies in conducting their investigations. In the pursuit of theoretical clarity, this section will, after identifying the commonalities in their areas of interest, delineate each field. The aim of this section is to legitimate the selection of linguistic geography as the focus of this chapter.

27

Crystal (2003) broadly defines "geolinguistics" as the branch of linguistics that "studies the geographical distribution of languages throughout the world, with reference to their political, economic and cultural status". In accordance with Trudgill (1983: 1), he also acknowledges that the term can, more narrowly, denote a linguistic approach which "combines the insights of dialect geography, urban dialectology and human geography in a sociolinguistically informed dialectology". What is important, then, in relation to geolinguistics, is that it is concerned with "the relationship between languages and their physical and human contexts" (Williams 1988: 2). Geolinguistics is therefore not simply an exercise in language mapping; it seeks extra-linguistic explanations as to why languages are distributed in particular ways.

In contrast, dialect geography, as Trudgill (1983: 32) notes, ignores factors explaining the distribution of languages, focusing solely on the "geographical distribution of the distinctive features of a dialect or dialects" (Macquarie University 2005). Linguistic geography and dialect geography orient themselves towards similar goals, as linguistic geography also does not take an interest in the reasons behind particular linguistic distributions. McDavid and O'Cain (1973: 137) define linguistic geography as "a branch of historical linguistics based on samples of the stable and traditional, and necessarily somewhat biased in the selection of small communities, older informants and traditional cultures". Linguistic geography would seem to encompass both the mapping of dialects and languages; and although the above definition appears to argue that linguistic geography has a greater historical interest than dialect geography, the relevant literature concerning the time period to be discussed in this chapter does not distinguish between the two (likely because all of this work was indeed conducted within "small communities" and focused on "traditional cultures").

Both linguistic and dialect geography are closely related but not identical to dialectology, which, as defined in the previous section, describes and documents regional dialects. Hagen (1987: 408–409) additionally emphasizes that dialectology refers to the "the tradition of studying the dialect of one place", or to "the comparative study of several language varieties or language variants in a single place". The key difference here would seem to be that linguistic and dialect geography aim to determine the extent to which a particular dialect extends in space, whereas dialectology takes a single, already-defined space as its locus of investigation. However, the focus on "communities" and "cultures" present in linguistic geography is also found in dialectology – indeed, one cannot really be said to be studying the 'dialect of one place', but only the dialect of one community that occupies one place. Schrambke (2010: 87)

28

notes in addition that the beginnings of linguistic geography and dialectology are very closely intertwined.

The above makes the distinctions between these four fields clear. Importantly, the two geographies simply locate linguistic or dialectal features or entities across an undefined area of space, whereas geolinguistics seeks to relate the distribution of particular languages or linguistic phenomena to the broader social context in which they are found. Dialectology, on the other hand, works with a pre-defined area, such as a country or region; assumes that language differs between these pre-defined areas, and considers the linguistic features found within the chosen space. To make the working definitions that will be adopted in this chapter clear: "linguistic geography" will be understood to encompass dialect geography as the practice of mapping both dialects and languages in space, and dialectology will be understood to be a kind of linguistic geography focused on the dialect of one area.

Geolinguistics, to hark back to Trudgill (1983), would probably be described as "wholly sociological", given that it looks at the status of languages as the outcome of political, social and economic factors, and thus will not be considered in the present study. This chapter's focus will be instead on linguistic geography, understood to encompass dialect geography and dialectology, which relies quite heavily on the variable of space, as it aims to map languages across territories.

3.3 Geographic determinism and its relation to linguistic geography

Geographic determinism (also referred to as "climatic determinism" or "environmental determinism"), a theory that became popular in the late nineteenth and early twentieth centuries, proposes a causative link between the physical environment and its climatic conditions and the physical and cultural characteristics of the people inhabiting that environment. An example of such thinking, reflective of the racism prevalent at the time, related the humid climate in the tropics to laziness and impulsiveness amongst tropical peoples; whereas the cooler temperatures in northern Europe were thought to make northern Europeans "energetic, provident, serious [and] thoughtful rather than emotional" (Frenkel 1992: 144).

Geographic determinism was particularly influential in Germany, where it built on, firstly, an intellectual tradition "reaching as far back as Immanuel Kant" and his lectures relating racial diversity to differences in physical geography in 1765, and secondly, geopolitics, which attributed many social and biological developments in civilizations to the influence of geographic space (Murphy 1999: 124). This preoccupation with the determining powers of space was manifested in the German concept of *Raum*, an understanding of space that views it as a "dynamic force" that "decisively shaped every facet of German society" (Murphy 1999: 122). The discourse of *Raum* was notably deeply hostile to the urban areas, as they were seen to be a threat to the "healthy cultural life" of the rural areas and a centre of contagious diseases (Murphy 1999: 125–126).

The concept of *Raum* still enjoyed immense popularity in Germany in the early 1930s (Murphy 1999: 121), long after most of the research to be discussed in this chapter was conducted. Thus, the idea of a particularly German *Raum* that needed to be protected from non-German influence, and the idea of purity that is found in the rural areas, of course relates strongly to the dialectological impulse to record and preserve the dialects of rural Germany. However, it seems safe to say that the influence of geographic determinism on the methods used to carry out language-geographical investigation was limited to the reinforcement of the already-strong impulse to conduct this investigation at the level of the region – that is to say, further research was not carried out into how exactly the geography of one region might have resulted directly in the manifestation of particular linguistic features.

3.4 Background to and aims of linguistic geography

Schrambke (2010: 87) puts forward that linguistic geography, initiated by Georg Wenker and Hermann Fischer's continuation of the work of Adelbert von Keller, is closely related to the beginnings of neogrammarian dialectology and the emergence of scholarly dialectology. If a thorough discussion of the aims of linguistic geography is to be presented, it will be of use to present a brief overview of the neogrammarian tradition, as well as of the beginnings of dialectology, so as to give a clear impression of the scholarly climate within (variationist) linguistics at the time.

3.4.1   The neogrammarian tradition

The term "neogrammarian" is a misleadingly translated designation (from the German *Junggrammatiker*, 'young grammarian') that refers to a group of philologists and linguists based in Leipzig in the 1870s (Murray 2010: 70). This small group of individuals[7] reacted against the "scholarly neglect of the contemporary spoken dialects" that arose within linguistics as a result of the dominant historical focus. Indeed, at that time, the derision of contemporary speech was rationalized by the argument that pre-historic languages were subjects of "development and growth", whereas after this period language was said to have degenerated in both sound and form (Murray 2010: 70–72). The neogrammarians argued that, with the majority of research interest devoted to the "dead letter", there was too little investigation of the speaker and too much investigation of abstract systems of language (Murray 2010: 72). Thus, these linguists prioritized the contemporary spoken dialects as their object of study.

Furthermore, the neogrammarians discarded "broad overviews of dialect regions in favour of detailed descriptions… of individual dialects" (Murray 2010: 79). In keeping with their interest in what was happening in language at the present time, the neogrammarians' primary focus was on sound change, that was thought to occur gradually and universally (Murray 2010: 82). Murray (2010: 74) remarks that this interest (despite the neogrammarians' derision of historical linguistics) was indeed correlated to the overriding historical focus prevalent in linguistics at the time, as the intense research in the late nineteenth century into the development of the Indo-European languages from a common source produced widespread interest in the factors responsible for dialect and language split. The neogrammarians may thus be said to have initiated a shift in focus within linguistics to contemporary speech; thus giving impetus to the language-geographical investigation of the distribution of present-day languages. Additionally, because the neogrammarians took contemporary dialects as their object of study, they may also be referred to as "dialectologists"; their work will therefore be further referred to in this section.

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[7] The original group included Karl Brugmann, Berthold Delbrück, August Leskien and Hermann Osthoff; later, Wilhelm Braune, Hermann Paul and Eduard Sievers, among others, were also associated with the tradition (Murray 2010: 70).

3.4.2   The beginnings of traditional dialect geography and linguistic geography

The first scholarly dialectologist is generally acknowledged to be Johann Andreas Schmeller,[8] who, during the period spanning 1827-1837, published a dictionary of the Bavarian dialects (Bayerische Landesbibliothek Online 2012). However, Schrambke (2010: 87) argues that because Schmeller's work was not "followed up until much later", the "pioneering work" of Adelbert von Keller, continued by his students Georg Wenker and Hermann Fischer, should be considered the initiator of linguistic geography.

As put forth above, dialect geography can be considered to be a subsection of linguistic geography. It is therefore not surprising that it is von Keller's work in dialect geography that is considered to have given prominence to linguistic geography as a field of study. This research was begun somewhere near the middle of the nineteenth century, and focused on the empirical investigation of the Swabian dialects[9] (Schrambke 2010: 88). Von Keller's eventual goal was to draft a language map of the region; his notes compiled for the project would represent "the first collection of primary material from a closed dialect region for the analysis of phonological, morphological and lexical issues" (Schrambke 2010: 88).

Von Keller's empirical dialectological method inspired his student Georg Wenker, who initially sought to record and classify the dialects of the Rhineland, but ended up investigating "the entire German-speaking territory of Central Europe" (Schrambke 2010: 88). He compiled the *Sprachatlas des Deutschen Reichs* with the information he gathered; and although the dialect maps contained within this atlas were never conventionally published, Wenker's colleague Ferdinand Wrede managed to publish part of his collection "with greatly simplified maps" under the title of *Deutscher Sprachatlas* (Schrambke 2010: 89).

Hermann Fischer employed similar methods to those of Wenker. Using material passed on to him by von Keller that the latter had collected in preparation for the publication of a Swabian

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[8] Schmeller, notably, is said to have desribed himself as a *Sprachsoziologe* or 'speech sociologist' (Wiesinger 1979 in Hagen 1987: 402).

[9] Swabia is a "historic region of southwestern Germany, including what is now the southern portion of Baden-Württemberg *Land* (state) and the southwestern part of Bavaria *Land* in Germany, as well as eastern Switzerland and Alsace" (Encyclopaedia Britannica Inc. 2014b).

dictionary, he developed a linguistic atlas of the Swabian dialects in 1895 (Schrambke 2010: 97).

3.4.3   Aims of linguistic geography

The above discussion of the shift in focus initiated by the neogrammarians from the investigation of pre-historic languages to that of contemporary spoken language, is evidence that the neogrammarian investigations and the related fields of linguistic and dialect geography had a synchronic rather than diachronic focus – that is to say, scholars in the field were interested in capturing a current state of a language or dialect, instead of being interested in its origins.

This interest in capturing the current state of a language, or recording the features of dialects, is made especially clear by the fact that a number of dialectological investigations were motivated by the feared imminent extinction of particular language varieties. For example, a research and funding proposal put before the German *Reichkanzler* "justif[ies] the societal need" for the research by arguing that "the German dialects were on the verge of extinction under the influence of the standard language" (Wegener 1976 in Murray 2010: 78). Similarly, the Dutch Royal Geographic Society organised a dialect survey of the Netherlands in 1876 because of "the threat to rural dialects by other varieties" (Hagen 1987: 403).

This is of course a conservative (and perhaps somewhat alarmist) motivation for the study of the dialects. However, as remarked upon above, another form of motivation was the interest in language change and particularly sound change (Murray 2010: 82). The following section will show how these disparate interests manifested themselves in two different approaches to the collection of dialect data, namely the direct and indirect approach.

3.5 Methodology employed in linguistic geography

Putschke (1969 in Murray 2010: 71) notes that one of the earliest contributions made by the neogrammarians was to "attempt to formalise and give methodological rigour to the best [linguistic] practices of the period". This attempt to bring rigour and scientific exactitude to the study of dialects was a reaction to the view that the dialects were "degenerate forms of an

idealised standard language", which, in addition to the dominant scholarly interest in historical linguistics, was an influential reason behind their academic neglect (Murray 2010: 71). The aim to dispel the "negative perception of dialects and their study" (Murray 2010: 78) motivated the neogrammarians' attempt to make their study of dialects as scientific as possible. This (perhaps somewhat ironically) resulted in their "embrac[ing] the methodology of historical linguistics" (Wegener 1976 in Murray 2010: 78). The elevation of the scientific method will be shown in due course to have led to the privileging of direct, empirical methods over indirect methods in dialectological research.

The methodologies most prevalent in dialectological research during this period of the mid-nineteenth to the early-twentieth century were, as alluded to above, direct and indirect data collection methods. The direct method employed fieldworkers, who were ideally native speakers of the dialect in question, to go out into the dialect community and gather data in person from speakers. The indirect method, in contrast, relied primarily on written data, typically gathered by means of surveys and questionnaires. The remainder of this section will provide more detailed explanations of each method by offering examples of relevant research designs.

3.5.1 The direct method of data collection

As noted above (cf. section 3.3.1), the favoured approach of the neogrammarians was to compile "detailed descriptions… of individual dialects" found in "small geographic area[s] considered to be relatively homogeneous" (Murray 2010: 80), rather than "broad overviews of dialect regions". In addition, amongst the neogrammarians there was an overriding focus on phonetics (with morphology being second in importance, followed by syntax and semantics in no particular order). Consequently, the dialectal descriptions were ideally "written by a native speaker of the particular dialect based on self-analysis and fieldwork".

An investigation of the sound system of a dialect of course necessitated the use of the direct method of data collection (i.e. involving fieldwork), whereas morphology, syntax and semantics could be indirectly investigated by means of questionnaires (Murray 2010: 79). At the turn of the twentieth century, one ground-breaking addition was made to the equipment available to the linguistic geographer engaged in direct data collection – the ability to record

sound in the field. The earliest recording of a dialect (in this case, the German dialect of Bavarian) was made in 1901. Travel phonographs were developed rather late (in 1927); the earliest ones, weighing around 45 kilograms, were not suitable for researchers who travelled to their research sites by bicycle (Murray 2010: 81).

The direct method as employed by early dialectologists has been subject to some serious criticism; primarily because the individual grammars produced using this method present a number of problems if they are to be used as foundations for further research of a comparative nature. Murray (2010: 81) notes that the "lack of a standard, non-ambiguous transcription, the absence of systemic, phonological analyses and the tendency to provide theoretically ad-hoc – and sometimes highly idiosyncratic – phonological interpretations" makes studying two such grammars side-by-side extremely difficult. Thus, many manuscripts produced at this time and according to this method can serve as nothing more than singular descriptions.

3.5.2   The indirect method of data collection

Schrambke (2010: 87) notes that "[t]he earliest schools of linguistic geography concentrated exclusively on indirect data collection methods". This, as is to be expected, was criticized by the neogrammarians who aspired to the exactness of the natural sciences. Consequently, the indirect methods of linguistic geography came to be supplemented with fieldwork, although originally only in confined areas (Schrambke 2010: 87).

Georg Wenker, referred to above (cf. section 3.3.2), created the first linguistic map in history (the *Language Map of the Rhine Province North of the Moselle)* based on data collected indirectly. Wenker's project, begun in 1876, made use of a questionnaire, the final version of which contained 40 sentences. Wenker sent this questionnaire to teachers across the Rhine Province, with the request that they translate each sentence into their local dialect. They were to use the normal alphabet; diacritics were provided for those vowels "which could not be represented by the letters of the alphabet". Wenker's sentences were "designed to cover all of phonology and some morphology", with lexical issues playing only a "subordinate role" (Schrambke 2010: 90).

It is noteworthy that Wenker, although he was also primarily interested in phonological and morphological variation, employed an indirect data collection method. The reason for this is, however, simple – his project, which started out on a relatively small scale, eventually expanded to cover "the entire German empire of that time", eventually producing more than 44 000 dialect translations (Schrambke 2010: 89-92). The vastness of the project meant that it could only be conducted employing written data collection methods (Schrambke 2010: 91).

Wenker's method was heavily criticized due to the diversity of its informants; some of the questionnaires were completed by teachers, and some by schoolchildren, leaving the variables of "age, occupation and origin" unconsidered and unaccounted for (Schrambke 2010: 90). Later, the *Deutsche Sprachatlas* Wrede completed based on his work was contrasted by Jules Gilliéron's *Atlas linguistique de la France*. The latter made use of direct methods to collect phonetically precise data, although from admittedly few locations. Each atlas has its own advantages and shortcomings – although the German publication is rich in linguistic and geographic diversity, its use of the indirect method "necessitated subsequent interpretation whenever phonetic details were of interest" (Schrambke 2010: 92). Furthermore, those particularly interested in language change, such as Karl Bohnenberger, argued that the indirect method "obscured the causes of language change", and thus was not useful when conducting investigations of that nature (Schrambke 2010: 100).

3.5.3   Related studies employing similar methodologies

German dialectology, and especially Wenker's approach to dialect geography, is said to have had a significant impact on linguistic research elsewhere, particularly in the northern European countries (Schrambke 2010: 94). A comprehensive overview of the Norwegian dialects, based on data directly collected, was published by Larsen in 1897. Indirect data collection was favoured in similar projects undertaken in the Netherlands and Belgium; in 1935, Wenker's same 40 sentences were sent out across the Netherlands in an effort to chronicle that country's dialects.

Wenker belonged to the so-called 'Marburg School', which is said to have influenced the dialectological research already in progress in Württemberg (Schrambke 2010: 96). Consequently, the research done here was similar to that undertaken by Wenker. Notable

Württemberg researchers include Hermann Fischer, the student of von Keller discussed above who was responsible for the linguistic atlas of the Swabian dialects published in 1895; and Karl Haag and Karl Bohnenberger. Haag in particular made significant contributions to the field of linguistic geography with his introduction of the statistical analysis of sounds (Schrambke 2010: 98). He argued that "[t]he significance with which we credit individual [dialect] boundaries is to be judged in three ways: the number of forms affected by the sound change, the frequency of use of these forms, and the degree to which they have changed". Employing these methods, Haag calculated the relative strength of boundaries for individual dialectal features, identifying "core areas" and "fringe areas" in what he presciently termed every "linguistic landscape" (Schrambke 2010: 99-100).

3.5.3.1 Language-geographic studies including social variables

It would be remiss to fail to mention such a significant study of a dialect area as Louis Gauchat's (1905) investigation of the village of Charmey in east Gruyère. Gauchat is said to have been surprised by the linguistic heterogeneity in an area "where all the conditions favour unity" (Gauchat 1905 in Hagen 1987: 405, my translation). In reaction to this variation, Gauchat organised his study around the variable of age, looking at phonetic variation across three generations (Hagen 1987: 405).

3.5.4   Summary of language-geographic methodologies

What the above studies all have in common, whether they employed direct or indirect data collection methods, is their use of maps to represent their findings. Language maps and linguistic atlases are discussed in the section that follows.

3.6 Representing language-geographical data: the linguistic atlas

The linguistic atlas, whilst not the only manner of representing data gathered through dialectological or linguistic-geographical projects (another option is the "dialect dictionary", a lexicographic description of a particular area (cf. Moulin 2010), is certainly a helpful mode of representation when one seeks to examine the spatial nature of language. This section will give

a brief overview of linguistic cartography. Particular attention will be paid to the difficulties that arise when an attempt is made to present language or dialect distribution visually.

3.6.1   Background to the linguistic atlas

Linguistic maps first began to be produced in the nineteenth century when, as Lameli (2010: 567) notes, the interest in mapping was "part of a more general zeitgeist", as the publishing of thematic (that is, organized around a single subject/phenomenon) maps in geography, which had begun in the eighteenth century, had gathered steam.

Although originally compiled for naval purposes, cartographers realized the potential of the thematic map as an explanatory tool when examining demographic phenomena (Lameli 2010: 569). Language, being also of demographic interest, was soon also mapped, although not originally by a linguist. Instead, the first maps of linguistic variation were compiled by a geographer, Gottfried Hensel; amongst other phenomena, his maps show "the different realisations of the Lord's Prayer in Europe" (Lameli 2010: 569).

There is some dispute as to which work deserves the title of the first "linguistic atlas" – Kirk (2001) takes it to be that compiled by Johann Schmeller in 1821; Lameli (2010: 570), on the other hand, argues that Schmeller's "single map is not… elaborately illustrated, nor is [it] explicitly designated an atlas", and puts forward that Klaproth's (1823)[10] *Sprachatlas*, because of the clear labelling of its purpose, should be given the title. This is despite the fact that the majority of Klaproth's "atlas" consists of "lists of words ordered into tables according to certain language types", with only one map at the end of the volume (Lameli 2010: 570).

Kirk (2001) distinguishes between three kinds of "geographically and demographically distributed info[r]mation" that can be presented in the form of the conventional linguistic atlas, defined as "a collection of thematic maps showing the regional distribution of language" (Lameli 2010: 572),. These are, firstly, languages, which are often presented "in contrast, or in contact, with other languages"; dialects, the mapping of which is often pre-informed by

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[10] Lameli (2010: 570) notes that a French "sound atlas" was also being planned in this year, but was never completed.

expectations about the geographical distribution of borders; and geolects, which look only at "linguistic or spatial variation" without reference to any "externally conditioned geographical expectation or borders".

3.6.2 Shortcomings of the linguistic atlas

No matter which linguistic entity is being mapped, be it language, dialect or geolect, early linguistic maps focused primarily on words and sounds, adopting "an individual, item-centred approach" (Kirk 2001). A secondary hope for such mapping projects, in addition to presenting gathered data in a clear, visual manner, was the identification of "dialect areas… where there would be some correlation between geography and language" (Kirk 2001). This, of course, is somewhat problematic as a goal, as identifying a dialect area must "depend on maps displaying entire systems, together with their internal structure", for single items do not distinguish one dialect from another (Kirk 2001). Many later linguistic atlases recognised this shortcoming, and attempt instead to map structural properties of languages (cf. Dryer and Haspelmath 2013; Barbiers et al. 2005).

In addition, the same questions that are put to the field of traditional dialectology by some (including Trudgill (1983)) can apply also to the linguistic atlas as method of representation – for example, what is the percentage of speakers using the form that has been mapped? How often do they use this form? With whom do they use this form? What are the distributions of age, sex, ethnicity and level of education amongst the speakers? A related point raised by Chambers and Trudgill (1998 in Lameli 2010: 583) is the tendency of investigators in the past to take a monodimensional approach to data collection, "mostly concentrating on the language production of so-called NORMs: "non-mobile, older rural males"".

Both Kirk (2001) and Lameli (2010: 583) note that such monodimensional studies would be unlikely to be conducted today, given these kinds of criticism and the fact that the connection between social variables and variation in language has (thanks mainly to the advent of sociolinguistics) become a relevant topic of study, leading to the dominance of a "pluridimensional" approach to data collection. However, the points of critique mentioned above must still play a role in our interpretation of these early exemplars of linguistic maps.

3.7 The dominant spatial conception within the language-geographic paradigm

Johnstone (2011: 204) notes that in the nineteenth century, the spatial construct most closely related to the understanding of language was that of the nation-state. A shared language was thought to be a bond that united a nation; an idea that was supported by confrontations with the "mutually incomprehensible varieties and languages" of foreign nations. The relationship between dialectology and the preservation of a particular national culture has been highlighted with reference to early dialectologists' arguments for the importance of recording the German dialects in the face of their extinction by the standard language, where the dialects were seen "as a cultural legacy comparable to the marble pillars of Italy and the statues of ancient Greece" (Murray 2010: 78). This importance of language in uniting a people is also manifest in the German concept of *Raum* discussed above (cf. section 3.3).

It is noteworthy here that the conceptions of space employed were not seen to be constructs – that is to say, their reality or objective, external existence was not questioned. Thus, the state was not recognized as "a socially produced space actively engaged in the reproduction of a particular social spatialization" (Soja 1989: 35). Furthermore, space and place were thought of in "objective" and "physical" terms (Johnstone 2011: 205). This is despite the fact that, with specific reference to German thinking at the time, *Raum* was seen to be an active force that shaped human cultural behaviour in particular ways. It would seem that 'shaping' is indeed the most apt verb to use in this case, as the environment's supposed influence on culture seems little different from the influence that a bottle has on the liquid within it – the liquid is certainly forced into a particular form by the physical boundaries of the receptacle, but the influence of the bottle ends there. Thus, space at this point is still understood as little more than an "environmental container of human life" (Soja 1989: 79); the social operating autonomously against the backdrop of the spatial (Soja 1989: 35).

Of course, whilst language as a "pillar of nationalism" and "a key element of the political philosophy that justified the modern nation-state" (Johnstone 2011: 204) was certainly an important understanding at the time, the above discussion of dialectology also makes it clear that not only the scale of the nation-state was important – the region as part of the nation-state also garnered its fair share of attention. Zelinsky (1992 in Kretzschmar 2011: 186-187) argues that regions are "culture areas", which are defined as "naively perceived segment[s] of the

time-space continuum distinguished from others on the basis of genuine differences in culture systems". Thus, Kretzschmar (2011: 187) notes, "a region is not merely some arbitrary tract of geography, but instead a location in time and space in which people behave in some particular way, and in which we may find physical evidence related to that behaviour". To refer again to early German dialectology – prior to the collection of their data, there had often been an expectation amongst researchers that the dialect boundaries they found would coincide with the territorial boundaries of the historical German tribes, although these expectations were sometimes thwarted when they began to piece together their results (Schrambke 2010: 97).

Karl Haag, however, claims to have made the "happy discovery that there was a surprisingly extensive agreement" between the dialect boundaries he found in a "closed area of almost 60 square miles" and the old German political boundaries. Haag even argued that former political boundaries persist in language for up to 300 years and, furthermore, that "geographical barriers are less relevant for the establishment of [dialect] boundaries than political ones" (1900 in Schrambke 2010: 99). This kind of reasoning is an indication that large sectors of traditional dialectology employed a conception of region that coincides with Zelinsky's concept of the 'traditional region', which is a culture area that is "relatively self-contained, endogamous, stable, and of long duration" (1992 in Kretzschmar 2011: 188).

In conclusion, although the above makes it clear that the dominant understanding of space within early dialectological work is of a "void inside of which we… place individuals and things" (Soja 1989: 17), it is not possible to ignore the fact that, as in the case of *Raum*, space is still seen to be a variable that affects language and language change. As Johnstone (2011: 205) notes, "physical facts about where speakers are located or where they are from play a dominant role in the processes dialectologists… are interested in". What is important to remember, however, is that space itself is not seen to be a "shaping force… in social life" (Soja 1989: 7), but merely, to paraphrase Zelinsky (1992 in Kretzschmar 2011: 187-188), a relatively self-contained area where people behave in particular linguistic ways. Thus, the spatial conception most prevalent in linguistic geography coincides with what Britain (2004) terms Euclidean space – an abstract arena within which human narratives are enacted.

3.8 Difficulties associated with and limitations resulting from the dominant spatial conception in linguistic geography

This section highlights problems that arise when research is conducted at the scale of the region, when the 'region' is understood as a 'traditional region', as defined by Zelinsky (1992 in Kretzschmar 2011: 188). It is of course understood that many of the points of critique that follow are based on linguistic research conducted long after the language-geographic research discussed in this chapter; the aim here is thus merely to argue why such a conception of space is rarely useful in light of these criticisms, rather than to discount this earlier research entirely.

3.8.1   The impossibility of establishing concrete dialect boundaries

Wenker, when conducting the research that would eventually make up the *Deutscher Sprachatlas*, hypothesized that "clear dialect boundaries" would be found (Wenker 1886 in Schrambke 2010: 91). He was disappointed when examining the materials that had been gathered; finding even in the very first maps compiled that the "diversity of isoglosses"[11] ruled out the possibility of establishing distinct geographical divisions between dialects (Schrambke 2010: 91). It is notable that, being confronted with these results, Wenker remarked that the "multiplicity" of isoglosses must be "linked to history, the divisions, displacements, migrations, settlements and intermingling of the German tribes" (1895 in Schrambke 2010: 91). In doing so, he clearly recognizes that although he had expected to be working with a group of traditional regions, in hindsight, this was not the case – it would seem that, even with regards to the rural areas of the nineteenth century, the traditional region is an idealized abstraction.

Indeed, Kirk (2001) calls the concept of a bounded 'dialect area' a "convenient fiction", stating that "the best dialect maps are not therefore maps of dialect areas but of dialect features". Although some linguistic borders are undoubtedly stronger (e.g. the Scottish-English political border), there are many other cases where even political borders do not mark clear linguistic

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[11] Where an 'isogloss' is "a dividing line or boundary, plotted on a map, showing where one linguistic form… gives way to another". When isoglosses "bundle", and "isoglosses for several different linguistic features are found close to one another", this represents a dialect boundary (Swann et al. 2004c).

divisions, as in the case of the dialect continua to be found between Germany and Denmark and Germany and the Netherlands (Kirk 2001).

3.8.2   The phenomenon of cross-border languages

A cross-border language is defined as a "language… common to two or more states and domains straddling various usages" (Acalan 2009 in Ndhlovu 2013: 14). Such languages are particularly common in Africa; examples are Swahili in East and Central Africa, and Arabic in North Africa and the Horn of Africa region (for many more examples, see Ndhlovu 2013: 14). Cross-border languages pose a challenge both to the connection between language and nation-state, and to the practices of language- and dialect-mapping, when these practices rely on "externally conditioned geographical expectation[s] or borders" (Kirk 2001). The mapping of cross-border languages must be conducted in the form of geolect-mapping – that is, the mapping of linguistic or spatial variation without reference to external borders (Kirk 2001).

3.8.3   The side-lining of non-homogeneous linguistic communities

The focus on "small communities" and "traditional cultures" within linguistic geography (see section 3.2) necessarily led to the overlooking of multi-lingual or -dialectal communities (which would often rule out urban communities; recall also the view of urban spaces as sources of societal degeneration (cf. section 3.3)) and communities undergoing processes of language shift. Thus, the insights into language variation that could be delivered by linguistic geography in the late nineteenth and early twentieth century were only applicable to very specific social contexts.

3.9 Conclusion

This chapter has discussed "one of the oldest forms of sociolinguistics" (Ervin-Tripp 1973 in Hagen 1987), namely linguistic geography. An overview was given of the discipline and its close academic relations, geolinguistics, dialect geography and dialectology. Geographic determinism was mentioned as a thought pattern that was related to the academic investigation of the dialects of particular areas; its influence, however, was argued to be limited to motivating researchers to investigate language at the level of the region. Subsequently, particular attention

was paid to the kinds of research conducted and methods employed within linguistic geography, and to the most common method of presentation of the data gathered within the field, namely the language/dialect map. The dominant conception of space employed within linguistic geography was then examined. It was found that space was important both at the level of the nation-state and at the level of the region, and that, in both cases, space was understood in Euclidean terms as a container for human activity. Although the spatial units of the nation-state and the region seemed to be expected by researchers at that time to be self-contained areas where people behaved in particular linguistic ways (to paraphrase Zelinsky (1992)), it was shown that this hypothesis was not supported by the data gathered. Finally, challenges to linguistic geography that have been identified over the years were highlighted, and it was shown that, taking into account phenomena such as cross-border languages, the static conception of space employed in early linguistic geography will rarely be applicable in similar research today.

CHAPTER FOUR

SPACE IN QUANTITATIVE SOCIOLINGUISTICS

4.1 Introduction

Quantitative sociolinguistics, also often referred to as "variationist sociolinguistics" (where the term designates a more narrow field than it does when defined as in section 1.2), denotes sociolinguistic work "in the tradition inspired by William Labov" (Swann et al. 2004e). The quantitative approach, to be distinguished from the qualitative approach, which focuses on how language use creates meaning in particular contexts, "draw[s] numerically-based comparisons between different types of language use" and, for example, may look at the frequency of use of certain linguistic forms amongst "speakers, groups of speakers, texts or text types" (Swann et al. 2004e). Quantitative linguistics, in its early stages, was seen by its proponents to be a significant and promising methodological advance for the field of linguistics. Labov sums up the optimism surrounding the promise of the quantitative approach in an introduction to a collection of his papers using quantitative techniques, remarking that whilst "a field of human knowledge [is often said to] begin with qualitative observations", an advancement towards quantitative techniques is a sign of maturation (1980: xiii).

Much of this optimism stemmed from the hope that quantitative linguistics would be "the major route for resolving theoretical alternatives in a decisive way" (Labov 1980: xi). These theoretical alternatives had arisen within formal linguistics, which was said by Labov to pose endless linguistic conundrums that theory alone could not resolve due to the field's "weak… data base, the instability of theoretical constructs, [and its] inability to deal with the data produced by observation and experimentation" (Labov 1980: xiii). Quantitative linguistics was an approach that could gather large amounts of raw data, which could then be used to judge the explanatory power of the various theories in existence.[12]

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[12] However, it should be remembered that such large-scale data collection presents the problems of "quality control and reliability, data handling and data reduction, and interpretation and inference" (Guy 1993: 223).

Of particular interest to quantitative linguists was, and continues to be, the functioning of sound change. Indeed, the fundamental problem of the field, in its early days, was said to be the question of how sound changes are embedded in the social structure (Labov 1980: xix). This specific genre of quantitative linguistics, that has as its aim the identification of "systematic correlations, or interrelationships, between linguistic variables and social variables" (Swann et al. 2004e) is termed "correlational linguistics".

Unsurprisingly, some of the most famous work conducted within correlational linguistics is Labov's. Indeed, the correlational linguistic study *par excellence* is perhaps his *The Social Stratification of English in New York City (SSENYC)* (2006), said to be "[o]ne of the first accounts of social variation in language" and the "ground-breaking study [that] founded the discipline of sociolinguistics" (Labov 2006: i). The New York City study examined "the distribution of instances of post-vocalic /r/[13] in the speech of individuals belonging to different social groups". It was found that usage amongst different social groups differed systematically – post-vocalic /r/ was used most often by those belonging to the elevated social classes, and less frequently by members of the lower classes (Swann et al. 2004g). Interestingly, Labov himself is willing to accept only a narrow interpretation of the term "sociolinguistics" as fitting for work of this nature; an interpretation that relates back to what Trudgill terms "purely linguistic" studies. Wishing to avoid the interdisciplinary connotations of the term, he limits its meaning to denoting only research that "use[s]… data from the speech community to solve problems of linguistic theory" (Labov 2006: viii).

The layout of this chapter will be as follows: firstly, the evolution of quantitative sociolinguistics will be discussed, as will its relation to its academic predecessors, dialectology and linguistic geography. Subsequently, the aims of quantitative sociolinguistics and the methods it employs will be explicated. Particular attention in this regard will be paid to the urban focus of most quantitative studies, as well as its focus on the speech community. This will be followed by an overview of significant quantitative sociolinguistic studies. This section will discuss two kinds of quantitative studies, namely those that focus on a single locality and correlations within that locality, and multilocality studies that investigate the geographic diffusion of linguistic phenomena. Finally, the understanding of space that is operational within

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[13] I.e. such as the /r/ in "car" or "board".

quantitative sociolinguistics will be identified, and the resultant limitations for research conducted within the quantitative paradigm will be highlighted.

4.2 The beginnings of quantitative sociolinguistics

Britain (2010: 143) puts forward that early quantitative sociolinguistics, begun in the 1960s, drew inspiration from both generative linguistics and traditional dialectology, although it was also "radically different" from these two fields. The influence of generative linguistics, on the one hand, was limited to the adoption within quantitative linguistics of the generative concept of 'variable rules'. On the other hand, the interest of quantitative sociolinguistics in "the social embedding of change" (Britain 2010: 143) is an interest shared with a number of traditional dialectologists. It is thus reasonable to state that quantitative sociolinguistics draws more of its foundations from traditional dialectology than from the then-emerging field of generative linguistics.

4.2.1   Quantitative sociolinguistics and its relation to traditional dialectology

Traditional dialectology, as discussed in chapter three, incorporated an interest in the influence of social variables on language use almost from its very beginnings. Indeed, Johann Andreas Schmeller, reputedly the first scholarly dialectologist (cf. section 3.4.2), is said to have described himself as a *Sprachsoziologe,* or 'speech sociologist' (Wiesinger 1979 in Hagen 1987: 403). Some time after Schmeller's publication of his dictionary of the Bavarian dialects in 1875, the American William Dwight Whitney's book *The Life and Growth of Language* identified a correlation between dialect use and particular occupations, levels of education and ages (Hagen 1987: 403). Even later than this, Gauchat's (1905) Charmey study looked again at the relationship between age and language use, focusing on linguistic variation across three generations in the town (cf. section 3.5.31).

Kerswill (2004) goes so far as to argue that sociolinguistics be considered equivalent to social dialectology. He puts forth that both fields are concerned with "mapping monolingual linguistic variation onto social parameters"; that is to say, they are interested in explaining "structured variation within one language" according to social factors (2004: 1). In essence, Kerswill argues that dialectology, instead of being defined as a separate field of inquiry as typically done

47

at present, should be viewed as a sub-field of sociolinguistics that focuses on "variation relating to spatial and other geographic factors" rather than to socially-correlated variation within single speech communities (this definition does, however, contradict that given by Hagen (1987: 408-409) in section 3.2 above) (Kerswill 2004: 2). Kerswill's argument is supported by Guy (1993: 223), who remarks that all dialect research might fairly be termed "quantitative", as both traditional and social dialectology/sociolinguistics necessitate the gathering of "large amounts of data from many individuals".

The paper that might be seen as the manifesto of quantitative sociolinguistics, and which is said to be "central to all later thinking in social dialectology" (Kerswill 2004: 2), is typically acknowledged to be Weinreich, Labov and Herzog (1968), which poses many of the questions that early quantitative sociolinguists sought to address. The aim of this work was to provide a new, coherent explanation of how language change occurs; one that would correct the flaws in the model proposed by Hermann Paul (Kerswill 2004: 2). The central tenet of Paul's philosophy was that "language resided only in the individual psyche"; with the collection of all these idiolects forming what was termed the "language custom" (which would probably be conventionally understood as the 'standard language' of a community) (Kerswill 2004: 2).

The problems posed by Paul's model are numerous – for one, a view of language as a collection of individual varieties makes it difficult to explain language change; perhaps most critically, change is only realized as "chance fluctuations" in the idiolect of the individual, and it is difficult to explain how such a change would spread across all the idiolects of the community. In addition, acceptance of this model leaves the conundrum of why language change is not happening continuously across all languages unaddressed (Kerswill 2004: 2).

Weinreich, Labov and Herzog (1968), in opposition to Paul's view, proposed the hypothesis that language is systematic at both the individual and the community level. Labov himself goes further, saying that language at the community level is *more* systematic, as the idiolect is subject to "oscillations and contradictions" (Kerswill 2004: 2). Notably, Weinreich, Labov and Herzog (1968) was published after Labov's New York City study came out in 1966, and drew on the findings of that study to propose that communities show a pattern of "orderly heterogeneity", where language use differs between social classes, but individuals within each class show consistency in the use of specific linguistic features. Language change, within this model, occurs because particular groups within a linguistic community lead in "the introduction

of features from outside", or generate linguistic innovations which are then spread (Kerswill 2004: 3).

Kerswill (2004: 3) notes Weinreich, Labov and Herzog's (1968) model presented above is not just a model of language change, but a model of language itself – one that privileges the community over the individual, and structure over agency (Mendoza-Denton 2011: 182). The following section will expand on the importance of the community as the focus of investigation within quantitative sociolinguistics, paying particular attention to the notion of the 'speech community'. In addition, a discussion of quantitative sociolinguistics' preference for urban locations will be presented.

4.3 Quantitative sociolinguistics and the urban speech community

Mendoza-Denton (2011: 181) remarks that "[s]ome of the greatest controversies taking shape today in sociolinguistics focus on the relationship between the individual and the community". The speech community is but one delineation among many that can serve as the site of linguistic investigation (examples of others being the CofP, the city and the nation-state), but it is the level generally favoured within quantitative sociolinguistics.

The concept of the speech community, said to be "a hallmark of the twentieth-century innovations in the study of language by anthropologists, sociologists and linguists", was first outlined by Leonard Bloomfield in 1933. Bloomfield (in Mendoza-Denton 2011: 181) defined the concept very simply as follows: "A speech community is a group of people who interact by means of speech". Labov (1972 in Mendoza-Denton 2011: 182) expands on this definition, saying that "the speech community is defined by participation in a set of shared norms; these norms may be observed in overt types of evaluative behaviour, and by the uniformity of abstract patterns of variation which are invariant with respect to particular levels of usage". The "levels of usage" mentioned here refer both to levels within the individual (i.e. particular styles of language use that are selected between according to context situations) and to levels within a socially-stratified society (Mendoza-Denton 2011: 182).

It is clear that Labov's definition of the speech community is an overt refutation of Paul's claim that language exists solely as an idiolect. Importantly, in the speech community, individuals

are governed by "a set of shared norms"; it is not the average of the members' own systems that is abstracted into a general system. Thus, by focusing on phonological variation in New York City and treating phonological inconsistencies as "continuous… variables rather than fluctuating constants" (Labov 2006: 5–6), or, put differently, systematically realized variants rather than randomly differing individual outputs, Labov may be said to have set out to prove the existence of the speech community as the locus where a structurally uniform language is to be found.

Quantitative sociolinguists other than Labov have understood the speech community in slightly different ways – whereas Horvath and Horvath (2002) (to be discussed in section 4.5.2), as Labov did in *SSENYC*, understand cities (or sectors thereof) to form speech communities, Boberg (2000) finds it problematic to consider individuals that speak different varieties of a language as a single speech community. These varying interpretations of, and flaws within, the concept of the 'speech community' will be discussed further in section 4.6.

4.3.1   The focus on the urban in quantitative sociolinguistics

The importance of the city as a site of research in quantitative sociolinguistics is made clear by the fact that the discipline is sometimes termed "urban sociolinguistics" or "urban dialectology" (Britain 2010: 145). This preference for the urban as site of investigation is partly reactionary in motivation – as the interest amongst early quantitative sociolinguists was in language change, they turned to urban locations as "the best place[s] to find the most fluid, heterogeneous, complex communities, facilitating investigations of the social embedding of change "where it's all happening"" (Britain 2010: 144). Rural locations were, at this stage and arguably still today, seen within quantitative sociolinguistics as being "insular", "conservative", "backward", "isolated" and "static" places where language change was largely non-existent (Britain 2010: 145). Cities, on the other hand, were sites of influx, attracting job-seekers, tourists and other linguistically-disparate elements.

However, and this is a point to be returned to later in this section, although Labov in particular highlights the complexity of the site of his New York City study in relation to that of his Martha's Vineyard study, ultimately, this complexity is abstracted away in *SSENYC*. Britain (2010: 144) notes that the city was "distilled down to the variables of age, class, ethnicity and

gender"; variables that are indeed present, if not in such diversity as they might be in urban areas, in any community, no matter how "small and seemingly homogeneous". Thus, one might say that although the rural features much less often as a site of research in quantitative sociolinguistic studies, the urban/rural distinction that is made does not necessarily impact decisively on the results found by researchers. That is to say, although Labov (2006) might be able to tell the reader something about English in the Lower East Side of New York City in 1966, and although it might be able to shed some light on the interaction between social characteristics such as socio-economic status and language use, it does not necessarily tell the reader anything about how *New York City in particular* acts on the speech of its inhabitants. The particular spatial character of New York City and its influence is ignored.

4.3.2   The city and social variables

Having mentioned that Labov (2006) strips away the physical characteristics of New York City so that it remains as nothing more than a container for linguistically-influential social variables, one might question whether this study, one of the first of its kind, initiated a turn from a purely physical conception of space, such as that found in traditional dialectology that examines language in, for example, one specific geographical area, to a conception of space that recognizes it as "a certain historically-constituted social relation" (Castells 1977: vii). Put differently, it may be plausible to think that Labov recognizes that space is not merely a static, Euclidean domain, but displays an understanding of social space as a shaping force; in that he sees that the social organization and stratification of New York City impacts on how its inhabitants use language.

Further consideration of this question would seem, however, to refute the above hypothesis. Labov's interpretation of society incorporates no spatial aspects at all – indeed, Britain (2010: 147) notes that Labov firmly separates the ""spatial" contributions to language change from the "social"". The following quote is further illuminating in this regard:

> Labov (1982: 42)… state[s] that "the study of heterogeneity in space has not advanced at the same tempo as research in single communities". The division implies that heterogeneity in both time and society are somehow not in space, and that spatiality has not shaped the evolution of social variation in the communities under investigation.

Britain's use of "spatiality" here is significant, as the term, defined by Soja (1989: 120), denotes something that is socially constructed through a combination of the forces of "material nature" and "cognition and representation". Labov's severance of the social from the spatial indicates clearly that he is not engaging with 'spatiality' as a concept.

4.3.3   Social variables, Bourdieu's linguistic market and indexicality

A perhaps more plausible connection to be drawn is between Labov's approach and Bourdieu's (1977) ideas regarding the "economics of linguistic exchanges". One might argue, in line with Bourdieu, that traditional dialectology in the form discussed in the previous chapter had seen "language [as] an object of understanding", whereas Labov's understanding of the "social significance of speech forms" (Labov 2006: 6) reflects an awareness of language's status as "an instrument of action (or power)" (Bourdieu 1977: 645). It is conceded, again, that there is some very static and basic spatial awareness evident here, in that the significance or value of different speech forms on the 'linguistic market' differs according to where that market is operational. As Bourdieu (1977: 647) says:

> All particular linguistic transactions depend on the structure of the linguistic field, which is itself a particular expression of the structure of the power relations between the groups possessing the corresponding competences (e.g. "genteel" language and the vernacular, or, in a situation of multilingualism, the dominant language and the dominated language).

Again, though, space itself does not act – it is merely a backdrop to the social judgments made by speakers in a particular speech community. Put differently, the linguistic field is socially constituted by the "symbolic power relation between…speakers" (Bourdieu 1977: 648); it is not spatially constituted.

The concept of the 'linguistic market' is closely related to the later notion of 'indexicality' in sociolinguistics. "Indexicality" refers to the ability to interpret speakers' use of particular linguistic forms as "reflection of speakers' membership in social categories" (Eckert 2008:

453). A well-known illustration of this is the social indexicality presented by 'second person pronouns' in the European languages – for example, the use of *tu* when addressing a listener in French indexes solidarity and equality; whereas *vous* indexes deference on the part of the speaker due to the presence of an unequal power relationship (Brown and Gilman 1960 in Silverstein 2003: 204).

4.4 Methodology employed in quantitative sociolinguistics

The remainder of this chapter will discuss two types of quantitative sociolinguistic studies, namely those that study variation in single locations, and those that investigate variation across multiple localities.

The methodological exemplar of single-location studies is, according to Horvath and Horvath (2002), Labov's (2006) *SSENYC*. Here, interviews with a sample of speakers from a single speech community (taken to be represented by New York's Lower East Side) are recorded. The unit of analysis in such studies as these, the concept of which was developed by Labov, is termed the "sociolinguistic variable", defined as "a linguistic variable (phonological usually, in practice) which co-varies not only with other linguistic elements, but also with a number of extra-linguistic independent variables such as social class, age, sex, ethnic group or contextual style" (Milroy 1987: 10). The realization of a variable is termed a "variant".

Typically, the data obtained in a study such as Labov (2006) "are coded for a small set of variable phonological and/or morphological features" and, subsequently, the linguistic and social features that may influence the use of particular variants are analyzed quantitatively in order to determine their significance (Horvath and Horvath 2002: 319). Multilocality studies, such as Horvath and Horvath (2002) and Boberg (2000) typically employ the same methodology, but across more than one community.

Horvath and Horvath (2002: 321) identify three types of quantities that can be interpreted by sociolinguistic researchers. Firstly, there are "relative frequencies in the occurrence of a variant (usually expressed in percentages) in particular social and linguistic contexts"; secondly, there are indices calculated by analysts; and lastly, there are expressions of the probability

(calculated by software known as the "Goldvarb program") that a certain variant will occur in a particular social or linguistic environment.

The Goldvarb program, and a similar program known as "Varbrul" are, as noted above, used to calculate "probabilistic rules" from large sets of linguistic data. These rules, also known as "variable rules" (see section 4.2), were conceptualized by Labov, and are used to "describe the probability that an optional rule… will be applied by members of a social group" (Swann et al. 2004f). An example of such a probabilistic rule can be taken from Labov (2006), where the feature [+ working class] was found to decrease the likelihood of the "realization of post-vocalic /r/" (Swann et al. 2004f).

4.5 Quantitative sociolinguistics: pre-Labov, Labov and beyond

Labov (2008: 9) himself acknowledges the first quantitative sociolinguistic study to be J.L. Fischer's investigation of the use of *-ing* in a small New England village. Fischer, engaged in "a study of child-rearing", became interested in his young subjects' varying use of *–in* and *–ing* for the present participle ending (Fischer 1958: 483). Fischer was particularly interested in how language use differed between the genders, and so focused on the frequency of use of the *–in* variant for boys and girls in two age groups, ages 3-6 and 7-10 (Labov 2008: 9; Fischer 1958: 483). *–ing* was found to be favoured amongst male speakers and not amongst female speakers. Fischer, further, divides his male sample into "model boys" and "typical boys", where the former "conformed perfectly to the behavioural pattern endorsed by adults", and the latter did not. Amongst model boys, *-in* was used once in 39 opportunities; amongst typical boys, *-in* was used on 10 out of 22 possible occasions (Labov 2008: 9). In terms of the possible influence of other social and contextual variables, the sample size of the study was too small to be able to definitively identify any class-linked differences, but Fischer does speculate briefly on the influence of the formality of the situations in which the data were produced (Fischer 1958: 484).

Fischer identifies many of the concerns that occupy later quantitative sociolinguists; perhaps most significantly, he emphasizes that the linguistic choices individuals make are determined by "social structure" (1958: 488). This is a hypothesis that is further explored by Labov (2006). As the methodology and central findings of *SSENYC* have already been discussed above, the

remainder of this section will provide overviews of significant quantitative sociolinguistic research conducted by researchers other than Labov. The studies to be focused on are Trudgill (1974a) and Horvath and Horvath (2002); both of which take as their interest the diffusion of linguistic innovations. Trudgill (1974) is an extremely significant work within the study of linguistic diffusion and, more broadly, within sociolinguistics as a whole, as he introduces the use of a model from economic geography to explain how linguistic innovations spread. Horvath and Horvath (2002) are also interested in diffusion; their study, in contrast to Trudgill (1974a), is both multilocal and transnational.

It is supposed that studies of linguistic diffusion may reveal another aspect of spatial thinking within quantitative linguistics to supplement that found within correlational studies such as *SSENYC*, as here space is assumed to be acknowledged to have some effect on how language changes.

4.5.1   Trudgill (1974a): Linguistic change and diffusion: description and explanation in sociolinguistic dialect geography

It is perhaps important to note from the outset that whilst Trudgill (1974a) employs quantitative methods, the study itself may be more comfortably situated within dialect geography. However, one of the work's central goals is to advocate mutual learning between dialect geography, theoretical geography and the (at that time) relatively new field of quantitative sociolinguistics. This mutual learning was necessary, Trudgill (1974a) argues, because dialect geography neglected explanation of the geographical distribution of phenomena; simply offering descriptions instead (see section 3.2). To make matters worse, these descriptions themselves were "not… sufficiently full or accurate" (Trudgill 1974a: 217).

In order to be able to offer explanations of the geographical distribution of linguistic phenomena, Trudgill (1974a: 216) suggests that dialect geographers mirror quantitative sociolinguists' method of correlating their linguistic data with "preconceived categories". However, whereas in quantitative sociolinguistics categories such as "age, income [and] education" are used, dialect geographers were to make use of "'preconceived' geographical units".

These "preconceived geographical units" that Trudgill suggests should be employed are not as simple and arbitrary as, for example, American states (Trudgill 1974a: 216). Rather, he proposes the division of areas under investigation into "geographical cell[s]" similar to the "social class cells" employed by Labov (Trudgill 1974a: 223). Within each of these cells, then, the dialect geographer would consider the "density" and "social distribution" of a given linguistic feature (Trudgill 1974a: 223). This information would then be used to determine the "spatial diffusion of [a] particular linguistic innovation" (Trudgill 1974a: 230), by mapping the density of, for example, an older and a more recent realization of a phoneme.

Trudgill (1974a) does exactly this, looking at the gradual phonetic change from [ɛ] (which was prevalent amongst older speakers) to [a] (which was the realization most often found in younger speakers) in the pronunciation of the [æ] vowel in Brunlanes in Norway (Trudgill 1974a: 226-227). Brunlanes was divided into geographic cells, and a sample of speakers in one randomly selected locality in each cell was recorded. Speakers of both sexes and of relatively similar social class were investigated (Trudgill 1974a: 227). For data analysis purposes, values were given for pronunciations ranging from most conservative, or closest to the older form (lowest value) to least conservative, or closest to the more recent form (highest value), and the area with the highest average was identified as likely to be the innovator of the linguistic change (Trudgill 1974a: 228).

Trudgill's model is borrowed from, or perhaps inspired by, the Swedish social and economic geographer Torsten Hägerstrand. Hägerstrand is said to have played a "leading role in the 'quantitative' revolution in the 1950s and 1960s", and to have been the first geographer to simulate diffusion patterns (Flowerdew 2011: 199–200). His diffusion model was variously applied to agricultural innovation, the "spread of the ghetto" and "the settlement of Polynesia". Hägerstrand's approach was perhaps particularly attractive to linguists because of its "emphasis [on] the importance of individual behaviour" – indeed, the "humanistic element" in his work is said to be "encapsulated in the title of his 1970 paper 'What about people in regional science?". This title borders on being a paraphrase of the complaint Trudgill (1974a) levels against the incomplete geographical descriptions prevalent in the dialect-geographical work of the time (Flowerdew 2011: 200–203).

Trudgill's (1974a) Brunlanes study is a pilot of what its author hopes to become the norm for future dialect-geographical research adopting the diffusion model. Maps created using this

56

model, like one that he refers to created by Hägerstrand showing the spread of motor vehicles in southern Sweden, present a "full and accurate" description of the diffusion of a phenomenon. Such a useful description is one that, Trudgill (1974a: 224) argues, was lacking in dialect geographical maps at that moment. "[A]lthough dialectologists have often been able to point to *where* certain innovations have *started*" in maps such as these, Trudgill (1974a: 224) points out, "they have not always been able to explain *why* these particular innovations, rather than those originating elsewhere, have been successful, nor why these innovations have *stopped* where they have" (italics in original).

This failure is illustrated by Trudgill's reference to two maps illustrating the distribution of uvular /r/ in Western Europe. Looking at the first of these maps, he inquires how uvular /r/ came to be distributed in the way that it is, and, going on the information provided by the maps, notes that it is suggested that "it spread as an innovation gradually across the countryside" (1974a: 221). This is, however, misleading, as in actual fact, the adoption of uvular /r/ "jump[ed]… from one large urban centre to another", involving in particular The Hague, Cologne, Berlin, Copenhagen, Kristiansand and Bergen. This is obscured in the first map because that illustration only portrays the use of the feature by one social group, therefore ignoring the "social density of usage" of the feature (Trudgill 1974a: 221).

The adoption of a model like Hägerstrand's that focuses on how innovations have spread, looking at both exposure in an area to an innovation and factors that lead individuals to resist the innovation (Trudgill 1974a: 223), would, it is argued in Trudgill (1974a), prevent oversights of this nature in dialect geography, and aid in the discipline's development.

4.5.2   Horvath and Horvath (2002): The geolinguistics of /l/ vocalization in Australia and New Zealand

Horvath and Horvath (2002) are, like Trudgill (1974a), concerned with how researchers understand the manner in which linguistic change functions, and particularly how changes that originate in one place spread to other places. Whereas Trudgill (1974a) attempts to introduce Hägerstrand's model of innovation diffusion into dialect geography, and thus relies almost

57

entirely on quantitative information in order to determine how a particular linguistic change is spreading, Horvath and Horvath (2002) uses quantitative methods to present something akin to a meta-analytic perspective. The aim of the study is to "test the generality of the linguistic and social correlates of sound change found in a single speech community by adding geography to the linguistic and social conditioning of language change" (Horvath and Horvath 2002: 320). Put differently, what is being investigated is whether the same social and linguistic variables have a consistent effect on linguistic change, no matter where these variables are in operation.

The interest in the effects of geography on the variables already understood to have an effect on variation was a reaction to the tendency of urban dialectologists working in the Labovian tradition at that time to ignore spatial variation in favour of focusing on the social aspects of variation in single locations (Horvath and Horvath 2002: 320). In order to investigate the universality of the effect of certain social and linguistic variables, Horvath and Horvath (2002) focus on English and, more specifically, Australian and New Zealand English. The researchers investigate nine "speech localities" where Australian and New Zealand English are spoken: "six in Australia (Adelaide, Mount Gambier, Hobart, Melbourne, Sydney and Brisbane) and three in New Zealand (Christchurch, Wellington and Auckland)" (2002: 324). The single phonological phenomenon that is under investigation is /l/ vocalization, which is defined as "the realization of a historical instance of /l/ as a vowel- or [w]-like sound" (Knowles 1987 in Wong 2013: 184).

4.5.2.1 Horvath and Horvath (2002): findings re: the stability of social and linguistic correlates across space

As mentioned above, the phenomenon under investigation in Horvath and Horvath (2002) is /l/ vocalization. The larger study of which Horvath and Horvath (2002) forms part focused on three types of /l/, namely coda /l/ (such as that found in *cool*), syllabic /l/ (such as that found in *horrible*) and clustered /l/ (such as that found in *silk*). Horvath and Horvath (2002), however, discusses only the results obtained for coda /l/ and clustered /l/.

The data were obtained as follows: each of the nine cities under investigation were divided into cells (a methodological move reminiscent of the geographical divisions made in Trudgill (1974a)), and a goal of five speakers tested per cell was set (albeit not always met). Subsequently, in each of these cells, strangers in public places were approached and recorded reading a wordlist and a few select passages. Within the material participants were asked to read, 84 words containing syllabic, coda and clustered /l/ were present (Horvath and Horvath 2002: 324).

During data analysis, each occurrence of /l/ was analyzed in terms of the context in which it occurred, where 'context' is made up of linguistic, social and geographical factors. The first of these factors is determined by the phonetic environment of the /l/ occurrence (e.g. whether it is preceded by a vowel, or whether it occurs at the end of a word and is followed by a word beginning with a consonant or a vowel, and so forth); the second is constituted by speaker characteristics such as sex, age and social class; and the final contributing factor is determined by where a speaker lives (Horvath and Horvath 2002: 325). Subsequently, the influence of each factor on the probability of /l/ vocalization was determined using the Goldvarb program (Horvath and Horvath 2002: 325).

Horvath and Horvath (2002: 332) preface the discussion of their results by noting that "[a]lthough variationists approach their studies empirically, they do expect the conditioning of a sound change to be largely predictable". In terms of social factors, those investigated here, namely sex and social class, were found to be statistically insignificant in determining whether an instance of /l/ would be vocalized or not. In terms of linguistic factors, a number of linguistic environments that either promote or inhibit /l/-vocalization across all the localities surveyed were identified; in addition to some constraints that play some role, but are not "controlling", which Horvath and Horvath (2002: 334) identify as likely to be "available [to] mark social or regional dialects" (Horvath and Horvath 2002: 334-335). However, speech location was found to have the strongest effect on the data, which indicates that "there is significant variation among the nine localities" (Horvath and Horvath 2002: 327). This is, of course, to be expected, as we are dealing here with a sound change in progress, which is spreading from location to location. Using the data gathered, it was possible to determine the density of /l/-vocalization in each of the nine cities investigated. The cities were then ranked according to overall rate of /l/-vocalization, in order to shed light on the question of how the feature is diffusing. This question is discussed in the following section.

59

4.5.2.2 Horvath and Horvath (2002): interpreting the spatial diffusion of /l/-vocalization

Trudgill (1974a), in addition to its advocacy of Hägerstrand's innovation diffusion model, proposes its own model "to explain the diffusion of features of London English into towns and villages in East Anglia" (Boberg 2000: 2). This model is termed the "gravity model" and claims to predict the influence one linguistic centre will have on another. Without going into detail, the model's general prediction is that the bigger the centres and the smaller the distance separating them, the greater influence they will have on one another (Boberg 2000: 2). Boberg (2000: 2-3) states further that "large centres will influence other large centres before they influence equidistant smaller ones; second, when two centres are not equal in size, the larger will have a greater influence on the smaller than vice versa".

The same author (2000: 2-3) also points out that "[t]hese predictions accord well not only with a good deal of evidence from historical linguistics, which shows that many changes appear earlier in major centers like London than in their surrounding hinterlands, but also with our intuitive notions of the structure of society and human interaction". Thus, in addition to investigating the stability of the effect of social and linguistic variables, Horvath and Horvath (2002) also considers how the apparent spread of /l/-vocalization across the nine investigated localities corresponds to the gravity model.

When the nine cities investigated were ranked according to their rate of /l/-vocalization, Christchurch, Wellington and Auckland had the highest rates of vocalization, in that order; followed by Adelaide, Mount Gambier, Sydney, Hobart, Melbourne, and Brisbane, in that order (Horvath and Horvath 2002: 335). This ranking does not fit with that that would be predicted by the gravity model, as the distribution of /l/-vocalization is not in accordance with the hierarchy that can be set up amongst the nine cities according to their sizes. In other words, the phenomenon has not spread amongst the largest cities first, and subsequently to the smaller cities (Horvath and Horvath 2002: 336).

As a basis for an alternative explanation of the strong effect of location on the rate of /l/-vocalization, Horvath and Horvath (2002: 336) refer to what they term "place effects", referring to the human geographer Doreen Massey's (1997 in Horvath and Horvath 2002: 336) definition of "place" as a "particular constellation of social relations, meeting and weaving together at a

particular locus". Place effects may be thought of as a more nuanced and empirically verifiable interpretation of geographic determinism (see section 3.3); emphasizing the social rather than the physical environment as responsible for the outcomes of certain processes in an area. Place effects take into account the particular characteristics of a place, such as the social and historical forces at work in the location, and the influence such forces may wield on processes such as language change. An example of a place effect offered in this case by Horvath and Horvath (2002: 337) (although they recognize that this hypothesis is not supported by their data) is the substantial emigration of New Zealanders to Australia so that "they represent a sufficient presence in some cities to be the source of a sound change".

The conclusion that the multilocality study discussed here arrives at suggests that whilst a sound change may indeed be operational in several localities that are relatively near to one another, the robustness of that sound change is unlikely to be equal in all of those localities and, furthermore, may be influenced differently by the same factors in those respective localities (cf. the 'non-controlling' linguistic constraints mentioned in section 4.5.2.1). To account for this variation, Horvath and Horvath (2002) introduce the concept of the 'variable isogloss'. Contrary to the classic isogloss, "a line on a map 'where one variable gives way to another variable at some particular point in space'" (Chambers and Trudgill 1999 in Horvath and Horvath 2002: 341), the variable isogloss indicates a "change in the pattern of variation between speech localities", and captures what Horvath and Horvath (2002: 341) call "sociolinguistic variability that is also geographically variable".

The appreciation for nuances in variation across different geographic locations that is evident in Horvath and Horvath (2002) is lacking from Trudgill (1974a), and perhaps from the majority of purely quantitative studies. Horvath and Horvath's (2002) incorporation of the concept of 'place effects' indicates that these researchers do not find asocial and apolitical understandings of space sufficient in explaining why language varies from place to place. The following section expands on the concept of space operative in quantitative linguistics; and the section after that will present some shortcomings in quantitative sociolinguistics resulting from this spatial conception.

4.6 The dominant spatial conception within quantitative sociolinguistics

As noted above, it is evident when considering even a small sample of research done in quantitative sociolinguistics that the way space is understood within the field varies from one researcher to another. Labov's work, exemplified in *SSENYC*, to begin with, accords great value to the "uniform structur[e]" that governs members of a speech community, and that is stable enough that individual variation will not interfere with or disrupt it; and, furthermore, believes firmly in the predictable influence of social types on the language use of individuals (Mendoza-Denton 2011: 182). In other words, work like *SSENYC* relies on a conception of a community constituted by individuals who are all historically from that community (Kerswill 1994 in Mendoza-Denton 2011: 182). Furthermore, it is also assumed that social stratification is relatively stable, and that individuals from different classes will not come into sufficient contact in order to influence each other's linguistic varieties.

Labov's conception of the insular and homogeneous nature of the speech community can be captured again in Zelinsky's concept of the 'traditional region' (Kretzschmar 2011: 192). The term describes, to reiterate the definition given in section 3.6, a "self-contained, endogamous [and] stable" community. Whilst this aspect of the definition, as noted above, is also applicable to the conception of space operative in traditional dialectology, it contains an additional facet that is only suited to the Labovian spatial conception. This is the interpretation of "caste, class, occupation and social role" as being fixed categories to which individuals are assigned by "the accident of birth" (Zelinsky 1992: 110 in Kretzschmar 2011: 188). It is the assumption of the existence of this kind of stable structure that allows Labov (2006: 130) to remark that "the concept of a single community implies that linear scales are possible, and most of the approaches which we will attempt will involve the matching of linguistic variables against a linear social ranking". Labov (2006) relies on this linear ranking, employing social groups as independent variables and setting out to determine "the type of speech [one] can expect from a given group of New Yorkers" (2006: 131).

Section 4.3.2 already covered Labov's separation of the social from the spatial in his approach to sociolinguistic research. It can therefore be concluded that the dominant understanding of space present in quantitative studies in the Labovian tradition remains Euclidean – space is still a container for communities whose social stratification has an impact on language use and

variation. The social and the spatial do not combine to contribute to what Soja (1989) terms "spatiality" – the outcome of material, natural forces, forces of representation and social interactions.

The understanding of space that is evident in quantitative studies of language change differs from that that is present in purely correlational studies such as *SSENYC* – this is indicated merely by the fact that Trudgill (1974a) borrows the basis for his model of diffusion from a geographer. Studies of diffusion of language phenomena of course imply an interest in how language moves across space, and how space affects that process of movement. Trudgill (1974a), in his admiration of maps compiled by Hägerstrand, shows a strong appreciation for the social factors influencing language change, in that he recognizes the importance of "exposure to… [an] innovation", and, in particular, the powerful influence of "interpersonal contact" in this regard (1974a: 223). At the same time, however, neither Trudgill (1974a) nor Hägerstrand ignore the importance of "terrestrial barriers which impede communication" (Brown and Moore 1971 in Trudgill 1974a: 223).

Horvath and Horvath (2002) highlights some flaws in the assumption, present in Trudgill's (1974a) gravity model, that terrestrial, linguistic and social barriers will have the same "relative significance" (Trudgill 1974a: 233) across all locations. Boberg (2000), in his study of geolinguistic diffusion across the border between the United States and Canada, finds further that the "border effect" that appears to inhibit the adoption of linguistic innovations is lacking in the gravity model. Additionally, Boberg (2000: 6) pinpoints a problem relating to Trudgill's (1974a) method of calculating the degree of linguistic similarity between two centres: in Boberg's (2000) study, a "large proportion" of the population of one of the cities under investigation (Detroit, in the United States) were speakers of African American English, which "could not be expected to have the same kind or amount of influence on Canadian speech as European American varieties" (Boberg 2000: 6).

This is reflective of another problem in the use of a supposedly uniform speech community or 'traditional region' as the locus of investigation in quantitative studies – vastly different varieties of a language are subsumed under one umbrella term, and thus become difficult to take into account in calculations using the gravity model. The following section will explore these and other difficulties associated with the understanding of space within quantitative sociolinguistics.

4.7 Difficulties associated with the dominant spatial conception in quantitative sociolinguistics

This section details oversights and shortcomings that are connected with the understanding of space prevalent in the quantitative sociolinguistic research covered in this chapter. The concerns to be discussed are, firstly, those associated with the use of the supposedly uniform speech community as level of investigation in quantitative sociolinguistics, and secondly, those arising from early quantitative sociolinguistics' focus on the social characteristics of urban locations at the expense of their geographical characteristics. However, it is to be noted that these shortcomings, present in some quantitative studies, have been addressed and sometimes remedied in later quantitative sociolinguistic research. Thus, where relevant, reference will be made in this section to applications of quantitative methods in non-uniform and rural speech communities.

4.7.1.   Difficulties arising from the focus on the speech community

Recall Labov's description of the speech community as "defined by participation in a set of shared norms" (1972 in Mendoza-Norman 2011: 182). Notably, this definition posits the existence of *one* set of shared norms that forms what Kerswill (1994 in Mendoza-Denton 2011: 182) terms a "uniform structural [language] base". Problematically, assuming the existence of such a uniform base that governs individuals' language use "would exclude persons who are not originally from the community, community members in contact with other varieties [and] communities undergoing language shift" (Kerswill 1994 in Mendoza-Denton 2011: 182).

Thus, communities where different varieties of a language are in use, as in the case of Detroit where the proportion of speakers of African American English is significant, what might have been taken as the 'speech community' of Detroit must be split into different language groups if one wishes to conduct a correlational study (Boberg 2000: 6). However, as in Boberg (2000) where language diffusion is being investigated, the solution is not quite as simple – the gravity model, at least, does not have space to incorporate the varieties spoken within a language centre into its calculations.

In addition, and as pointed out in relation to linguistic geography in section 3.8.3 above, the focus on the 'traditional' speech community, in Zelinsky's (1992) sense, discounts bi- and multilingual speech communities from investigation, as well as communities whose primary language or dialect is under threat due to language shift to an encroaching variety (an interesting development, considering traditional dialectology's drive to preserve older varieties). The latter situation, it is worth noting, is examined in Wolfram and Schilling-Estes (1995), in which quantitative methods are used to show that Ocracoke English, a "dialect of American English which is spoken on Ocracoke Island, located off the coast of North Carolina", is under threat from mainland dialects (Wolfram and Schilling-Estes 1995: 696). This is done by showing that a characteristic Ocracoke pronunciation of the /ay/ diphthong "is receding in the face of external pressures" (Wolfram and Schilling-Estes 1995: 703).

4.7.2   Quantitative sociolinguistics and 'place effects'

Wolfram and Schilling-Estes (1995) is of course also an example of a correlational study that does not take an urban area as its site of investigation, but, as Britain (2010: 147) remarks, as with much of "urban variationism", there is "little geographical input" here, as space is still limited to the role of backdrop. Reference is made to the importance of geographical input in Horvath and Horvath (2002) with their mention of "place effects". Horvath and Horvath (2002: 336) recognize the importance of "the particular characteristics of [a] speech locality" in influencing a process of change. This awareness is absent in studies of change employing the gravity model, and, as noted in section 4.3.1, in correlational studies such as *SSENYC* that use space as merely a useful means of organizing and categorizing groups of speakers.

4.8 Conclusion

This chapter has discussed quantitative sociolinguistics, focusing on correlational sociolinguistic studies that take the relation between language and social categories such as age, class and gender as their interest and studies interested in the spread of linguistic phenomena. An overview was presented of the beginnings of quantitative sociolinguistics and the discipline's relation to traditional dialectology (the latter having been discussed in the previous chapter). An explanation of the preference within quantitative sociolinguistics for urban areas as site of study was then presented. This was followed by a discussion of the

65

methodology typically employed within the field. Two significant studies within quantitative sociolinguistics were then discussed in detail, namely Trudgill (1974a) and Horvath and Horvath (2002). Subsequently, the dominant conception of space operative within quantitative sociolinguistics was identified, as in the previous chapter, as again being closest to Britain's (2004) description of Euclidean space, despite quantitative sociolinguistics' apparent focus on social factors as determiners of language variation. Again, as within traditional linguistic geography, great importance was found to be placed on stable speech communities; in addition, here additional emphasis was placed on locations with relatively fixed levels of social stratification. However, in comparison with the understanding of space dominant in linguistic geography, some advances were made. For one, an awareness of the effects of the particular spatial character of a location on processes of linguistic change was found to be present in Horvath and Horvath (2002). Finally, issues arising as a result of the dominant conception of space within quantitative sociolinguistic research were identified. It was found that the supposed homogeneity of speech communities is problematic in the case of communities where more than one variety of a language, or indeed more than one language altogether, is spoken. In addition, despite the passing reference to 'place effects' in Horvath and Horvath (2002), it is concluded that in the research examined in this chapter, the dominant conception of space remains overwhelmingly and problematically passive, and/or it overemphasizes the social whilst ignoring the effects social processes have on human surroundings, and vice-versa.

CHAPTER FIVE

SPACE AND SOCIOLINGUISTIC SOCIAL NETWORK ANALYSIS

5.1 Introduction

The1980s marked a shift from a focus on the relationship between language variation and "traditional macro-scale categories such as social class [and] gender" (Vetter 2011: 209) to a focus on the individual differences within these macro-scale categories (Milroy and Margrain 1980: 43). Research into language variation at this level marks a middle ground between the interest in the idiolect amongst linguists such as Paul (cf. section 4.2.1) and the interest in "regular patterns of variation" across whole communities characteristic of Labovian

quantitative sociolinguistics, as discussed in the previous chapter (Milroy and Margrain 1980: 43).

The interest in explaining individual patterns of language use arose primarily as a reaction to the dominating essentialist conception of identity present in many quantitative explanations of language variation. The essentialist conception of identity "view[s] identity in terms of given categories of who individuals or groups are" (Lanza and Svendsen 2007: 277). Applied to the study of language variation, this understanding of identity results in the language use of an individual being understood as directly and uncomplicatedly linked to his/her position within broad social categories, which include gender, ethnicity and socioeconomic status (Auer 2005 in Lanza and Svendsen 2007: 277). In opposition to the essentialist conception of identity stands the constructivist understanding, which views identity as constructed through performance in social interaction by the individual. Individuals are therefore able to negotiate and manipulate how they are seen by others through particular kinds of behaviours, of which linguistic behaviours are one component (Lanza and Svendsen 2007: 277).

Understanding language variation as arising partly as a consequence of the process of identity construction in the course of social interaction requires a novel methodology; one that avoids both a focus on the isolated individual and the abstractions of "pre-established social categories" (Auer 2005 in Lanza and Svendsen 2007: 277). To address this requirement, social network analysis presents itself as "a tool for linking micro and macro levels of sociological theory" (Granovetter 1977: 1360), or, put differently, as a means of understanding how the linguistic behaviours of individuals combine to form the larger-scale regular patterns of variation such as those that Labov (2006) observed. In Hymes' terms, what social network analysis considers is the "structure of relations among components" (1974: 17) at the micro level, which serves to effect broader patterns at the macro level (Bruggeman 2008: 3). Explained in its simplest form (this definition will be expanded upon in section 5.3), social network analysis considers who interacts with whom, in what capacity, and how these interactions influence behaviour (Bruggeman 2008: 2).

The concept of the 'social network', according to Vetter (2011: 210), entered into mainstream use in sociolinguistics as a result of its employment in Lesley Milroy's (1987)[14] study of language variation within three Belfast communities. In an effort to supplement the vast body of linguistic knowledge regarding "careful styles" and "standardized varieties" (often seen to be 'more neutral' and therefore less powerful as markers of individual speaker identities), Milroy (1987) is particularly interested in speakers' use of the vernacular (Milroy 1987: 1). She argues that whilst Labov (2006) takes the view that language simply "reflect[s] people's positions in an abstract hierarchical society, demarcating general social class, age and sex groups", language can also be "manipulated" so as to show solidarity with certain values or groups (Milroy 1987: 19). A "major concern" of Milroy (1987), then, is to "document… the manner in which low-status Belfast speakers from three different communities… use Belfast vernacular in an extremely complex way to demonstrate allegiance to those communities" (Milroy 1987: 19).

Clearly, an investigation of this sort involves many more variables than a typical correlational sociolinguistic study, where particular linguistic variants are associated with certain fixed social categories. Indeed, something closer to an ethnographic approach is required – social network analysis, as will be further discussed in the following sections, considers all the different roles that a speaker may fulfil within whatever broader social categories s/he is part of and, furthermore, considers the nature of the speaker's interaction with other individuals in his/her society.

The layout of this chapter will be as follows: in the next section, the relation of sociolinguistic social network analysis to preceding studies in sociolinguistics will be explicated. Subsequently, a more detailed discussion of social network theory in general and how the theory has been applied within sociolinguistics will be presented. This will be followed by a discussion of a prominent sociolinguistic concept that operates at a similar level to that of the social network, namely the 'CofP'. An overview is then given of significant studies that have been conducted within variationist sociolinguistics using social network analysis. The next part of the chapter focuses on the sociolinguistic investigation of virtual networks – here, a

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[14] Note that the second edition, consulted for the purposes of this study, was published in 1987. The first edition was released seven years earlier, in 1980.

discussion of the nature of the relationship between virtual networks and language use is presented, which is followed by an overview of significant studies applying social network analysis to virtual networks. Finally, the dominant conception of space that is operational within sociolinguistic social network research is identified, and the limitations that arise from the employment of this conception are examined.

5.2 Predecessors of social network analysis in sociolinguistics

Milroy (1987: 37) remarks that, at the time of her writing, four key studies provided "the most coherent models available to the investigator studying language in the community". These were the works that guided her empirical study of language and social networks in Belfast. Three of these studies were conducted by Labov; they included the Martha's Vineyard study (1963), the New York study (2006), and the Harlem study (1972). The other key work was Blom and Gumperz's (1971) investigation of code-switching in Hemnesberget in Norway. This section, where necessary due to a lack of discussion in prior chapters, gives a brief overview of each of these influential writings to serve as background to the introduction of social network analysis in sociolinguistics.

5.2.1   Influential studies by Labov

A considerable amount of coverage of all but one of those of Labov's studies mentioned in the previous section has already been provided in chapter four above; thus, this section will merely highlight points of these studies' methodologies that were influential in Milroy's (1987) turn to the social network as an explanatory model in the study of language variation. However, considering that Labov (1972) has not been referred to previously, the bulk of the discussion here will focus on this work.

Labov (1972) was particularly valuable to the conceptualization of Milroy's (1987) research in Belfast for two reasons, the first of these being its object of interest; and the second, its data collection method. Labov's study focused on the structure and use of the Black English Vernacular (BEV), which was (and to a large extent remains) "heavily stigmatized" amongst speakers of Standard American English. BEV, furthermore, serves as "a symbol of ethnic

identity" amongst the black community (Milroy 1987: 26–27); a characteristic that is shared with the vernacular in Milroy's (1987) three Belfast communities.

In terms of data collection, Milroy (1987: 27) lists three "important procedures" that Labov and his co-workers employed in their Harlem study in order to record their subjects' use of the vernacular. Firstly, they devoted their attention to the speech of adolescents, who are generally thought not to have "fully developed the characteristic adult range of superposed styles which may obscure the vernacular" (Milroy 1987: 27). Secondly, fieldworkers who were part of the "vernacular culture" under study were employed to work alongside the white professional linguists within the community. Lastly, Labov and his co-workers made use of group situations to collect data. It is important to note here that members of a vernacular culture, despite the presence of onlookers and recording equipment, are almost forced to employ the vernacular as they usually would when in an unobserved group situation, as peer supervision over speech is such that a single deviation from group speech norms may result in a speaker being "taunted for years afterwards" (Milroy 1987: 28).

Milroy (1987) takes a number of her points of departure from those key aspects of Labov (1972) mentioned above. The first obvious influence is Milroy's (1987) focus on the vernacular in three Belfast communities. The second similarity is between Milroy (1987) and Labov's (1972) data collection methods – Milroy also entered into the communities under study; albeit in a manner different to that employed by Labov and his co-workers. The precise manner in which Milroy (1987) interacted with her subjects will be discussed further later in this chapter; for now, suffice it to say that recording the interactions of a group when the fieldworker is present marks a significant methodological departure from the speaker interviews that had previously been relied upon in sociolinguistic investigation in order to elicit careful styles of speech (Milroy 1987: 28).

Labov's (1963) Martha's Vineyard study, referred to in passing more than once in the preceding sections of the present study, made two primary contributions to the conceptualization of Milroy (1987). These included, most importantly, the identification of the necessity of studying stretches of speech more substantial than "formally elicited single lexical items"; and the acknowledgement of the importance of taking into account background information regarding both the location of investigation and the speakers under investigation (Milroy 1987: 8). It is stressed by Milroy (1987: 7–8), in relation to the Martha's Vineyard

investigation, that without a rich and varied understanding of the community under study (an understanding that incorporated, for example, knowledge of younger speakers' dislike of the influx of mainland tourists in their hometown), and an awareness of how language is employed within different situations, it would not have been possible for Labov to draw the conclusions he was able to draw, and thus, the counter-intuitive result of younger speakers being the group that made most frequent use of the traditional island vernacular would most likely have been overlooked.

Turning finally to Labov's (2006) study of language use in New York's Lower East Side community, two relevant points arise in relation to the conceptualization of Milroy (1987). Firstly, Labov (2006) pays close attention to the different styles speakers employ in different situations. Thus, he divided the recordings of conversations that he made into a "careful" style, typical of speech when "an isolated individual was answering questions put by a stranger", and a "casual" style, which arose when a speaker was recorded speaking "outside the structure of the interview proper" (Milroy 1987: 9).

The second influential aspect of Labov (2006) with regard to social network analysis is his concept of the 'sociolinguistic variable' referred to in chapter four (see section 4.4). The sociolinguistic variable, Milroy (1987: 10) argues, is the "key to direct analysis [of] and systematic comparison" between speakers. Once variants characteristic of the vernacular in an area have been identified, it becomes possible to judge a speaker's adherence to vernacular norms by measuring their use of particular linguistic forms.

5.2.2 Blom and Gumperz (1971): Social Meaning in Linguistic Structures: Code-Switching in Norway

Blom and Gumperz (1971) sets out to explore how code-switching in the Norwegian town of Hemnesberget can be explained with reference to social factors. In Hemnesberget (from this point onward to be referred to as "Hemnes", in line with Milroy (1987)), the first language of the approximately 1300 inhabitants is Ranamål, a dialect which, as a marker of community pride, "enjoys great prestige" (Blom and Gumperz 1971: 276). The language of formal education, however, is Bokmål, one of Norway's two official standard languages. The accessibility of education in the area has resulted in all of Hemnes' speakers being (to a greater

or lesser degree) fluent in the standard language. Blom and Gumperz (1971: 284) establish that the syntactic and phonetic similarity of Ranamål and Bokmål, coupled with the fact that almost all Hemnes residents are fluent in both, rules out the possibility that speakers code-switch from one variety to the other for reasons of intelligibility. The frequent code-switching the researchers observe must therefore be explained with reference to changes in social context. In Milroy's (1987: 17) terms, the use of one or the other variety "signal[s] a wide range of social meanings".

Blom and Gumperz (1971) found that Ranamål was emblematic of "local team interests" (the authors' own term, in Milroy (1987: 17)), whereas the standard language was associated with the professional classes that made up the "élite of the town" (Milroy 1987: 17). Use of the standard language between Hemnes natives was therefore seen to suggest "social dissociation" (Blom and Gumperz 1971: 307) and "rejection of 'local team' values" (Milroy 1987: 18).

Thus, in line with the insights delivered by Labov (1963), the Hemnes study stresses the importance of knowledge of the "norms and values" of the community under investigation in researchers' attempts to explain particular language choices (Milroy 1987: 17). Furthermore, the study also (albeit more as a theoretical aside) introduces the importance of speaker networks in sociolinguistic investigation – Blom and Gumperz (1971) remark that those speakers that made most frequent use of the dialect "generally were members of 'closed' networks"; whereas the professional classes, preferring the standard language, had "'open' personal networks" and "moved outside territorial boundaries" (Milroy 1987: 20). The terminology and detail employed in the network analysis in Milroy (1987) differs from the rudimentary descriptions offered in Blom and Gumperz (1971); however, the observation that speaker networks correlate in some way with language use is a significant one.

5.3 Introducing the social network as an analytic tool in sociolinguistics

Milroy (1987: 45) states that in sociolinguistics, the concept of the social network is used as "an analytic tool, rather than as a simple metaphorical device for describing social relations". This section will begin by giving some background as to the content of social network theory. Subsequently, it will be explained how the social network made its way into the methodological toolkit of the social sciences, and how it can be used as a tool in sociolinguistic research.

5.3.1   The concept of the social network

Bruggeman (2008: 2) quotes Jeremy Boissevain (1979), saying "Network analysis asks questions about who is linked to whom, the content of the linkages, the pattern they form, the relationship between the pattern and behaviour, and the relation between the pattern and other social factors". Thus, as remarked in section 5.1, the interest is in how the actions of "interdependent actors at the micro level" influence the structures of which they form part at the macro level (Boissevain 1979: 3).

Social networks can be divided into two categories – 'whole' networks that map the connections between all components in a system, such as the example given in Bruggeman (2008: 7) that diagrams the romantic and sexual relationships of students at a rural high school in the United States, and networks that take an individual as their focal point, called "ego networks" (Bruggeman 2008: 10). The focal person in the latter case is referred to as "ego", and the people she has contact with are referred to as "alters" (Bruggeman 2008: 10). In an ego network like this, the network is said to be "anchored" by ego, and is considered from ego's point of view (Milroy 1987: 46).

Milroy (1987: 46–52) discusses a number of characteristics used to describe ego networks. The first of these are "network zones", where people directly connected to ego are said to be part of her "first order" zone, and those people that ego could come into contact with via her first order zone make up her "second order" zone (Milroy 1987: 46).[15]

Further, Milroy (1987: 49–52) highlights two structural and one content characteristic of networks identified by Boissevain (1974). Amongst the structural characteristics are density and clusters. The former refers to how many of the possible links between persons in a network are actualized: "[a] network is said to be relatively dense if a large number of the persons to whom ego is linked are also linked to each other" (Milroy 1987: 50). Clusters, on the other hand, are sectors of a network that are marked by "relatively high density" (Milroy 1987: 50). Clusters tend to be made up of relationships with similar content. As Milroy (1987: 50)

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[15] Milroy (1987: 46–47) notes that whilst one may in principle distinguish up to an nth order zone, "the first and second order zones appear, in practice, to be the most important".

remarks, the personal networks of most individuals tend to consist of "series of clusters", organized around ties of kinship, ties related to the individual's occupation and hobbies, and so on.

The content characteristic that is important in describing a network is that of plexity. Here, one must distinguish between the different kinds of links that can exist between individuals, as, to use an example, the relationship between ego and his financial advisor X would differ depending on whether X is *only* ego's financial advisor, or whether she is also a friend or a neighbour. In the former case, where ego's relationship with X has only a "single content", the relationship is said to be "uniplex". However, when ego is connected to X in more than one capacity, the relationship is said to be "multiplex" (Milroy 1987: 51).

Milroy (1987: 52) observes that when a network is multiplex, it is also likely to be dense; and, furthermore, both of these network characteristics "increase the effectiveness of the network as a norm-enforcement mechanism" (this notion will be expanded on in due course – recall as an example, for the moment, the "peer supervision" of speech noted within vernacular cultures). Plexity, density and clustering can also serve as useful measures if one wishes to determine the level of integration of an individual into a community (Milroy 1987: 52).

5.3.2   Deployment of the social network in the social sciences

Vetter (2011: 208) states that the concept of the social network began to be used non-metaphorically and systematically in the social sciences in the 1950s, where it had been introduced by the Manchester School of Anthropologists (amongst whom were John A. Barnes, Elizabeth Spillius (née Bott) and J. Clyde Mitchell). The concept is said to have arisen from work done in sociology and social anthropology, particularly that of Georg Simmel (although many look to the work of Émile Durkheim that describes "egoistic suicide" as a result of an individual's low level of social integration as the "forerunner of social network theory" (Vetter 2011: 210)).

Milroy and Margrain (1980: 47–48) cite Spillius's (1957) study as a useful example of how network analysis can be used to explain social behaviour. This study investigated the "conjugal roles" of married couples, and found that where separate household responsibilities were

rigidly allocated to each member of a couple, the personal networks of each partner were dense, consisting of "long-standing relationships with people who also knew each other". Where responsibilities were shared equally, their personal networks were less dense (Milroy and Margrain 1980: 47). Spillius (1957) argues here that these network structures result in such behaviours because "dense, multiplex network[s]… form… a bounded group capable of imposing normative consensus on its members" (Milroy and Margrain 1980: 48).

In the same way that dense and multiplex networks regulate divisions of labour as discussed above, Milroy and Margrain (1980: 48) argue that they can also enforce linguistic norms. The networks within the communities investigated in the Belfast study were both dense and multiplex; therefore, investigating the level of adherence to vernacular norms in these communities was an excellent way to test the hypothesis regarding the relationship between network structure and linguistic behaviour.

5.4 Social networks and the community of practice (CofP)

The preceding sections of this chapter should suggest that the compilation of a social network is quite different to that of the speech community as described in section 4.3. This section, will make clear exactly how the social network and speech community differ as levels of investigation. Subsequently, the social network as a unit of analysis will be related to the CofP, a concept introduced into sociolinguistic research by Eckert and McConnell-Ginet (1992).

The social network and the speech community differ primarily in that the previous unit is internally defined by the individuals involved, whereas the former can be externally established by the researcher. Holmes and Meyerhoff (1999: 178) observe that "[o]ne's membership in a speech community depends on social or behavioural properties that one possesses". Thus, a speech community may be externally defined by the researcher according to, for example, shared linguistic norms (in line with Labov 2006), or as "a geographical area delimited by non-linguistic criteria, such as demography or socio-political boundaries" (Kerswill 1994 in Patrick 2002).

The constitution of a social network, however, cannot be externally determined, because it depends on the relationships that exist amongst individuals. It is therefore not possible for a

researcher to claim that the inhabitants of a small town together form one social network, as she cannot be aware of, without further investigation, the nature of social interaction within that town. Membership in a social network is therefore "internally constructed" (Holmes and Meyerhoff 1999: 179). The social network as unit of analysis will be shown, for this reason, to have more in common with the sociolinguistic unit of the CofP than the speech community.

5.4.1   Defining the CofP

Holmes and Meyerhoff (1999: 175–176) give three defining characteristics of the CofP as put forward by Wenger (1998). These are a) mutual engagement; b) a joint negotiated enterprise; and c) a shared repertoire of negotiable resources accumulated over time. Each of these dimensions will be further explained in this section.

The criterion of mutual engagement requires that members of a group, if it is to be defined as a CofP, interact frequently. Workers who share an office might be said to fulfil this criterion; whereas they would not with reference to those individuals working at the head office of the same company in another country. The requirement of individuals able to be defined as members of a CofP sharing a joint negotiated enterprise demands that individuals be working together and negotiating ways to achieve a shared goal. A sports team playing a match with the objective of winning could be said to fulfil this criterion. Finally, members of a CofP must have developed a shared repertoire of actions or words that is used amongst the group. These may be "linguistic resources" such as jargon or other "specialised terminology", or behaviours such as gestures used commonly enough to have become part of the community's routine interaction (Holmes and Meyerhoff 1999: 176). Members of the legal community who make use of legal jargon amongst themselves may be said to satisfy this demand.

Meyerhoff (2004: 528) sums up the definition of the CofP as follows: "the CofP is a domain defined by a process of social learning". That is to say, within a CofP, individuals learn particular kinds of behaviour that mark them as part of a particular group and distinct from other groups. In these terms, when language variation is studied from the perspective of the CofP, language use is understood as "but one vehicle by which speakers construct, maintain, or contest the boundaries of social categories and their membership in or exclusion from those

categories"; thus indicating that this perspective of language use falls squarely within the constructivist understanding of identity discussed in section 5.1 (Meyerhoff 2004: 526).

5.4.2   The CofP and the social network

The similarities between CofP analysis and social network analysis are, as Holmes and Meyerhoff (1999: 179) point out, numerous. In both cases, the researcher can make a distinction between core and peripheral members of the group, or, put differently, the researcher can determine how integrated into the community or network an individual is through observations of his/her behaviour (linguistic or otherwise) (cf. Milroy (1987: 30), where Labov (1972) was able to ascertain the degree of a speaker's integration into BEV culture by measuring how often copula deletion featured in his/her speech).

An important difference between the CofP and the social network is the exclusion, from the former grouping, of entirely peripheral individuals, such as those that would be included in an ego network as second order contacts, even though they have "limited or infrequent" contact with ego (Holmes and Meyerhoff 1999: 180). The CofP, in contrast, demands the particular kind of interaction detailed above amongst individuals if they are to be considered members of the CofP.

Thus, although CofP analysis and social network analysis are by no means to be considered equivalent, they are sufficiently similar that one should bear their similarities in mind when considering research produced in either field. Indeed, Meyerhoff (2009 in Vetter 2011: 215) argues that the CofP can be considered "as a specific kind of highly local network". The following section will present overviews of some significant studies done using the social network as an analytic tool within sociolinguistics.

5.5 Methodology employed in sociolinguistic social network analysis

To begin with, it must be established that network analysis as a method of studying language variation and change is applicable in contexts where, due to situational complications, normal correlational analysis is not an obviously useful methodology. These situations are primarily rural (although cf. Bortoni-Ricardo (1985), which takes a non-rural part of Brazil as location;

and Holmquist (1985), which applies correlational analysis to a small rural population in Spain), and do not show the defined levels of socioeconomic stratification that the urban sites of typical correlational studies do. In very small rural communities, such as that of Grossdorf in Austria (the location of Lippi-Green's (1989) study), income and status differentiation is not only less defined than it is in urban communities, but it also structured in different ways. Particularly relevant in this regard is that in small rural communities such as Grossdorf, and in impoverished communities such as the three Belfast communities investigated in Milroy (1987), much value is placed on an individual's level of integration into the community structures – i.e., how involved he or she is in community life (Lippi-Green 1989: 216). Social network analysis, with its focus on "interaction patterns", is a fruitful method of gaining insight into such concerns, and therefore allows the researcher to determine the social distinctions important within communities such as these (Lippi-Green 1989: 216).

Typically, for a researcher to be able to gather the data necessary to perform a social network analysis, she must be at least slightly familiar to the members of the community under investigation. For example, Milroy (1987) entered each of the three Belfast communities by taking the position of a friend of someone she knew who was part of the community; Lippi-Green (1989) spoke the dialect of the community she was entering and had been both socially and economically involved within the village for a number of years.

The necessity of obtaining background information about speakers' lifestyles and beliefs has already been highlighted above with reference to Labov (1963) and Blom and Gumperz (1971). Some of the categories of background information that are indispensable to an informative social network analysis relate to kinship, employment, voluntary association (which can refer to friendship or membership in a club or association) and geographical history (i.e. how long the speaker has been part of the community in question) (Lippi-Green 1989: 218–219).

Based on the above kinds of information, the researcher can develop a "network strength scale", which assigns a score to a speaker based on the structural characteristics of her network, namely density and plexity (cf. section 5.3.1) (Lippi-Green 1989: 217). The higher an individual scores on this measure, the more integrated into the community she is said to be.

The reference to 'scores' and 'measures' is a clear indicator that most social network analysis has a quantitative aspect to it that would serve to connect it to the research presented in chapter

78

four. Milroy (1987: 109) provides a comprehensive discussion of the methods followed in the Belfast study – certain linguistic variables are selected for investigation, and a speaker's use of the particular relevant variants is related first to his/her social characteristics (e.g. age, sex and area of origin) and then to his/her "level of integration into local community networks" (Milroy 1987: 134).

The following section will refer to various significant studies within sociolinguistics that have employed social network analysis in order to illustrate the kinds of research questions that can be answered using the technique.

5.6 Milroy (1987): *Language and social networks*

As stated above (see section 5.1), the Belfast study reported on in Milroy (1987) is generally considered to be the "first systematic account of the relationship between social network and language variation" (Vetter 2011: 209). As this work has already been extensively referred to in the preceding sections of this chapter, a brief overview of significant aspects of the study not yet covered in detail will be provided here.

5.6.1   Methodology of the study

As discussed above (see section 5.5), Milroy (1987) gained access to the Belfast communities of Ballymacarrett, the Hammer and the Clonard by establishing herself as a "second order network contact", or a friend of a friend (Milroy 1987: 53). It is important to point out that Milroy (1987) views the social network as "a mechanism… for exchanging goods and services", in addition to its function as a norm-enforcing structure (Milroy 1987: 47). For this reason, she considers the appeal of interaction with a second order contact for individuals whose first order zone is relatively impenetrable (as is often the case with dense networks) to lie in the fact that it broadens the range of goods and services to which the individual has access. Positioned as a second order contact and a potential provider of useful services,[16] the

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[16] For example, the fieldworker at one stage assisted a group of boys who ran a mobile disco by driving them and their equipment to the location of one of their performances, thus ingratiating herself with the boys' families (Milroy 1987: 56).

fieldworker was able to both observe and participate in "prolonged interaction" (Milroy 1987: 53), which she in turn recorded and analyzed. As remarked above (see section 5.2.1), the influence on members' speech exerted by the "rights and obligations mechanism" of a dense network is such that the presence of a single outsider in the form of the fieldworker has little noticeable effect when a prolonged interaction is recorded.

Recall the abovementioned concept (see section 4.4) of the sociolinguistic variable and its corresponding variants. Milroy (1987) investigates eight phonetic variables and their phonological variants found in the speech of 46 speakers drawn from all three of the Belfast communities investigated. For each variable, a "vernacular norm" was established (i.e. the variant most commonly appearing in vernacular speech), and speaker data was evaluated according to how closely the variants in their speech approximated to that norm, with a higher score indicating stronger adherence to the vernacular (Milroy 1987: 119). Importantly, data were drawn both from when speakers were using "interview style", and when they had been recorded speaking spontaneously.[17]

Subsequently, in order to determine the relationship between certain social variables (e.g. sex, age and area of origin) and linguistic variables, the mean scores of different subgroups were analyzed in order to establish whether the differences amongst them were statistically significant.[18] However, this is a less important aspect of the research, as what the study in fact set out to prove was that differences in scores of network scale strength are related to differences in linguistic score and, more specifically, that the higher a speaker's network score is, the higher her linguistic score would be (Milroy 1987: 150). In other words, the denser and more multiplex a speaker's network was, the closer to the vernacular norm her speech was expected to be. The Spearman rank order correlation test was used to determine the relationship between these two scores.

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[17] For a detailed description of the variables in question, see Milroy (1987) and J. Milroy (1981).

[18] For a discussion of the statistical methods employed, see Milroy (1987: 121–123).

5.6.2   Findings of the study

This section will, due to the focus of the chapter, only discuss the results relating to the Spearman rank order correlation test performed in order to establish the relationship between network density and plexity and adherence to vernacular norms in the three Belfast communities. In short, the researcher's hypothesis was confirmed: the results of the tests conducted indicated a "positive and significant relationship" between a speaker's network score and her language scores on the variables tested and, therefore, the importance of the study to sociolinguistic research is made clear (Milroy 1987: 153). However, it was found that for three phonological variables, network score had a significant effect "only when the informants [were] divided into age and area subgroups", which suggests that in particular areas and amongst particular age groups, the quality of the vowels in question was used to signal group membership (Milroy 1987: 153). In Milroy's (1987: 154) words, this is an indication that "not all speakers will relate the same linguistic variables to their personal network structure in the same way". It is also further indication of the complex way in which speakers use language to construct aspects of their identity.

5.7 Other examples of the use of social network analysis in sociolinguistics

This section will give brief overviews of the rationale and results of two other sociolinguistic studies that make use of social network analysis, namely Evans' (2004) study of the speech of Appalachian migrants in Michigan, and Edwards' (1992) study of the speech of inhabitants of a black inner-city neighbourhood in Detroit.

5.7.1   Edwards (1992): Sociolinguistic behaviour in a Detroit inner-city black neighbourhood

Edwards (1992: 93) introduces his article by stating that its primary goal is to determine the applicability of social network theory to the explanation of "sociolinguistic variation in a working-class urban neighbourhood in America". This study applies a theoretical aspect of the SNT approach termed the "Vernacular Culture Index" (VCI), which, similarly to Milroy's (1987) "network strength scale", measures the integration of a subject into her neighbourhood. However, Edwards' (1992) measure differs slightly in that, in addition to questions about where

81

the subject's family lives, where she works, and so forth, it incorporates questions that evaluate the subject's attitude towards her community; or, in Edwards' (1992: 96) words, her "psychological integration" into the neighbourhood.

What makes Edwards (1992) interesting to compare to Milroy (1987) is primarily the manner in which the former study's subjects were selected. Participants were selected by means of a "modified random sample of households" in the chosen neighbourhood. Selected households were informed by letter that an interviewer would arrive at their homes to conduct an interview within two weeks of the letter's receipt. This method is notably different to Milroy's (1987) method of introducing herself as the fieldworker into the communities as a "friend of a friend".[19] Consequently, because the fieldworkers in this study did not necessarily meet and interview the members of a subject's network, exact mathematical measures of density and plexity were not possible. Rather, participants were asked to respond to ten statements (rating them on scale of 1 to 4, with 1 indicating strong disagreement and 4 strong agreement) regarding their physical and psychological integration into the neighbourhood; thus, they were allowed to rate themselves with regard to the VCI, instead of having ratings assigned to them by the researcher. Edwards (1992: 96) motivates this approach by expressing his belief that " the respondent is the best judge of his or her attitude toward neighborhood values and the most knowledgeable expert on his or her demographic characteristics, social history, and other cultural experience".

Eventually, Edwards (1992) correlated respondents' VCI score to their use of BEV variants of specific linguistic variables. Similarly to the results obtained in Milroy (1987), it was indeed found that the higher an individual's VCI score, the more likely he/she was to use BEV variables.

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[19] Although note that the socio-political tensions in Belfast at the time produced very specific constraints as to who would be allowed into these communities, and under what circumstances (Milroy 1987: 44).

5.7.2   Evans (2004): The role of social network in the acquisition of local dialect norms by Appalachian migrants in Ypsilanti, Michigan

This section of the chapter will conclude with a discussion of a study of language change that employs social network theory. Evans (2004) investigates a community of migrants from the Appalachian region in the south of America in Michigan. The community was historically established by migrant workers drawn to the area in the early 1940s by the opening of a Ford Motor Plant. Evans (2004) considers whether the speech of these migrants reflects the dialect change that the speech of Michigan locals is undergoing, namely that of the Northern Cities Shift (NCS), which affects the location in which vowels are formed in the mouth.

Evans' hypothesis is that those individuals within the migrant community that have dense and multiplex networks will exhibit the least evidence of their speech undergoing the NCS. Thus, density and plexity were investigated using the same procedure followed in Milroy (1987) (cf. section 5.6.1). On this basis, the 28 participants in the study were awarded an "Appalachian integration score". Their speech was subsequently evaluated to determine the number of instances of /æ/ raising (a preliminary indicator of NCS) present.

It was found that only 9 of the 28 participants showed a preference for /æ/ raising. Sex and Appalachian integration were the only significant determining factors in this regard, with Ypsilanti women being more likely to raise the vowel and, as hypothesized, a higher Appalachian integration score was correlated with fewer instances of raising (Evans 2004: 162–165).

The studies discussed above highlight but a few of the possible applications of social network theory in sociolinguistic analyses of variation. The following section will present an overview of another useful application of social network theory in sociolinguistics, namely the investigation of linguistic variation in virtual networks.

5.8 Virtual networks in sociolinguistics: an introduction

Rheingold (2008: 3) describes a virtual community as "a group of people who may or may not meet each other face to face, and who exchange words and ideas through the mediation of

computer… networks". He states further that although such communities often have a "geographically local focus", they are typically supplemented by members from disparate locations, and held together by a common interest. Thus, virtual networks share some characteristics with both typical social networks and with CofPs, but are distinguished by virtue of their not-necessarily-local nature.

The Internet has, since its inception, been extolled as "a means for fostering social connection and community-building among geographically dispersed people" (Paolillo 2001: 180). These virtual communities, like their physical counterparts, also have particular social structures, which are made manifest in part through the ways participants use language. For this reason (and, additionally, because of the appeal of having access to "pre-transcribed data which are easily downloaded for analysis" (Herring 1996 in van Gass 2008: 430), sociolinguists have for some time been interested in computer-mediated communication (CMC) (Paolillo 2001: 180).

Sociolinguistic research into CMC has been carried out from interactional and ethnographic perspectives. For the purposes of this chapter, however, more interesting is research into virtual networks carried out from a social network perspective. The following section will discuss one such study, namely Paolillo (2001); giving a brief overview of the study's rationale, its method and its findings.

5.8.1 Paolillo (2001): Language variation on Internet Relay Chat: A social network approach

Paolillo (2001) seeks to apply a key theoretical assumption of Milroy and Milroy's (1992) model that explains how networks influences linguistic variation amongst individuals to language use within virtual communities, focusing specifically on one Internet relay chat (IRC) "channel". The assumption taken from Milroy and Milroy (1992) is "that standard variants tend to be associated with weak social network ties, while vernacular variants are associated with strong network ties" (further explanation of these concepts will be offered shortly) (Paolillo 2001: 180).

IRC is a "multi-user synchronous communication system" which was developed in 1988 by Jarkko Oikarinen (Reid 1991 in van Gass 2008: 430) (and, since then, has fallen out of

mainstream use). Users send and receive messages in real time; thus mimicking the flow of a spoken conversation, with interruptions and overlap. Sociolinguistic investigation into these conversations poses some problems to conventional methods, because it is not possible to determine anything about a user's social identity – users hide behind nicknames and, furthermore, they can mask their identities by using different computer accounts (Paolillo 2001: 181). Social network analysis fortunately offers a way around this obstacle, as "it permits social structure to be observed directly from patterns of interaction" between speakers (Paolillo 2001: 181).

Paolillo (2001: 185–186) notes that specific kinds of language use serve to differentiate IRC from other modes of CMC and, furthermore, to distinguish IRC channels from one another. (Channels on IRC are equivalent to different conversations, and are usually structured around a loose theme which is indicated in the channel's name, prefaced by a hashtag.) Paolillo (2001) investigates language use on one specific channel, namely #india, whose participants are primarily "expatriate South Asians or their children" (Paolillo 2001: 181). Much as in Milroy (1987), five linguistic variables are identified that seem to form part of the vernacular linguistic norms of the channel, namely "'r', 'u', 'z', obscenity and code-switching into Hindi and other Indian languages" (Paolillo 2001: 193). It is then hypothesized that those participants in #india who have stronger ties or more frequent interaction with other participants will adhere more closely to these vernacular norms, whereas those who interact less frequently will make use of Standard English and its norms more often (Paolillo 2001: 188).

An important point to note, before considering the findings of the study, is that channels are controlled by "operators" that usually form part of the channel's most active users. These operators are able to exclude users from channels based on their dislike of certain behaviours, and are also able to grant other users operator privileges (Paolillo 2001: 185). It is thus to be expected that a large portion of the activity in a channel will either stem from or be directed towards an operator.

After the data were collected (4296 turns in total), #india's participants were sorted into 16 groups based on a factor analysis, and the strengths of the ties between groups was calculated; ending up with a 'central core' group, K (consisting, unsurprisingly, of the highest number of operators); an 'outer core' consisting of three groups, G, H and J; five 'periphery' groups, B, C, E, I and L; and another seven groups that make up the 'outer periphery', A, N, P, D, M, F

and O (Paolillo 2001: 198). To relate this to the aforementioned hypothesis, K should have the highest frequency of use of the five linguistic variables identified above; with this frequency steadily decreasing until reaching D, M, F and O, where use should be least frequent (Paolillo 2001: 198).

Contrary to the results predicted by a simple application of Milroy and Milroy's (1992) model, tie strength was not found to correlate straightforwardly with use of the five linguistic variables on the #india channel. Paolillo (2001: 200–209) presents a comprehensive discussion of each variable's distribution pattern; this section will focus on only one of these variables, namely Hindi-English code-switching, because the explanation offered regarding its distribution is interesting from a social network perspective.

It was found that the 'central core' group K avoided code-switching, whilst G, a non-core central group, favoured it. Paolillo (2001: 202) argues that, although it is probably correct to suppose that code-switching would be prevalent on a channel serving members of a minority group abroad, the practice also seems to be a means of garnering attention from other participants. As mentioned above, K consists of a large proportion of operators, who play an important role within the channel and consequently are continuously engaged by participants who wish to curry favour with them. For this reason, they have less need for the attention-getting function of code-switching. A non-core group like G, however, has an unstable social position on the channel, and thus uses code-switching as a means of engaging others' attention (Paolillo 2001: 202).

The effect of power relations on linguistic choice that arises here with reference to the phenomenon of code-switching is a theme that does not come up overtly in Milroy (1987), Edwards (1992) or Evans (2004). Interestingly, the effect of mobility is also brought into consideration in this study: Paolillo (2001: 208) notes that the potential movement of participants from channel to channel means that they are connected to "overlapping, potentially conflicting centres of power, each of which may contribute its own linguistic norms". These kinds of issues, that also arise when mobility amongst speakers becomes the norm, will be considered in detail in the following chapter.

5.9 The dominant spatial conception employed within sociolinguistic social network analysis

From the discussion of the relationship between the CofP and the speech community in section 5.4 above, it is already clear that research that is primarily interested in the social interactions of individuals takes place on a much smaller scale than is found in, for example, quantitative studies that take the speech community as locus of investigation. The scaling down of the locus of investigation extends almost right to the level of the individual. This is a clear departure from the kind of quantitative investigation discussed in chapter four, where "[t]he scientific empiricism of the time meant that the regular, the general, and the neutral took precedence over the specific, the individual, and the unique" (Britain 2004: 607).

There is also more interest in what speakers *do* than into which broader social categories they fit. Amongst these broader categories, one must include a speaker's geographical origin, and his/her present geographical location. This is of course not to contend that a speaker's physical environment plays no role at all in social network investigation – for example, Johnstone (2011: 210) notes that particular class-linked spatial structures, such as densely-packed houses and the proximity of individuals' homes to their places of employment, contributed greatly to the plexity and density of speakers' social networks in Milroy (1987). Therefore, if it is to be unquestioningly accepted that these network characteristics influence the maintenance of the vernacular, it must also be accepted that spatial factors impact significantly on language use.

It must be acknowledged that the fact that aspects such as these are taken into account is an indication of the emergence of a more socially-influenced conception of space. Britain (2004: 604) describes social space as "shaped by human agency, by the human manipulation of the landscape, by the contextualization of face-to-face interaction". Thus, to refer again to Milroy (1987: 76–79) as an example, we may consider how the spaces within which the inhabitants of the three Belfast communities moved were demarcated and shaped by particular social forces, such as the sectarian conflict between Catholics and Protestants at the time that resulted in strong territoriality within communities. As Buttimer (1969: 423) remarks, strong ideas or perceptions regarding space such as these lead to tensions among "spatially juxtaposed groups", and this influences spatial movements which in turn (see above) influence network structure and, consequently, language use.

Interestingly, the roots of the concept of 'social space' can be traced back to almost the same roots as those of the concept of the social network. Buttimer (1969: 419) claims that the notion of 'social space' was first articulated by Émile Durkheim as, at least in part, an objection to the geographic determinism of the German Friedrich Ratzel, who had first propagated the concept of (*Lebens)raum*, which relates characteristics of human groups to the spatial units where they develop (see section 3.3 for a discussion of *Raum* and geographic determinism) (Encyclopaedia Britannica Inc. 2014a). Durkheim's original formulation of the concept did not allow room for physical influence on the social environment; subsequent definitions, however, seem to place emphasis on social space as a "mosaic of [socially organized] areas" (Buttimer 1969: 419), which resonates with the definition given by Britain (2004) above.

It seems evident that some change is present in the spatial conceptions dominant within linguistic geography, quantitative sociolinguistics and sociolinguistic social network analysis. Recall that the first two paradigms were found to favour the Euclidean understanding of space, despite the interest in the relationship between language use and social categories found in correlational sociolinguistics. The spatial conception dominant in the research covered in this chapter certainly understands space as contextualized by face-to-face interaction, in Britain's (2004) words – there is a recognition, in Edwards (1992) and Evans (2004) that speakers' social preferences shape where they move in physical space, and thereby affect the kinds of language use they are exposed to. Thus, the spatial conception here comes somewhat closer to Soja's (1989) notion of 'spatiality' as the outcome of both physical and representational forces – to use a rudimentary example, the neighbourhood studied in Edwards (1992) was seen to be a 'black neighbourhood'. In reality, this neighbourhood did exist, but was brought into existence and maintained by the way its inhabitants and outsiders represented it.

Kretzschmar (2011: 191) notes that the social network and the CofP can be associated with what Zelinsky (1992) refers to as "voluntary" and "vernacular/perceptual" regions. The development of the voluntary region, Zelinsky (1992 in Kretzschmar 2011: 188) explains, "is coeval with… the appearance of individuals who are essentially free agents, in spatial and other dimensions". These individuals are (relatively) able to self-select their "lifestyle, goals, social niche, and place of residence". As examples, Zelinsky offers "educational voluntary regions" – university towns such as Stellenbosch or Grahamstown – and "pleasuring places" which are popular holiday and recreational destinations, but also residential choices for those who can afford them (such as Paternoster and Plettenberg Bay). A vernacular or perceptual region is a

place that is defined by others' cultural perception of the behaviours characteristic of that area. Kretzschmar (2011: 190) uses as illustration the so-called "Bible Belt" in the southern United States – here, physical geography does play a role in the characterization of the space (by way of the physical 'Belt'), but the perception of the cultural nature of that area is often more definitive in characterizing the space.

Kretzschmar (2011: 191) notes that the CofP need not be anchored to a particular location, and the same is true of the virtual network, as discussed in section 5.8. However, the results obtained by Paolillo (2001) when attempting to apply to a virtual network the principles laid out by Milroy and Milroy (1992) for the study of speakers in a shared location may suggest that space is more important to social network theory than originally thought. In particular, Paolillo's (2001: 208) mention of the complications brought about by "overlapping [and] potentially conflicting centres of power", which is echoed in the importance placed on *one* set of vernacular norms in Milroy (1987) and, furthermore, in Blom and Gumperz' observation that vernacular users "generally were members of 'closed' networks" (1972 in Milroy 1987: 20), emphasizes that speakers should not be especially mobile (both physically and socially) if they are to be non-users of the standard variety of the language in question. This issue will be addressed further in the following chapter.

5.9.1   Making room for bi- and multilingualism

It was highlighted in chapters three and four (cf. sections 3.8.3 and 4.7.1) that when an investigator's focus is strictly on the traditional, endogamous speech community, bi- and multilingual communities are excluded, as they would preclude the existence of the "uniform structural [language] base that is necessary to the speech community (Kerswill 1994 in Mendoza-Denton 2011: 182). The social network as locus of investigation addresses this shortcoming, to an extent. Social network analysis has, according to Lanza and Svendsen (2007: 275), "proved particularly useful in explaining why speakers in *bilingual* communities maintain or change their language behaviour" (emphasis in original) (cf. Gal's (1978) study of the shift from German-Hungarian bilingualism to the exclusive use of German in the Austrian town of Obewart; and Li Wei's (1994) study of the language maintenance of Chinese migrants in Britain).

However, although Lanza and Svendsen (2007: 278) acknowledge the above point regarding the usefulness of social network analysis in the investigation of bilingual communities, they also note that much of the focus in early social network analysis was on network structure (i.e. density and plexity) and ethnic composition (i.e. as in Li Wei (1994), where the interest is in whether Chinese individuals are interacting primarily with other Chinese individuals or with Britons). This is, somewhat ironically due to social network analysis' attempt to move away from essentialist understandings of identity, due to a lack of nuance in the understanding of the relationship between ethnicity and language. Many approaches considering language choice in bi- and multilingual settings, Lanza and Svendsen (2007) argue, still "omit the qualitative aspect of social relations", and thus are not quite as different from typical quantitative and correlational language analyses as one might suppose at first glance; still seeing ethnicity as straightforwardly linked to a particular language (that is to say, they assume that Chinese people living in Britain are speaking Chinese and not English). In Lanza and Svendsen's (2007) study of linguistic and cultural maintenance amongst the Filipino community in Oslo, the researchers use a triangulated method of participant observation, ethnographic interviewing, and a questionnaire covering language choice patterns and social networks. In so doing, they aimed to acknowledge individuals' own agency in making language choices and, by doing so, shaping their own identities; thereby combatting the tendency towards essentialist understandings of language and ethnicity.

5.10   Difficulties associated with the dominant spatial conception in sociolinguistic social network analysis

This section will discuss two prominent issues that arise as a result of the dominant spatial conception employed within sociolinguistic social network analysis. The first, which was mentioned above and will therefore be only briefly treated here, is the issue of speaker mobility and speakers' conflicting relationships with different centres of power. The second, also alluded to above, is the treatment of speaker identities.

5.10.1 Speaker mobility and competing centres of power

Highlighting again the pervasive influence of Labovian thinking on sociolinguistics, Lanza and Svendsen (2007: 294) state that "an integral part of the notion of social networks and its

application to the study of language behaviour is that the members of the network share norms or ideologies concerning language and language use". Recall the difficulties that arose in Paolillo's (2001) study as a result of speaker movement across different IRC channels with different linguistic norms. This is a difficulty that can be similarly applied to non-virtual networks – for example, it was seen in Blom and Gumperz (1971) that the speakers with 'open' networks, who had moved away from their hometown to attend university and had there become more exposed to the norms of the standard language, made less frequent use of the Ranamål dialect.

Mobile speakers with open networks tend to have many 'weak ties', which are characterised by low levels of intimacy and emotional intensity between individuals, and also by smaller amounts of time spent together and fewer "reciprocal services" (Granovetter 1977: 1361). Weak ties, within sociolinguistic social network analysis, are supposed to make individuals more likely to move away from vernacular norms and towards more standard language use, as weak ties do not have much power in terms of norm-enforcement. (Although, consider Stuart-Smith et al.'s (2007 in Johnstone (2010: 388)) finding that those Glaswegians with the most open social networks "are maintaining distinctive Scottish features in their speech", whereas "less-mobile working-class adolescents are adopting non-local forms, which distinguish them from other Glaswegians". However, this seemingly binary characterization of network type and the fact that speakers' language use is being related to network structure in the essentialist manner that has already been criticized in this chapter would also seem to be problematic. The following chapter will explore language variation amongst mobile, 'weak-tied' individuals in further detail.

5.10.2 Social network analysis and the question of essentialism

It was noted in section 5.9 that some social network analysis lacks a qualitative aspect. For one, analyses that focus on the density and plexity of speaker networks ignore the content of these networks entirely; and analyses such as those that focus on language maintenance and shift within bilingual communities merely count the number of individuals of different ethnicities and/or language groups within a network and make judgments based on those numbers. In the latter case, an essentialist approach to identity is employed, where 'ethnicity' is "taken as a given, in terms of which individual's [*sic*] language behaviour can be analyzed" (Lanza and

Svendsen 2007: 295). This essentialist approach may also be criticized from the perspective of its interpretation of 'language', as in multilingual societies it becomes extremely difficult to designate an individual who speaks multiple languages (often all as mother tongue) as belonging to one specific language group.

Particularly relevant here is Rampton's (1995) notion of 'crossing', the full definition of which is given below:

> Language crossing involves code alternation by people who are not accepted members of the group associated with the second language that they are using (code switching into varieties that are not generally thought to belong to them). This kind of switching involves a distinct sense of movement across social or ethnic boundaries and it raises issues of legitimacy which, in one way or another, participants need to negotiate in the course of their encounter.

> (Rampton 1995: 485)

Thus, if we are to understand social networks as particular socio-spatial structures, it matters how we understand the social identities of network members. If they are understood as fixed; if, for example, members of particular ethnicities are understood to be members of a homogeneous and clearly-defined group, we risk ignoring the complexities and contestations that arise in individuals' construction of their identities through language use and other behaviours.

5.11   Conclusion

This chapter has discussed the analysis of language variation and change within sociolinguistics from the perspective of social network analysis. An overview was presented of key studies by Labov and Blom and Gumperz that, Milroy (1987) argues, provided the background for her ground-breaking social network study in Belfast. Subsequently, the concept of the 'social network' and its application in the social sciences was discussed, as well as its relation to another significant method of grouping within linguistics, namely the CofP. This was followed by an explanation of the methodology employed within sociolinguistic social

network analysis. Three examples of sociolinguistic studies employing social network analysis were then summarized, namely Milroy (1987), Edwards (1992) and Evans (2004), with a view to highlighting the kinds of research questions that can be answered within the field using social network analysis. Following this, the study of virtual networks within sociolinguistics was introduced, and an overview of Paolillo (2001) was given as illustration. The dominant conception of space within sociolinguistic social network analysis was then identified. Indicating a shift from earlier, Euclidean understandings of space in the language-geographical and quantitative sociolinguistic studies covered in the previous two chapters, it was found that the concept of 'social space' plays a pivotal role here, as much emphasis is placed on how, when and why individuals interact with one another, and how these interactions are both influenced by and in turn serve to influence speakers' movements through the space around them. The investigation of bi- and multilingual communities was also found to be more easily conducted at the level of the social network than at that of the speech community. Finally, issues arising as a result of the dominant conception of space within sociolinguistic social network analysis were identified. It was found that networks consisting of particularly mobile speakers and networks spread over great physical distances (such as virtual networks) are not entirely amenable to social network analysis because the desired single shared set of language norms and ideologies is compromised. Furthermore, issues around essentialist conceptions of identity were highlighted as problematically reducing the complexity of the socio-spatial milieu of social network analysis. It can be concluded that social network analysis, when employed as sole methodology, is too simplistic to account for the complex ways in which speakers choose to use their languages.

CHAPTER SIX

SPACE IN SOCIOLINGUISTICS BEFORE AND AFTER THE MOBILITY TURN

6.1 Introduction

The dawning of the 1980s is said to have marked the advent of another reshaping of global arrangements[20] captured under the label of "globalization" (Coupland 2010: 1). Although many scholars are sceptical as to the novelty of this "new world order" (indeed, Blommaert and Dong (2010: 366) remark that "[t]he current wave of globalization is best understood as a development *within* globalization", thereby highlighting the simplistic manner in which global interconnectivity had been understood in preceding years), what is clear is that the academic focus on changing global circumstances and the consequences of these changes was not quite as sharp before the term "globalization" was coined.

Globalization refers to "a transformation in the spatial organisation of social relations and transactions… generating transcontinental or interregional flows and networks of activity, interaction, and the exercise of power" (Held et al. 1999 in Fairclough 2009: 1). It is incontestable that the changes in social arrangements brought about by this new period of globalization, particularly in terms of intensified movements of people and the proliferation of communication technologies, have altered the ways in which people use language and the ways in which language varieties enter and circulate within societies (consider, for example, the new varieties entering communities as a consequence of migration, and how migrants' language use will change as they adjust to life in their new communities) (Blommaert and Dong 2010: 367). More than any prior change, this shift in social structure and subsequent alteration in people's language use would seem to necessitate a redefinition of the "theoretical and methodological toolkit" (Blommaert 2010: xiii) previously employed in sociolinguistics, as well as demand contemplation regarding how the variable of space should be conceptualized if one of its defining characteristics under globalization is that it is subject to change and flow.

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[20] Colonization is offered by Mufwene as an example of another phenomenon of this type (Coupland 2010: 1), and the Industrial Revolution in England and its resultant effect on rural and urban populations is offered by Beal (2009 in Johnstone 2010: 390)) as another.

In addition to the term "globalization" which captures some of the significant societal changes that have occurred recently; since the late 1990s or so, the social sciences have also been said to have undergone a "mobility turn" (also referred to as a "mobilities perspective" or "the mobilities paradigm" (Faist 2013: 1638)). This mobility turn is said to be focused on bridging the divide between transport research and social research; or, "putting social relations into travel and connecting different forms of transport with complex patterns of social experience conducted through communications at a distance" (Sheller and Urry 2006: 208). It is possible to read the mobility turn as a supplement to the spatial turn (discussed in section 1.5.4) – Sheller and Urry (2006: 208) state that although the social sciences have made strides towards incorporating spatial considerations into their approaches, they have still failed to investigate "how the spatialities of social life presuppose (and frequently involve conflict over) both the actual and the imagined movement of people from place to place, person to person [and] event to event". An increased focus on mobility is hoped to remedy this long-standing oversight.

Mobility perspectives claim to differ from theorizations of globalization, as they direct some of their analytical attention to the "multi-scalar, non-human, non-representational [see section 6.6.1], material and affective dimensions of human life" (Sheller 2011: 3). They are thus positioned as more nuanced than both approaches within globalization theory that simply stress the novelty of these current levels of mobility, and those that assert the dissolution of the nation-state and the rise of "a single system of mobile power" (Sheller and Urry 2006: 209).

It could be argued that globalization perspectives have been quite enthusiastically taken up within sociolinguistics – for example, within the field of linguistic landscapes, which arose within the 1990s and takes an interest in how different languages and varieties come together in new ways in particular spaces. Considerations of mobility in sociolinguistics have, however, been relatively absent up until roughly 2009 (assuming, as it seems reasonable to do, that Blommaert (2009) represents one of the very first considerations of mobility in sociolinguistics).

The remainder of this introductory section will characterize some of the effects this latest phase of globalization, as well as increases in mobility, have had on society; focusing particularly on those that are relevant to the study of language variation in society. Subsequently, an overview will be given of an early consideration of language and mobility in sociolinguistics, namely Blommaert (2009). This work highlights some of the key additions to the sociolinguistic

"theoretical and methodological toolkit" (Blommaert 2010: xiii) that occur frequently in sociolinguistic studies undertaken in globalized and mobile contexts. Examples of such additions are the 'truncated repertoire' and 'superdiversity'.[21] This section is followed by an examination of the role the nation-state has to play within sociolinguistics from a mobilities perspective – this debate represents one of the key contested points within globalization theory, and also has significance for the role space is understood to play within the social sciences and sociolinguistics. Here, the opposing perspectives of linguistic human rights and linguistic citizenship are considered. Then, an overview of a study (namely Stroud and Jegels (2014)) employing the novel approach of 'narrated walking' to the study of language and mobility is presented as an example of an innovative approach to the study of space, language and mobility. The chapter concludes with a discussion and criticism of the dominant spatial conception within sociolinguistic studies of mobility.

6.1.1   A characterization of globalization, and its consequences for research approaches in sociolinguistics

As highlighted above in Held et al.'s (1999 in Fairclough 2009: 1) definition of "globalization", some of the key aspects of this stage in human history are, firstly, a trend towards a removal of power from the nation-state to "global and regional alliances and organizations" (Phillipson 1998: 101), and secondly, an emphasis on mobility and flow as defining characteristics of present socio-cultural arrangements (Coupland 2010: 6). Both of these aspects have consequences for identity and, more specifically, *linguistic* identity: the increased salience of "diverse local and transnational identities" is thought to result in the decline of "both national identities and those broad class identities that were traditionally handled by the nation-state" (Mann 1997: 474). Here, a rising to prominence of the constructivist approach to identity is again seen, at the expense of the essentialist approach, which is fond of employing of given categories to characterize individuals (see section 5.1 for further discussion of this point). Additionally, in terms of language variation, it would seem that we are confronted with a "tension between cultural homogenization and cultural heterogenization" (Appadurai 1990 in Phillipson 1998: 101). This means that whilst some scholars may tend towards alarmist

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[21] Note that whilst the concepts of 'scale' and 'indexicality' are not new to sociolinguistics, they do enjoy particular prominence in recent sociolinguistic studies.

reactions to the "intrusion" of English alongside national and local languages in public spaces, it may equally be said that individuals' "linguistic worlds", particularly, according to Bolton (2012: 30), those of young people, are becoming more and more diverse.

Any emphasis on flow or movement; on persons who may be only loosely, if it all, connected to their location of origin, marks quite a change from previous moments in sociolinguistics, such as those considered in the preceding chapters, that "focused on static variation, on local distribution of varieties, on stratified language contact, and so on" (Blommaert 2010: 1). Blommaert (2009) uses a case study of a Rwandan asylum seeker's interaction with the British Home Office in order to highlight some of the problems that arise if older, static sociolinguistic approaches are applied in current mobile situations. This case study provides a useful entry point into a discussion of some recent sociolinguistic concepts that should affect current sociolinguistic understandings of space.

6.2 Blommaert (2009): Language, asylum and the national order

The primary obstacle faced by the Rwandan refugee in Blommaert (2009) (who is given the pseudonym of "Joseph") was the British Home Office's refusal to accept his Rwandan nationality on grounds of his lack of proficiency in Kinyarwanda and French, two prominent languages of that region. Blommaert (2009) uses Joseph's troubled, turbulent and diasporic history to explain why he was more proficient in varieties typically understood as belonging to other African regions. This "typical understanding" is precisely the problem with what Blommaert (2009: 415) terms a "sociolinguistics of languages", which understands standard, national languages as uncomplicatedly linked to nation-states (and, therefore, is again closely related to the modernist, essentialist understanding of identity). Joseph's scattered past that put him into contact with, amongst others, varieties such as Runyankole (most widely spoken in Uganda but also used by Rwandan refugees and migrants) and Swahili (Blommaert 2009: 417) led to the formation of a varied linguistic repertoire that is not easily categorized as linked to a particular origin.

Joseph's linguistic repertoire, it is argued, cannot be understood from the perspective of static languages and varieties that are confined to particular spaces; which is the kind of spatial perspective found in the language-geographical studies discussed in chapter three of the present

study. Blommaert (2009: 416) puts forward that "the sociolinguistic repertoire displayed by Joseph is indicative of *time*, not just of *space*; it connects to the *history* of a region in the past two decades, not just to the region" (italics in original). Thus, to replace the 'sociolinguistics of languages' favoured by those at the Home Office, Blommaert (2009) proposes a "sociolinguistics of speech and repertoires", which takes into account the realities of mobility and the fact that the linguistic resources an individual has at her disposal depend largely on the trajectory that her life takes.

Many of the research paradigms previously employed in sociolinguistics, relying as they did on essentialist understandings of the relationship between language and area of origin, cannot remain unchanged and still be fruitfully employed today. Indeed, many of the research questions asked in the early days of sociolinguistics – in dialect geography, in particular – are defunct, as to try to map the languages spoken across a particular area in almost any part of the world would now produce such a kaleidoscope of colour, pattern and variety as to be completely unreadable. Additionally, quantitative sociolinguistics' reliance on the speech community as scale of investigation becomes problematic: as Blommaert and Dong (2010: 382) remark, "in a context of mobility, the connection between a speech community and a set of established, and shared, forms of knowledge of languages and of language norms must be questioned". The social network, too, becomes a complicated level at which to conduct investigation – with the advances in communication technology, networks become vast, and it has been shown in section 5.8 above that virtual ties present a more complicated situation than those face-to-face ties of members of small, relatively isolated communities.

It would seem, from the brief survey given above, that many of the research approaches previously relied upon in sociolinguistics appear flawed when considered in the light of the present globalized day. However, this is not to say that some already-established sociolinguistic concepts cannot be usefully employed in designing new approaches to the study of language in society. The following section examines some established and some new concepts that have risen to prominence in recent sociolinguistic studies.

6.3 Rethinking language and society in the context of mobility and globalization

The necessity of a re-examination and re-definition of sociolinguistics' "theoretical and methodological toolkit" (Blommaert 2010: xii) has been argued for above, in light of the insufficiency of previously-employed approaches. This section, building on Blommaert's (2009) argument for a 'sociolinguistics of speech and repertoires', presents two crucial concepts within sociolinguistics whose understandings have had to be revisited in light of the increased movement of individuals through space. These two concepts are 'language' and 'society'.

6.3.1   'Language' versus 'repertoire', and the notion of 'truncated multilingualism'

The rise of mobility and the corresponding demise of traditional notions such as the 'speech community' and even that of the 'community of practice' (Busch (2012: 505) notes that at best, one may now speak of mobile individuals as belonging to "varying and deterritorialized communities of practice"; a view which would seem to pose challenges for analysis) has resulted in the destabilizing of the notion of 'language'. A 'language', it is argued by a number of present-day sociolinguists (cf. Busch (2012); Blommaert (2009), (2010)), is a static, stable unit; a bounded entity officially and politically defined (cf. also the discussion of 'disinventing and reconstituting languages' in Makoni and Pennycook (2007)). Correspondingly, knowledge of a language is seen to be an idealized, complete knowledge of the *entire* language (such as that possessed by Chomsky's (1965) famous 'ideal speaker-listener').

Following the mobility turn in the social sciences, Gumperz's notion of the 'verbal repertoire' has gained considerable traction in linguists' attempts to understand how speakers make use of their linguistic resources to participate in various activities in various places. The term "verbal repertoire", originally used by Gumperz to refer to "all the accepted ways of formulating messages in a particular speech community", incorporates all of a speaker's multilingual

knowledge into one linguistic "arsenal" from which s/he can pick and choose (Busch 2012: 504).[22]

The benefit of this conception of speaker knowledge is that it can incorporate, for instance, solely spoken knowledge of a variety, or knowledge of only business-related terms in a particular language. This kind of fragmented linguistic knowledge is what Blommaert, Collins and Slembrouck (2005: 199) call "truncated multilingualism", which the authors explain as "linguistic competencies which are organised topically, on the basis of domains or specific activities". Thus, the notion of 'repertoire' is flexible enough to comfortably allow for practices such as language crossing (referred to in section 5.10.2). Its emphasis is on linguistic knowledge as a resource that speakers can employ fluidly and creatively, in stark contrast with the emphasis on "structure, system and regularity" put forward by the notion of 'language' (Busch 2012: 506). This fluidity and acceptance of fragmentation is a useful addition to the conceptual apparatus of present-day sociolinguistics.

6.3.2 Superdiversity: a new understanding of societal space

The earlier mention in Held et al.'s (1999 in Fairclough 2009: 1) definition of "globalization" of the prevalence of "transcontinental [and] interregional flows and networks of activity" should give some indication that the configurations of society that must be dealt with in present-day social-scientific research are markedly more complex than they have perhaps ever been before. Part of this increase in complexity was captured by the discussion of the phenomenon of globalization and its accompanying movements and flows in section 6.1.1; however, to refer more specifically to the "demographic patterns" (Creese and Blackledge 2010: 550) that make up current urban societies, the term "superdiversity" has been coined by anthropologist Steven Vertovec (2007). The concept of 'superdiversity' has its origins in migration studies; where it refers to "a dynamic interplay of variables among an increased number of new, small and scattered, multiple origin, transnationally connected, socio-economically differentiated and legally stratified immigrants who have arrived over the last decade" (Vertovec 2007: 1024). Particular emphasis within the understanding of present-day societal configurations is on

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[22] Here, it must also be taken into consideration that when language is understood as a "set of resources", these resources are "socially distributed, but not necessarily evenly" (Heller 2000 in Creese and Blackledge 2010: 553) – an echo of Bourdieu's linguistic market.

'transnationalism', which refers to the connections migrant peoples keep with their "homelands or elsewhere in a diaspora" (Vertovec 2009 in Creese and Blackledge 2010: 551) that results in what Vertovec (2006 in Creese and Blackledge 2010: 551) refers to as a "*habitus* of dual orientation", and prevents widespread assimilation and homogenization of societies.

Taking into account the complexity of these "new social environments", Blommaert and Backus (2012: 6) note that "[p]eople can no longer be straightforwardly associated with particular (national, ethnic, sociocultural) groups and identities [and] their meaning-making practices can no longer be presumed to 'belong' to particular languages and cultures". This necessitates, along with a focus on the availability of linguistic resources rather than the possession of bounded languages mentioned in section 6.3.1, that linguistic practices be detached "from established associations with particular groups – such as 'speech communities' or 'cultures'" (Blommaert and Backus 2012: 6). If we are to speak of a 'speech community' at all under conditions of superdiversity, this can only be done *if* a group of people "establish[es] *in practice* a pattern of shared indexicalities" (italics in original) (Blommaert and Backus 2012: 6).

In superdiverse environments, one of the difficulties faced by governmental authorities is how to go about managing language in public spaces. The following section will present two important approaches to this question that have arisen within sociolinguistics, namely 'linguistic human rights' and 'linguistic citizenship'.

6.4 Managing multilingual spaces: linguistic human rights and linguistic citizenship

As discussed above, the superdiversity of many current contexts presents unprecedented challenges in the negotiation of peaceful communities where each speaker can feel that his/her linguistic needs are recognized and accommodated. Two approaches to this problem will be discussed in this section; one that employs a more static conception characteristic of pre-mobility turn perspectives, and one that presciently situates itself within the mobilities paradigm. The former approach is proposed within the framework of 'linguistic human rights'. The impulse behind this framework is primarily a protective one; stemming from a fear of the potential of language spread to wipe out local linguistic varieties. Phillipson (1998: 102) argues, as a justification for the active preservation of smaller varieties, that [t]he

homogenization that McDonaldization entails is… incompatible with the maintenance and promotion of cultural diversity".

The concept of 'linguistic human rights' is said to have developed after the Cold War as part of "the quest for a new society based on human rights" (Kontra, Phillipson, Skutnabb-Kangas and Várady 1999: 1). Kontra et al. (1999: 6–7) define access to linguistic human rights as, "in the case of minorities, access to at least two languages, the mother tongue and an official language". It is to be noted that linguistic human rights are most important in relation to minority language groups, whose first language is not the first language of the majority of the state in which they live, and who are therefore "constructed as deficient, suffering from lack of knowledge of the dominant language", and in a position where they have to be catered for and helped by the state (Kontra et al. 1999: 6). The example that Kontra et al. (1999) offer of a state that is doing right by linguistic minorities is South Africa – it is claimed that South Africa is, at the level of policy, "one of the few countries" that has understood that linguistic human rights "are a necessary tool that can assist in the prevention of problems and empowerment" (Kontra et al. 1999: 2).

South Africa's institution of 11 official languages has, of course, not met with universal acclaim, particularly within the country itself. Kamwangamalu (2000: 50) remarks that

> [C]ontrary to the constitutional principle of language equity, which stipulates that 'all official languages must enjoy parity of esteem and must be treated equitably', language practices in virtually all of the country's institutions point to a different reality: the languages are unofficially ranked hierarchically and constitute a three-tier, triglossic system, one in which English is at the top, Afrikaans is in the middle, and the African languages are at the bottom.

Kamwangamalu (2000) highlights here the all-too-frequent discrepancy between de jure and de facto language policies; a criticism that can also be applied to the bureaucratic awarding of linguistic human rights. Stroud (2001) applies this criticism specifically to mother tongue education programmes in Africa, remarking that "[a] general rule is that mother-tongue programmes and policies seldom deliver what they promise" (Stroud 2001: 339). Part of the problem is that knowledge of the dominant language (or "metropolitan language", in Stroud's (2001) terms), is "projected" as the "gatekeeper… to good jobs and tertiary institutions"

102

(Bristowe 2013: 62), thus relegating indigenous and minority languages to the status of parochial oddities.

For these reasons, Stroud (2001: 343) proposes that problems regarding the implementation of minority languages at the official level are in fact linked to broader complexes of problems "that centre on the distribution of power and economy in society, and ultimately turn on issues of democracy, equity and access to political voice for speakers of indigenous languages". Notions of institutionalized linguistic human rights are flawed, therefore, because they "tend to promote selective agency" and they "ignore the material and economic constraints in the implementation of rights" (Williams and Stroud 2013: 291). Furthermore, rights perspectives tend to lean on an essentialist understanding of language and identity, where languages are understood to be simplistic "*markers* of ethnicity" (italics in original) (Stroud 2001: 347) (see one criticism of this essentialist approach to identity in section 5.10.2).

A perspective put forward as an alternative to that of linguistic human rights is that of 'linguistic citizenship', where "citizenship", in this case, is defined as "a capacity to act" (Osborne and Rose 1999 in Williams and Stroud 2013: 292) that "is not produced or determined by any one social identity or political alignment" (Rose 2000 in Williams and Stroud 2013: 292). *Linguistic* citizenship places emphasis on how "everyday linguistic practices", used by speakers as they act as agents on a day-to-day basis, can form "acts of citizenship" that assert speakers' presence in the "official, wider sphere of the public realm" (Williams and Stroud 2013: 293). Thus, no prior permission from the state is necessary – citizens can use the linguistic resources at their disposal and, in so doing, demand recognition from the authorities.

The contrast between linguistic human rights approaches and linguistic citizenship approaches, therefore, is a contrast between state-centred and individual-centred approaches. This is perhaps another indication of a shift from investigation at the level of the community, where the community is seen to be a readily understandable compilation of easily definable speaker groups (characteristic of those approaches discussed in chapters three and four), to a focus on the individual speaker as self-defining.

6.5 The mobile citizen: understanding individual responses to language in perceived space

The previous section discussed understandings of linguistic human rights and linguistic citizenship in multilingual communities in present-day sociolinguistics, where the former was found to be a state-centred approach that contrasted with the latter's individual-centred perspective. This section will expand on the investigation of the individual's experience of language in the spaces that surround them. In particular, the praxeological approach ("praxeology" referring to "the branch of knowledge that deals with the nature of human action" (Oxford University Press 2014b)) put forward in Stroud and Jegels' (2014) study of the construction of what the researchers term "place", equated with 'perceived space' in this section, will be considered as an innovative methodological approach to the study of space in sociolinguistics.

6.5.1 Stroud and Jegels (2014): Semiotic landscapes and mobile narrations of place: performing the local

A point made early on by Stroud and Jegels (2014: 2) is that space itself is mobile, and changes over time as buildings, transport infrastructure, and the movement of individuals "alter the physical, cultural and linguistic landscape of a site". This premise serves to place into question the value of a simplistic investigation, such as that found in the field of LL, that focuses on enumerating the languages used on "public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings" (Landry and Bourhis 1997 in Bolton 2012: 31). To supplement this enumeration, it must be remembered that spaces and their meanings are constructed, and that signage – or indeed any semiotic artefact – contributes to the organization of space; that space determines how signage is read; and that "movement through space is organized… by means of… engagement with situated material semiotic artifacts [*sic*]" (Stroud and Jegels 2014: 3).

It should at this point be noted that Stroud and Jegels (2014), in line with Mondada (2011), are interested in the study of *place*, or what would in this study be termed "perceived space". They propose a praxeological approach to the sociolinguistic study of place; one that "views place as a socially accomplished and embodied *practice*, and that takes cognizance of the importance

of mobility in local place-making" (Stroud and Jegels 2014: 7). A methodology that can employed from a praxeological standpoint is the commonplace act of walking – in particular, 'narrated' or 'commented' walking allows a researcher to record individuals' narrated experiences of place as they unfold (Stroud and Jegels 2014: 8).

Again, before proceeding, it should be acknowledged that this particular study is probably closer to what Trudgill (1983) terms "wholly sociological", as it is interested in "people's practical reasoning and common sense knowledge of their society and the way it works" (cf. section 1.5.1). However, as Stroud and Jegels (2014) relates to the interaction between language and space, and proposes a novel methodology for the investigation of this interaction, it would be remiss not to make brief mention of it.

Essentially, the study "focuse[s] on the various ways in which signage is read and its themes reflected in and incorporated into personal narratives of place as residents move through township space" (Stroud and Jegels 2014: 24). It is shown how 'semiotic artefacts' such as signs are affected by and in turn affect individuals' experiences of particular spaces – for example, it was shown that "signage occasionally provided a semiotic framing for what was spoken about, and for how interpersonal relationships and local interaction orders were structured" (Stroud and Jegels 2014: 25). Put differently, the semiotic structuring of different Manenburg spaces plays a role in whether a citizen (be she from Manenburg or elsewhere) feels 'at home' or 'out of place', where the latter feeling is "one of the key obstacles to any sense of belonging, agency and participation" (Philips et al. 2007 in Stroud and Jegels 2014: 27); all aspects that have been marked as desirable in the preceding discussion of linguistic citizenship.

What Stroud and Jegels (2014) highlights is an inroad to a 'sociolinguistics of mobility', rather than the 'linguistics of locality' that focuses on static semiotic items, placed in one location to remain there for the foreseeable future (Stroud and Jegels 2014: 26), which relates, in turn, to the sociolinguistics of speech and repertoire that Blommaert (2009) advocates over a sociolinguistics of languages. In the course of this kind of research, the potential for change through the agency of citizens is highlighted, thus contributing to the conceptualization of linguistic citizenship.

6.6 The dominant spatial conception employed within studies conducted in globalized and mobile contexts

It must first be noted that, although "[g]lobalization theory has often posited 'the decline of the nation-state'" (Coupland 2010: 6), and corresponding proclamations of a new "global society" have been made (Mann 1997), the issues around language under the current era of globalization that have been discussed in this chapter do not reflect a complete diminishing of focus on speaker origin; nor do they indicate a complete weakening of the nation-state. With regard to the latter, recall Blommaert's (2009) analysis of language policing by authorities in the United Kingdom seeking to determine whether an individual was eligible to receive refugee status. In relation to the former observation, it is relevant to consider the sentiment expressed in Mann (1997: 473) that "[s]ince ethnicity looms large in scenarios of 'postmodern fragmentation'", national*ism* is often seen as "resurgent in the world today". This is indicated in the interest accorded to speaker networks (cf. section 6.2.1) that take into account the capacity, made possible by communications networks, for numerous and significant transnational relationships to be maintained (cf. Androutsopoulos' (2006) investigation of online linguistic diversity among diasporic groups in Germany).

As a foundational remark, it must be recognized that the work discussed in this chapter is no longer employing the notion of the 'traditional region' in their understandings of the nation-state (if indeed they even pay any attention to the scale of the nation-state, and if indeed it were ever plausible to apply this label to the nation-state). The traditional region, recall, was defined by Zelinsky (1992 in Kretzschmar 2011: 188) as a culture area that is "relatively self-contained, endogamous, stable, and of long duration"; a definition that overlaps strongly with Euclidean understandings of space. With its more permeable boundaries, both in physical terms and in terms of the ubiquity of long-distance communication, the present nation-state is closer to Zelinsky's definition of the "voluntary region"; in fact, it would seem to be far closer to Zelinsky's definition than the regional understanding prevalent in sociolinguistic social network theory. As defined in section 5.9, the development of the voluntary region "is coeval with… the appearance of individuals who are essentially free agents, in spatial and other dimensions". These individuals are (relatively) able to self-select their "lifestyle, goals, social niche, and place of residence" (Zelinsky 1992 in Kretzschmar 2011: 188). Although it might be questioned how "free" individuals may actually be in their geographical self-determination

(consider again the situation of Blommaert's (2009) asylum seeker, and the similar plights of other destitute individuals who must go where they are admitted entry), the emphasis on mobility in Zelinsky's notion of 'free agents' certainly resonates with the superdiverse conditions found in the majority of today's metropolises.

Interesting as the discussion of the make-up of the nation-state under current globalization may be, very little sociolinguistic research, of course, takes place at this scale. (This is stated, however, with one exception in mind – theorizing around the notion of 'linguistic human rights' takes place, typically, at the level of the nation-state, which would pose numerous problems for the maintenance of such rights were the nation-state to dissolve under globalization as predicted by some scholars (cf. Stroud 2001: 349)).

Thus, whilst the research paradigms discussed in chapters three and four (and, to a lesser extent, five) of the present study "ignored or trivialised the importance of the systematic movement of people for work and family life, for leisure and pleasure, and for politics and protest" (Sheller and Urry 2006: 208), the mobility turn within the social sciences no longer allows stability and sedentarism to be treated as normal. The question that arises now is where sociolinguistic studies of mobility fall within Britain's (2004) three categories of spatial understanding. Studies such as Blommaert (2009) that emphasize the importance of social forces in determining individuals' life trajectories would seem to be employing a social conception of space – put differently, the spatial experiences of people are "shaped by human agency" (Britain 2004: 604). There is again an aspect of perceived space here, in that mobility, whether voluntary or not, is influenced by perceptions of those in control of the spaces being left and/or moved towards. The spatial conceptions prevalent in sociolinguistic social network analysis and in studies conducted within a mobilities paradigm might therefore be said to differ primarily in their focus on movement. Resultantly, some of the concepts employed in the latter approach differ, as shown in section 6.3, from those employed in the earlier approach.

Studies such as Stroud and Jegels (2014), both those that do and do not employ praxeological approaches, clearly employ the notion of 'perceived space' and therefore have a strong phenomenological aspect to them. This approach connects strongly with geographer Nigel Thrift's 'non-representational theory', which is presented as a theoretical approach that can encompass the complexities inherent in the study of anything that both acts and is acted upon by humans. An overview of non-representational theory is given in the following sub-section.

6.6.1   The relevance of Thrift's (2008) *Non-Representational Theory*

The emergence of practice approaches in variationist sociolinguistics can be tied to a broader interest in practice in the social sciences, which is theorized perhaps most notably in the work of geographer Nigel Thrift under the designation of "non-representational theory". "Non-representational theory", according to Lorimer (2005: 83), "has become an umbrella term for diverse work that seeks better to cope with our self-evidently more-than-human, more-than-textual, multisensual worlds". Much of the impetus around the development of the theory centres on the opposition between the 'deadening' effect of theory and the incontestably 'living' practices in which humans engage. Theory – that is, attempts to 'represent' what it is to be human in society – tends overwhelmingly to simplify, to reduce, and to exclude much of the "excessive and transient aspects of living" (Lorimer 2005: 83). A non-representational approach (or what Lorimer (2005) prefers to term a "more-than-representational approach") prioritizes "how life takes shape and gains expression in shared experiences, everyday routines, fleeting encounters, embodied movements" and so on and so forth, and offers "an escape from the established academic habit of trying to uncover meanings and values that apparently await our discovery, interpretation, judgment and ultimate representation" (Lorimer 2005: 84).

Non-representational theory is said by Thrift (2008: 8) to concentrate on practices, where "practices" are defined as "material bodies of work or styles that have gained enough stability over time, through, for example, the establishment of corporeal routines and specialized devices, to reproduce themselves" (Vendler 1995 in Thrift 2008: 8). Science under this definition is then seen to be a practice, and the definition could also be applied to language. Language fits particularly well into Thrift's (2008: 8) other definition of practices as "productive concatenations that have been constructed out of all manner of resources and which provide the basic intelligibility of the world" (recall especially here Blommaert's (2010) emphasis on language as a resource).

The contrast between representational and non-representational theory is a contrast that is evident in the differences between the focus on simple material evidence of language in a space (the enumeration of the occurrences of different languages, found in approaches such as LL) and the more multimodal/phenomenological interpretations of the "human-sign interface" (Zabrodskaja and Milani 2014: 2) characteristic of recent research into language in the public

space. It must be noted, of course, that focus wanders off from investigating language variation for purely variationist purposes – most recent spatial approaches seem to be more interested in varying *experiences* of language than in the simple differences themselves.

6.7 Difficulties associated with the dominant spatial conception in sociolinguistic studies conducted within globalization and mobility paradigms

It is a criticism quite readily levelled against anything even vaguely postmodern/poststructuralist that the claims made are too non-specific to be criticized (for a famous expression of this criticism, see the 'verifiability principle', as explained in Black (1934)). Those approaches discussed in this chapter that focus on perceived space would fit into the field designated by the term "poststructuralist", which typically designates a disbelief in the possibility of stable meaning. Furthermore, as its name suggests, many of the structures used to understand language in society are set aside in poststructuralist approaches – recall the questioning of even the concept of 'language' in Makoni and Pennycook (2007); and the disintegration of the traditional speech community discussed in section 6.3.2. One of the difficulties associated with a focus on space as characterized by flow and flux, and a reluctance to enact the "deadening effect" of representational approaches (Lorimer 2005: 83), is that the results obtained from studies following these approaches are rarely generalizable. That is to say, it is unlikely that such investigations would end up producing models (like Hägerstrand's diffusion model referred to in section 4.5.1) that can be straightforwardly applied in any context. However, this is of course not really a *weakness* in these more recent approaches, as something that must be recognized about perceived spaces in particular is that they have very particular characters (recall Horvath and Horvath's (2002) concept of 'place effects' that take into account the social and historical forces at work in a location, amongst other things) (see section 4.5.2.2). In addition, and perhaps in consolation to those linguists that still hold to Labov's view of "an advancement towards quantitative techniques [being] a sign of maturation" (Labov 1980), the fact that *models* may no longer be readily produced does not mean that innovation in methodology is lacking. Stroud and Jegel's (2014) use of 'narrated walking' is one example of a method that opens up rich new areas of consideration in the exploration of language and perceived space; within the field of LL, Milani's (2014) investigation of the sexed nature of signs is also an innovative intersection between LLs and

queer theory. Inter- or transdisciplinary approaches such as these send a hopeful message about the ability of sociolinguistics to cope with the complexity presented by the present world.

6.8 Conclusion

This chapter has discussed recent contributions in sociolinguistics during the current era of globalization, focusing on sociolinguistic issues arising from heightened speaker mobility. By way of introduction, an overview of Blommaert (2009) was presented, and used as an inroad in order to explain some significant concepts within globalized and mobile sociolinguistics, namely those of 'repertoire' and 'superdiversity'.

Following this discussion, focus was shifted to the management of multilingual populations in present-day superdiverse states. Here, the notions of 'linguistic human rights' and 'linguistic citizenship' were contrasted, and it was found that linguistic human rights approaches are nation-state dependent and encourage passivity in citizens; whereas citizenship approaches (although perhaps idealistic, considering the *laissez-faire* political attitude of some) promote agency in minorities, and break free of reliance on the nation-state. The focus on the individual within the notion of 'linguistic citizenship' is carried through in the discussion of Stroud and Jegels (2014), which presents the method of 'narrated walking' in collecting data regarding individuals' experiences of their surroundings. Then, the dominant spatial conception employed within sociolinguistic studies conducted within globalization and mobility paradigms was explored. Importantly, the demise of the speech community, highlighted by both Busch (2012) and Blommaert and Backus (2012), was highlighted, which in turns indicates the demise of Zelinsky's 'traditional region' and the rise of the 'voluntary region' (although the use of the term "voluntary" was identified as problematic, as many human migrations are forced and determined by impersonal governing bodies). Finally, issues arising as a result of the dominant spatial conception(s) within present-day sociolinguistics were identified. It was noted that research of the nature discussed in this chapter is unlikely to produce universally-applicable models; however, this was dismissed as likely reflective of a more honest approach to the nature of society. Additionally, recent sociolinguistic approaches were identified as being indicative of promising trans-disciplinary strides being made within sociolinguistics. It was also acknowledged that innovative methodologies (such as Stroud and

Jegels' (2014) 'narrated walking') are forthcoming in current investigations of language and space; at the expense of widespread interest in 'purely linguistic' variation.

CHAPTER SEVEN

RESULTS, DISCUSSION AND CONCLUDING REMARKS

7.1 Introduction

This final chapter will discuss the significant theoretical findings of the study and, for summarization purposes, present these in tabulated form. This will be followed by a discussion of the results, where they will be related to the literature covered in chapter two, and examined for both their weaknesses and their possible implications. Finally, the study's ultimate conclusions will be drawn, and recommendations for further research will be made.

7.2 Results

It will, at this point, be useful to remind the reader of the research questions this study aims to address. The questions follow below. Subsequently, a discussion of the results found in the study in relation to the first two questions is presented; the third question, which demands a speculative answer, is addressed on its own in due course.

1. To what extent is there evidence of a shift in the conceptualization of 'space' in variationist sociolinguistics?
2. If there is indeed evidence of a change, how did it factor into the research paradigms that informed significant research in variationist sociolinguistics? In other words, how has variationist sociolinguistic research been shaped and constrained by our understanding of the effect of space on linguistic behaviour?
3. Finally, to what extent is space as a variable still relevant in current and future variationist-sociolinguistic investigation?

7.2.1   Shifts in the dominant conception of space within variationist sociolinguistics over time

In response to the first research question: the discussion presented in this study makes it clear that there has indeed been a change in the conceptualization of 'space' over time as employed

112

in variationist sociolinguistics. From linguistic geography, which, in essence, employed a Euclidean spatial conception that viewed space as a container for human life (although some acknowledgement was made of the power of the particular character of a region to shape human development in that area – cf. the discussion of *Raum* in section 3.3), some shift occurred with the advent of the quantitative paradigm in sociolinguistics. Here, and particularly within those works of Labov's that were discussed, the spatial is disregarded in favour of a focus on the social – speakers' use of particular linguistic forms was understood as directly correlated with their position in fixed social categories such as class and gender, and these categories are not understood as being subject to fluctuation according to *where* they are in operation. Thus, space is still understood in Euclidean terms. Moreover, particularly within studies of language spread such as Trudgill (1974a), the Euclidean understanding of space is also prevalent, as space, in terms of distances and barriers, is seen to be uniform in character and to have the same effects universally on the diffusion of linguistic innovations.

Turning our attention then to the paradigm of sociolinguistic social network analysis, a more nuanced conceptual interplay between social and Euclidean space is found. Here, social space is understood as slightly more dynamic, as much emphasis is placed on how and with whom speakers choose to interact in reference to their linguistic choices. Euclidean space does, nonetheless, still play a role, as distance and speaker mobility affect how speakers are oriented towards what may be termed "linguistic centres of power" – i.e., in close-knit neighbourhoods such as those in Milroy (1987), the linguistic norms that govern are likely to be more homogeneous than those found in a network whose speakers are spread across a large, bustling city. Finally, within studies conducted within the contexts of globalization and mobility, there is some prevalence of the concept of 'social space', which is supplemented by a pronounced and relatively novel focus on perceived space. In terms of social space, it is recognized that much of individuals' relationships to the spaces that surround them are "shaped by human agency" (Britain 2004: 604). With reference to perceived space, there is a strong interest in how individuals experience the spaces around them, and how these experiences in turn act to affect how those spaces are represented through narrative and discourse.

7.2.2 The influence of dominant spatial conceptions on research design in variationist sociolinguistics

The preceding chapters of the present study have attempted to show that how space has been understood in variationist sociolinguistics has affected research design, particularly in terms of directing the researcher's focus. With reference to linguistic geography (particularly in the German tradition), an understanding of regions as contained spaces, inhabited by one community speaking a unique dialect worthy of preservation in the face of the threat of standardization, motivated researchers to record those dialects (see section 3.3.3). The quantitative paradigm, interested both in the correlations between social characteristics and language use and in language change, took as its location of investigation cities, which were seen to be home to "fluid, heterogeneous, complex communities" (Britain 2010: 144). In addition, the view of the traditional speech community as "self-contained, endogamous [and] stable" (Kretzschmar 2011: 188) led, to a large extent, to the side-lining of correlational studies of bi- and multilingual communities, and communities undergoing language shift.

Sociolinguistic social network analysis, too, relies on very specific spatial circumstances to be able to produce useful insights, thus limiting the kinds of research in which it can be applied. It has been highlighted above (see section 5.10.1) that members of a network, in order to influence one another's linguistic behaviour, must share "norms or ideologies concerning language and language use" (Lanza and Svendsen 2007: 294). This requires that speaker networks also be relatively "self-contained, endogamous [and] stable" (Kretzschmar 2011: 188); and means that the language use of particularly mobile speakers with predominantly weak ties to other speakers is not amenable to analysis using this methodology.

Finally, the works covered in chapter six show, perhaps most clearly, that researchers' understanding of the nature of space must influence the research designs they employ. An acknowledgment that mobility and not stability is the norm amongst speakers, coupled with the recognition that communities are no longer "self-contained" and "endogamous" (Kretzschmar 2011: 188) but superdiverse, leads to the advocacy of a 'sociolinguistics of speech and repertoire' rather than a 'sociolinguistics of languages'. Furthermore, researchers interested in individuals' perceptions of the spaces within which they move would be inclined

to employ methodologies, such as Stroud and Jegels' (2014) 'narrated walking', that capture the phenomenological interplay between space, language and experience.

The table below presents a summary of how dominant conceptions of space within variationist sociolinguistics have changed over time. It also indicates other spatially-infused concepts within both the social sciences and sociolinguistics related to the dominant conception of space within each paradigm, and points out the shortcomings of these research paradigms that result from the understanding of space in use.

Table 1: Changes in dominant conceptions of space over time in variationist sociolinguistics

Research paradigm	Dominant spatial conception employed in relation to distinction in Britain (2004)	Relation to any other spatial conception in the social sciences	Relation to any other conceptual level of investigation in sociolinguistics	Shortcomings and flaws
Dialectology	Euclidean space	The traditional region; the nation-state; *Raum*	Speech community	Isoglosses overlap and intersect – drawing boundaries between languages and dialects is nigh-impossible
Quantitative sociolinguistics	Euclidean space, as the social and the spatial are completely severed from each other	Traditional region	Speech community	Bi- or multilingual speech communities are often excluded from investigation; space is treated as abstract and general and "place effects" are ignored; social categories are

				understood as assigned at birth and fixed
Sociolinguistic social network analysis	Social and Euclidean space	Voluntary/perceptual region	Community of practice	Tends to employ an essentialist conception of identity and therefore ignores the constructed and performative aspect of the social; has most explanatory power in reference to non-mobile speakers

Studies conducted within globalization and mobility paradigms	Social and perceived space	Voluntary/perceptual region	Focus is largely on the individual	In methodological approaches to perceived space, generalizability is lacking

7.3 Discussion

This section will seek, firstly, to explain why the observed changes in dominant spatial understandings in variationist sociolinguistics may have occurred. In order to do so, reference will be made to the trajectory that conceptions of space have followed in the broader social sciences. Subsequently, possible implications and weaknesses of the results presented in the previous section will be detailed.

7.3.1   Explanation of results obtained

Although it is difficult and perhaps impossible to do so precisely, an attempt to demarcate in time the sociolinguistic research paradigms discussed in this study would result in something along the lines of the following: Linguistic geography enjoyed its heyday from roughly the mid-nineteenth century up until the advent of World War II. Quantitative sociolinguistics gained popularity in the 1960s; the serious, systematic application of social network theory in

sociolinguistics began around the 1980s; and, finally, sociolinguistic studies focusing on mobility have been around since roughly 2009.

In chapter two, Britain (2004) and Johnstone's (2011) identified stages in the development of spatial thinking were detailed. The results obtained in this study agree, to an extent, with both of these authors: for instance, it was indeed found that before World War I, within linguistic geography, political boundaries were taken to be co-extensive with language boundaries (Johnstone 2011: 205). Furthermore, the advent of quantitative sociolinguistics in the 1960s also coincides with the broader quantitative trend in the social sciences at that time identified by Britain (2004: 607). Beyond the 1970s, an attempted integration between purely Euclidean and purely social notions of space is also seen, with a pronounced emphasis on perceived space, as much interest is accorded to how particular spaces and their linguistic aspects shape speakers' attitudes and experiences. This coincides with the post-1980s human-geographical understanding of spatiality "as a contingent effect" (Britain 2004: 610–611) that does not determine *a priori* the nature of a particular space and the people within it, but is also not simply the product of social interaction.

Turning now to explanation: the devaluing of political boundaries (found around the decline of linguistic geography) is explained by French literary critic Bertrand Westphal (in Tally 2013: 12) as a result of the "cataclysmic restructuring of societies" resulting from World War II. In addition, the atrocities perpetrated during the war led to a scepticism regarding narratives describing history as a "progressive movement towards ever greater freedom and enlightenment" (Tally 2013: 12), and thereby "made possible the valorizing rereading of space" (Westphal 2011 in Tally 2013: 12). It is also noted that, after 1945, the economic advantage enjoyed by the United States meant that the majority of social scientific research was centred here. In addition, partly in reaction to the Cold War, investment in the sciences skyrocketed, and this investment was extended (in smaller, but still significant amounts) to the social sciences. Consequently, a "further" and "fuller scientization of the social sciences" was encouraged (Gulbenkian Commission on the Restructuring of the Social Sciences 1996: 34–35), thus favouring the emergence of quantitative trends in sociolinguistics.

In relation to the questioning of the ability of quantitative methods to account for social realities that is co-extensive with the emergence of sociolinguistic social network analysis, one may also refer to the criticism of post-World War II social sciences' claim to universality from,

amongst others, non-Western and feminist scholars. Its profession to be an "unbiased interpretation of the human world" was also called into disrepute (Gulbenkian Commission on the Restructuring of the Social Sciences 1996: 51). This criticism, although seen to be a continuation of that of thinkers as diverse as Rousseau, Marx and Weber, is said to have gained more traction with the rise of East Asia as a "new, very powerful locus of economic activity" in the 1970s (Gulbenkian Commission on the Restructuring of the Social Sciences 1996: 52).

The focus on the complex spatial configurations of society under globalization from the 1990s onwards, finally, may be related, as it has been in section 6.1, to changes in "spatiotemporal perception in the twentieth and twenty-first centuries" brought about by advances in travel, communication and the Internet, as well as the spread of mass media and market forces (Tally 2013: 14–15).

Also to be related to the results of this study is the spatial turn discussed in section 1.5.4, which signifies not only the resurgence of space in social theory, but also "the move from a "container" image of space toward an acknowledgement of its mutability and social production" (Kümin and Usborne 2013: 307). It has been argued above (see section 1.1) that sociolinguistics has only quite recently seen an increased focus on the role space has to play in its research; however, the discussion in section 7.2 above has indicated that sociolinguistics experienced a move away from a container image of space in its dominant spatial conception. It is therefore reasonable to conclude that the spatial turn has not been absent from sociolinguistics over the last few decades; but merely largely un-commented upon.

7.3.2   Weaknesses and limitations

The present study has one primary limitation, and that is its "selective and eclectic" (Blommaert 2010: 21) treatment of each of the research paradigms discussed. Due to the scope of the investigation, it has only been possible to refer to a few key studies within each paradigm in order to determine its dominant spatial conception. (Indeed, for the sake of its argument, entire paradigms, such as LL and studies such as Pennycook (2010) that focus on language and locality, have been omitted). For this reason, it could be argued that were one to consult a substantial number of studies conducted within each framework, it might not be possible to identify a single dominant spatial conception employed within the framework; and therefore,

the development in spatial thinking in variationist sociolinguistics that is argued for above might no longer stand quite as securely as it seems to at present.

On a conceptual level, two limitations are evident. The study might be criticized on the basis of the tripartite distinction (found in Britain 2004) that it employs in order to categorize different understandings of space. Doubtless, there are other, finer conceptual distinctions that can be captured by the term "space" ('mental space', the space of cognition and representation, is one mentioned by Soja (1989: 120)), and it is possible that these other distinctions could also be found to be applicable to some frameworks in sociolinguistics. However, it can be argued that the three distinctions employed in this study subsume finer distinctions and distinctions referred to by another name – mental space, indeed, would seem to coincide with "perceived space" as defined by Britain (2004).

Secondly, and finally, one might question the neutral and homogenizing nature of the spatial conceptions used in the study. As mentioned in the previous sub-section, claims to universality within the social sciences have been criticized by, amongst others, non-Western and feminist scholars. It should be remembered that, for example, perceived space will differ markedly according to whom it is being perceived by; for this reason, treating perceived space as one unitary concept is problematic.

7.4 Implications and significance

It was mentioned in chapter two, as an argument supporting the importance of considering the role space has to play in sociolinguistic investigation, that one of the key problems that arises in relation to space in sociolinguistic research is "how to obtain data on language use and language competence that are both reliable and comparable (across space)" (Auer and Schmidt 2010: ix). This thesis is, admittedly, not the work that will shed decisive light on this question, but by demonstrating how spatial conceptions over time have influenced the results produced in different kinds of variationist sociolinguistic research, it is hoped that it has contributed to clarifying a topic that has previously been treated in largely incomplete and unsystematic ways. Additionally, by presenting a partial chronicle of the history of space in variationist sociolinguistics, the study is significant in that it can serve as a basis for those working in the field to reflect on the directions this relatively young discipline has taken.

In terms of the implications of the study, the third research question posed, namely "To what extent is space as a variable still relevant in current and future variationist sociolinguistic investigation?", must still be addressed. The present study has found that a possible trend in current sociolinguistic research is to employ a phenomenological approach when investigating the influence space has on how individuals perceive and use their languages. Space, then, would seem to relevant as a variable in the form of 'perceived space'; an understanding of space that takes into account its socially constructed nature, but also acknowledges the affect space has on how individuals experience the environments within and through which they move. It is also, however, still relevant in the form of social space, as human agency (and, perhaps even more significantly, the agency of corporations and other transnational operations) continues to affect how individuals move within and experience space. Thus, it is undeniable that space as a variable is still relevant, and perhaps even more relevant than before the changes wrought by globalization – a consideration of how multilingual, superdiverse states should be managed makes this evident (see section 6.4).

7.5 Final conclusions

The present study sought to address the problem of a lack of a coherent account of the influence of the various dominant conceptualizations of 'space' on research design throughout the history of variationist sociolinguistics. In order to do so, four significant research paradigms that have arisen in the discipline over the last 150 years or so were singled out and analyzed in order to determine the dominant spatial conception employed in each, and how this conception influenced and limited research conducted within each paradigm.

The first research paradigm analyzed was that of linguistic geography, which investigated linguistic variation primarily between different regional dialects. Here, space was found to be understood in Euclidean terms, as a 'container' home to a specific people with a unique dialect. As such, it was thought that the boundaries between linguistic containers could be relatively easily drawn. However, many researchers were confronted with isoglosses that overlapped, and languages that did not fit neatly into separate containers, but were scattered over space.

The second paradigm examined was that of quantitative sociolinguistics. Studies both from a correlational angle (such as much of Labov's work) and those that investigated language spread

122

were investigated. Space within quantitative sociolinguistics was found to be understood, again, from the perspective of Euclidean space, as the focus within correlational sociolinguistics was found to be entirely on social factors that were considered to be aspatial. The communities under investigation were typically thought to be relatively insular, but it was acknowledged that social stratification limited the spaces in which individuals moved. As a consequence of this spatial understanding, non-insular and homogeneous communities (such as bi- and multilingual communities) were often neglected. There was, in addition, an essentialist understanding of the relationship between the social characteristics (e.g. age and gender) of an individual and the linguistic forms he/she employed.

The third paradigm investigated was that of sociolinguistic social network analysis. The dominant spatial conception within these kinds of studies was found to be that of social space, as much emphasis is placed on how and with whom individuals interact, and how these interactions shaped their language use. However, this was supplemented by an acknowledgment of the role Euclidean space has to play, as distance, for example, has a strong weakening effect on the norm-enforcement mechanisms of social networks. Again in this case, the essentialist understanding of the relationship between social categories and language use was found to be limiting. In addition, social network analysis was found to be most useful in closed communities of non-mobile speakers, thus limiting its applicability in the current world.

Finally, studies conducted within the contexts of mobility and globalization were considered. Within these paradigms, the conceptions of 'perceived space' and 'social space' were found to be favoured. In terms of the former, the interest is largely in how individuals' environments, which are socially constructed to some extent, shape their linguistic experiences and attitudes. With reference to the latter, it is recognized within these kinds of studies that human agency is a powerful factor in shaping both how and where individuals move. The largest shortcoming, within investigations of perceived space, is that the generalizability of the insights delivered is limited.

The above makes clear both the changes in spatial conception that occurred in variationist sociolinguistics over time, and the manners in which these conceptions have shaped and limited the research conducted.

7.6 Recommendations for further research

Further research into the role space has to play in sociolinguistics could consider other sub-fields within sociolinguistics. In addition, a wider sample of sociolinguistic studies could be considered in order to support the conclusions drawn about the dominant spatial conceptions within different paradigms in variationist sociolinguistics. An interesting transdisciplinary inroad could be made if space within areas such as queer linguistics were also considered, thus combatting the homogenizing and neutralizing effect of the spatial conceptions employed in this study. Finally, perhaps a closer engagement with the field of human geography in particular would deepen the insight into how space has functioned within other areas in the social sciences, thus allowing a greater number of comparisons to be drawn between sociolinguistics and other social scientific disciplines.

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