Collecting sociolinguistic data: Some typical and some not so typical approaches

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Abstract

This article provides a survey of some data collection techniques employed in the analysing of social variation and language use. An outline of the methodology applied in early dialect studies and sociolinguistic interviews will be followed by a discussion of polling techniques including new and innovative rapid surveys used in data collecting. In addition, some of the findings obtained through employing different methods will be presented to illustrate their effectiveness in identifying and describing social variables.

This paper explores the three main types of data collection techniques: surveys, interviews, and polling techniques. An examination of survey methods used by traditional dialectologists will be followed by a review of interview techniques employed by researchers working within the variationist paradigm. Particular emphasis is given to the sociolinguistic interview, the mainstay of modern sociolinguistic research. In the final section of the paper there is a survey of recent polling methods used to collect data on the social dimensions of language variation.

Traditional dialectology

>From the beginning of the 19th century dialectologists have been working systematically on regional variation in language. Employing paper and pencil, and later tape recorders, researchers recorded differences in pronunciation, grammatical construction, and lexicon in the speech of rural inhabitants in France, Germany, England, Scotland, and America (Chambers & Trudgill, 1980, pp. 18-23; Petyt, 1980). Often, after decades of research, a monumental publication was produced which contained hundreds of dialect maps on which lines (called isoglosses) indicated the geographical limits of words, grammatical structures, and sounds. For example, although there are no current dialect maps of New Zealand or Australia, in the case of the former one could envisage such a map with isoglosses separating parts of Otago and Southland from the rest of New Zealand. These lines would indicate distinctive features of the area such as the presence of post-vocalic /r/ in words such as ‘car’, the vowel sound in words such as ‘can’t, dance’,
morphological features such as the past participle after ‘needs’ and ‘wants’ (e.g., ‘The cat wants fed’), as well as a few lexical differences such as ‘bach’ in most of New Zealand vs ‘crib’ in Otago and Southland (Bartlett, 1992; Bayard & Bartlett, 1996, pp. 26-27; Bauer, 1997; Gordon & Deverson, 1998, pp. 126-129). Although no other dialect areas have been identified within New Zealand, Bauer & Bauer’s (2000) current dialectology research on lexical variation may provide data for analysing additional regional variations in New Zealand English (see below).

Dialectologists employ two major techniques of data collecting, both of which involve 'direct probes' to elicit dialect forms (Wolfram & Schilling-Estes, 1998, p.21). Some of the earlier dialectologists used postal questionnaires mailed to selected individuals (e.g., teachers); others used the 'on the spot phonetic transcription' method, by travelling from one rural community to another to collect information (see Chambers & Trudgill, 1980, pp. 18-23; Milroy, 1987, p. 10). The questionnaires were very detailed, often taking days, sometimes even weeks, to complete. For example, the questionnaire for the Dictionary of American Regional English contained over 1,800 questions (Wolfram & Schilling-Estes, 1998, p. 126).

There are several features characteristic of traditional dialectology. Earlier research tended to focus on a few older (mostly male) speakers (Chambers & Trudgill, 1980, p. 33) who lived all of their lives in the community in which they were born. The justification for this research attitude was the belief that these speakers had the ‘purest, most vernacular’ speech. However, because these speakers were living in rural areas, language use in urban centres was typically not considered. Another important feature of early dialectology was its theoretically biased approach. Dialectologists believed that through detailed documentation of the regional speech of older speakers living in isolated areas it was possible to show irregularity in language change (Kurath, 1972), thus refuting the then popular hypothesis concerning the regularity of sound change (the Neogrammian Hypothesis).3

By the early 20th century, dialect research had shifted from a diachronic to a synchronic focus. It has become concerned with the distribution and variation of certain lexical or phonological items in population centres, rural and urban alike. While the social background of the various dialect...
forms was also taken into consideration, this was only of secondary importance (Wolfram, 1997, p. 108). With increasing mobility and urbanisation, more complex dialectology methods have been devised. The Linguistic Atlas of the United States, for example, includes all population centres and represents individuals of different ages of three social types based on their social and educational backgrounds (Kurath, 1972).

**The sociolinguistic interview**

A major shift in research techniques occurred with the publication of Labov’s work on English in New York City (1966). His description of urban speech was based on a study of 88 individuals from a socially stratified random sample, consisting of male and female speakers from three age groups and four social classes (identified on the basis of education, occupation, and income). Labov showed that variation in the speech of the individual was a reflection of variation in the social group by illustrating how the most extreme case of stylistic variation in the use of /r/ by a single speaker was in conformity with the overall pattern exemplified in group scores of the different social classes (summarised in Chambers, 1995, pp. 18-21).

Labov’s work on language use in New York City provided a blueprint for current methods of investigating variation in language use. As part of his research on the Lower-East side of New York City, he developed the sociolinguistic interview, the corner-stone of sociolinguistic research today. The sociolinguistic interview aims at eliciting linguistic data in different speech contexts. It comprises an informal part (consisting of free conversation) for eliciting vernacular or local use, and a formal part (consisting of a reading passage, word lists and minimal pairs⁴) to elicit various degrees of formal or standard language use.⁵ Labov (1966) identified nine contextual styles from casual to formal, and associated all nine types with channel cues (ie, cues that signal change from one style to another). For example, by initiating a topic such as childhood games or traumatic life-threatening events the interviewer may achieve changes in the speech of the interviewee resulting in a less formal style, approximating or arriving at the desired more natural, vernacular speaking mode. The technique of inducing style change with this kind of prompt has been widely employed in sociolinguistic research (for example, Bayard, 1995; 3 In Labov (1994) there is an in-depth discussion of the Neogrammician Hypothesis.

4 A minimal pair represents two words of distinct meaning that differ in only one sound, ie., ‘pet/bet’, ‘bit/bet’.

5 Labov acknowledged that it would not be possible to observe the use of the pure vernacular during an interview because of the formal nature of the setting. In a later publication (1972) Labov termed this situation the “observer’s
Holmes & Bell, 1988, Appendix). Thus the sociolinguistic interview usually starts with an informal free conversation, followed by increasingly formal language tasks that demand more attention to language use on the part of the respondent. The interviews often take up to two hours to complete (Holmes, Bell & Boyce, 1991).

Free conversation aims at eliciting 'natural speech', while the formal part of the interview is designed to elicit specific data that do not necessarily occur during the course of casual conversation. For example, as the vowel in the word ‘fish’ occurs frequently enough in English speech, free conversation suffices should the linguist aim at examining this vowel. However, certain other linguistic items may need careful interview design in order that sufficient data may be obtained for study. Word lists and minimal pairs can be constructed in such a way as to contain multiple tokens of the linguistic variable to be investigated.

In a sociolinguistic interview there is usually a minimum of five speakers per cell, with studies typically ranging from 48 to 120 respondents per community (Wolfram & Fasold, 1974). Earlier studies relied on random sampling for data collection (Labov, 1966), whereas later researchers have tended to use judgement samples (see Wolfram & Fasold, 1974, p.38), or networking (Milroy 1987, pp. 35-36). The sample is typically stratified on the basis of gender and age, and often includes social class (Labov, 1972; Trudgill, 1974) and/or ethnicity (Holmes, Bell & Boyce, 1991; Horvath, 1985). Of the social variables, age is often one of the most important. Bayard (1995, p. 65) claims that age appears to be the most important variable in New Zealand English, and Clarke (1991, p. 112) makes a similar statement about one variety of Newfoundland English.

An important feature to be acknowledged in connection with the sociolinguistic interview is the role of the interviewer. Some researchers have begun to explore the interviewer effect. For example, Trudgill (1986), has found that he was accommodating toward the speech of his
interviewees (i.e., his own speech tended to replicate that of his subjects); however, few researchers have been able to assess the role of the interviewer effect. Bell & Johnson (1997) devised a study to examine interviewer accommodation. In their study, four subjects, two Maori and two Pakeha, were interviewed three times. In the first interview, the interviewee was matched for gender and ethnicity with the interviewer. In subsequent interviews, interviewees differed from their interviewer in gender or ethnicity. This case study illustrated how the use of ethnic markers correlates with the gender and ethnicity of the interlocutor.

Although interview techniques in sociolinguistic research are acknowledged to be an effective tool for collecting sociolinguistic data, their limitations must also be recognised. Some types of linguistic variants are difficult or even impossible to collect by using the method of the sociolinguistic interview. For example, because certain vernacular forms may occur only in peer conversation, even minimal pair tests fail to elicit the forms the researcher may need to study in order to resolve an important theoretical question (Edwards, 1986; Milroy, 1987, pp. 51-54). An illustration of this is the study of the hypothesised merger of two vowels in Belfast inner-city speech where the distinction between the vowel of ‘meet’ and ‘meat’ is retained only in spontaneous conversation (described in Milroy & Harris, 1980). Further, while interview techniques work well for small samples, broad-based samples are difficult to administer through sociolinguistic interviews.

**Polling Techniques**

Research on language variation may necessitate the examining of broad-based samples across a speech community, such as a city or even an entire state. Accordingly, a number of extensive large-scale data collection techniques have been developed. Some of these use a combination of short sociolinguistic interviews and more formal reading tasks. For example, for the past eight years, third year undergraduate linguistics students at the University of Canterbury have each recorded half-hour interviews and word lists with two subjects. These recordings were later analysed by a trained phonetician and incorporated into the ONZE (Origins of New Zealand English) database. The recordings provide real-time data on language change in New Zealand English (Trudgill et al., 1998). In most broad-based research projects, data collection is restricted to formal reading tasks. For example, in their research on ‘ear/air’, Gordon and Maclagan (1990, p. 133; Maclagan & Gordon, 1996, p. 127) employed word lists and sentences as data collection methods in Christchurch classrooms. Every five years since 1994, 14- and 15-year olds from four
schools in Christchurch have participated in their study. The results show that sound changes occur at different rates in different words. For example, although the change was complete for the word pair ‘really/rarely’ by 1983, the merger for other word pairs (eg, ‘hear/hair’) was not complete until five years later (1996, p.133). Ways of employing the word-list polling technique are illustrated by research on regional variation undertaken by Horvath & Horvath (2000). In their broad-based survey aimed at studying the loss of /l/ (described as l-vocalisation) in words such as ‘call’ and ‘cold’, people in public places were approached and asked to read from a word list. The researchers used this method to trace the apparent global loss of this sound in four cities in Australia and four in New Zealand (they are currently investigating l-vocalisation in England), and results indicate that this process appears to be more advanced in New Zealand than in some regions of Australia.

Postal questionnaires serve as another polling technique designed to survey numerous speakers across large communities using the written medium. Chambers (1998), for example, investigated regional variation within Canada by mailing out 2000 questionnaires to a large, heavily populated area in Southern Ontario, Canada, and the northern United States. These questionnaires contained 11 demographic and 76 linguistic questions aimed at clarifying the use and pronunciation of selected lexical items. Pronunciation is communicated in the questionnaires by items prompting the speaker to fill in the blanks: e.g., ‘Does the ending of AVENUE sound like [ ] you or [ ] oo?’. Their findings based on the evaluation of the data in the questionnaires show pronunciation differences between towns on either side of the Canada-US border. Bauer & Bauer (2000) have also employed a written postal questionnaire in their investigation of regional variation in children’s vocabulary. They collected lexical items from Year 7 and 8 students at 150 New Zealand schools, focussing on words for common games and greetings, as well as words for feelings and behavioural stereotypes (Bauer & Bauer, 2000, p.8). The teachers recorded their students’ responses and reported the findings to the researchers. A preliminary analysis of the children’s playground vocabulary points to a potential dialect boundary between the north (as far south as the volcanic plateau), the large central region (which includes parts of the South Island), and the southern region comprising largely East Otago and Southland. This is illustrated in Bauer and Bauer’s telling example of the catching game: “In the north, the game is

10 The study has been extended to other areas as well. For a survey in Quebec, see Chambers & Heisler (1999). The project website is www.chass.utoronto.ca/~chambers/dialect.topography.html.
usually called *tiggy*. In the central area (North and South of the Cook Strait), the game is called *tag*. In Southland and Otago, it is generally called *tig*”.

A more recent form of postal questionnaire is the e-mail survey. Simon & Murray (1999), when studying different pronunciations of the vowel in the word 'suite' in the United States, found that e-mail requests proved to be a convenient way of gathering a considerable amount of data in a relatively short time. They also found that respondents often were prepared to supply detailed responses over the Internet (for example, providing illustrations of the use of words in different contexts).

In-person and telephone polling techniques have also been widely used in sociolinguistic research (Labov, 1984; Milroy, 1987, p.73). *Telsur* is a large-scale telephone survey of speakers from all major urban centres in the United States and Canada (Ash, nd; Boberg, 2000, p.9). The number of speakers per centre varies with population size, but in all cases at least one female between 20-40 years of age was included. The telephone survey has been used to create a dialect map of the USA and Canada which is scheduled to appear later this year (Labov, Ash & Boberg, forthcoming). This survey allows the researcher to record actual sounds, rather than written representations of them. The data has been analysed both impressionistically by listening to the tapes, and acoustically by focussing on the formant frequencies of the vowels. The survey contained words that had sounds of particular interest. These include vowel mergers (such as the mergers of the vowels in word pairs such as ‘caught/cot’ and ‘pen/pin’) and vowel shifts. An example of the latter is the *Northern Cities Chain Shift*, a vowel shift changing the quality of the vowels of younger speakers in Northern US cities. Others such as Herold (1997) have used telephone surveys to investigate the effect of migration patterns on the spread of sound changes. Her research in small towns around Philadelphia provides detailed documentation on the geographical spread of the merger of the vowels in words such as ‘caught/cot’.

A different large-scale polling technique was effectively employed by Bailey & Bernstein (1989). In addition to their own survey of 500 college and high school students from all parts of Texas, the researchers also availed themselves of the surveys of a state-wide polling agency - thus obtaining data from an additional 1000 randomly selected individuals - in order to gather

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11 Vowel quality is determined by the formant (or resonance) frequency pattern.
12 Information about this project is available on the University of Pennsylvania web-site ([www.ling.upenn.edu](http://www.ling.upenn.edu)).
Another frequently employed polling method is the in-person rapid and anonymous survey where individuals are unaware that their speech is the focus of study. By conducting in-person rapid and anonymous surveys, it is possible to observe individuals in public places, like streets, malls etc., and to note aspects of their speech. There are two types of this technique: the elicited and the unelicited type. In the unelicited type the researcher observes the set of speech events (a summary of this technique can be found in Gardner-Chloros, 1991). It was employed in Labov’s study (1966) in which he examined a series of speech events in different settings, and in Gardner-Chloros (1991, 1997) in which the researcher recorded occurrences of code-switching in a Strasburg department store. The second in-person rapid and anonymous survey is the elicited type. This is illustrated in Labov’s classic study of language use in three socially stratified department stores in New York City (Labov, 1972, Chapter 2). In this study, Labov’s questions posed to randomly selected employees triggered responses revealing of the use of the sounds under investigation. Additional studies using similar methods include the collecting of speech samples from streets: for example, Labov 1984 (in Philadelphia), Kontra 1995 (in Hungary), Lawson-Sako & Sachdev 1996 (in Tunisia), Bourhis 1984, Moise & Bourhis 1994 (in Québec). Because individuals are unaware that their interaction is the subject of study, the recordings are examples of 'natural speech'. The analysis relies on subjective assessments of the social characteristics of the speaker, and 'on-the-spot' phonetic judgements (see Labov, 1972, p. 61 for a critique of this method). In order to ensure accurate measurements, the linguistic variables selected for study need to be highly salient.

Another variation of the in-person rapid survey is illustrated in Starks (1998) in which the researcher polled over 1000 speakers on the streets of Auckland in the course of her investigation of the occurrence of an apparent shift in the pronunciation of the /s/ sound. In this study, the speech was recorded, and individuals were aware that their speech was under analysis. The study shows how the recorded rapid survey may be applied in the analysis of less salient variables in the community.

The recording of the rapid surveys also facilitates a comparison between the speech of the interviewer and interviewee. McRobbie-Utasi and Starks (1999) illustrate, through an analysis of
the pronunciation of one of the vowels in the speech of the interviewer, how the rapid survey can be used to analyse accommodation to different respondents during a brief encounter lasting less than a minute. For example, the findings showed that the interviewer tended to make slight adjustments according to the gender of the respondent: when interviewing a female respondent, the vowel tended to be more centralised than when interviewing a male respondent. The results illustrate the usefulness of polling techniques for analysing both the interviewer and the interviewee.

**Conclusion**

It has long been recognised that in any language there exists a great degree of variation. Members of a speech community are aware and make use of the different possibilities that the variability of language offers. In acknowledging the role of variability in language, linguists aim at identifying and accounting for a systematic pattern that governs the occurrence of the variants. This task can only be achieved by collecting representative data that reveal patterns of distribution with regard to the employing of the variants under investigation. The present study provides a brief survey of the most widely used techniques of sociolinguistic data collection. It discusses the approach of traditional dialectology, the use of the sociolinguistic interview, and the most frequently employed polling techniques including recent advances in rapid and anonymous surveys. The suitability of the various methods for studying variation in language are illustrated through their application in sociolinguistic studies.

**References**


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13 The linguist Edward Sapir at the beginning of the 20th century stated that …"everyone knows that language is a variable" (Sapir, 1921, p.147).


