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Abstract

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Notes

- 1 For the purposes of this discussion I will leave to one side the whole question of archival material created in electronic form.
- 2 Indeed you may be dealing with records in another language. For instance there is good deal of correspondence in Maori in Archives New Zealand: much, but not all, of which is accompanied by an English version prepared by official translators.
- 3 These are expanded on in the American Historical Association's Statement of Standard of Professional Conduct.
- 4 Given that this volume focuses on qualitative methods I have omitted discussion of how a researcher might extract and present in tabulated form quantitative information derived from archival sources.

Using Questionnaires in Qualitative Human Geography

Pauline M. McGuirk and Phillip O'Neill

CHAPTER OVERVIEW

This chapter deals with questionnaires, an information-gathering technique used frequently in mixed method research that draws on quantitative and qualitative data sources and analysis. We begin with a discussion of key issues in the design and conduct of questionnaires. We then explore the strengths and weaknesses for qualitative research of various question formats and questionnaire distribution and collection techniques. Finally, we consider some of the challenges of analysing qualitative responses in questionnaires and we close with a discussion of the limitations of using questionnaires in qualitative research.

INTRODUCTION

Qualitative research seeks to understand the ways people experience the same events, places, and processes differently as part of a fluid reality; a reality constructed through multiple interpretations and filtered through multiple frames of reference and systems of meaning-making. Rather than trying to measure and quantify aspects of a singular social reality, qualitative research draws on methods that reveal and interpret the complexities, context and significance of people's understanding of their lives (Eyles and Smith 1988). Within this epistemological framework, how can questionnaires contribute to the methodological repertoire of qualitative human geography? This chapter explores the possibilities.

Commonly in human geography, questionnaires pose standardised, formally structured questions to a group of individuals, often presumed to be a sample of a broader population (see chapter 5). Questionnaires are useful for gathering original data about people, their behaviour and social interactions, attitudes, and opinions, and awareness of events (McLafferty 2003; Parfitt 1997). They usually involve the collection of quantitative *and* qualitative data. Since such **mixed-method** questionnaires first appeared with the explosion

of behavioural geography in the 1970s (Gold 1980), they have been used increasingly to gather more complex data of a qualitative nature in relation to matters as varied as the environment, transport and travel, quality of life and community, work, and social networks.

While there are limitations to the depth and extent of qualitative data that questionnaires are capable of gathering, they have numerous strengths. First, they provide insights into relevant social trends, processes, and interpretations. Second, they are cost-effective, enabling extensive research over a large or geographically dispersed population. Certainly, they are one of the more practical qualitative research tools. Third, they are extremely flexible. They can be combined very effectively with complementary, more intensive forms of qualitative research to provide more in-depth perspectives on social process and context. For instance, Ruming, Mee and McGuirk's (2004) investigation of the impacts of the social mix policies of New South Wales' Department of Housing on understandings of community combined key informant interviews with housing officials, questionnaires with local residents, and follow-up in-depth interviews with volunteers who had participated in the questionnaire. Qualitative data from the questionnaire provided a framework for the in-depth interviews, allowing key themes, concepts, and meanings to be teased out and developed (see Askew and McGuirk 2004; England 1993; and Winchester 1999 for similar examples). In this mixed-method format particularly, questionnaires can be both a powerful and practical research method.

QUESTIONNAIRE DESIGN AND FORMAT

While each questionnaire is unique, there are common principles of good design and implementation. Producing a well-designed questionnaire for qualitative research involves a great deal of thought and preparation, effective organisational strategies, and critical review and reflection, as an array of literature suggests (for example, de Vaus 1995; Dillman 1978; Fink and Kosecoff 1998; Foddy 1993; Fowler 2002; Gillham 2000; and see the relevant chapters in Babbie 2001; Clifford and Valentine 2003; Flowerdew and Martin 1997; and Hoggart et al. 2002). The design stage is where a great deal of researcher skill is vested and it is a critical stage in ensuring the usefulness of the resulting data. Notwithstanding the quality of the questionnaire devised, we are beholden as researchers to ensure that we have sufficient reason to call on the time and energy of the targeted research subjects. The desire to generate our 'own' data on our research topic is insufficient justification (Hoggart et al. 2002). As with any study, the decision to go ahead with a questionnaire needs to be based on careful reflection on detailed research objectives, consideration of existing and alternative information sources, and appropriate ethical contemplation (see chapters 2, 4, and 5).

The content of a questionnaire must relate to the broader research question as well as to your critical examination and understanding of relevant processes, concepts, and relationships. As a researcher, you need to familiarise yourself with existing local and international work on your research topic. This ensures clarity of research objectives, and will help you to select an appropriate target population and relevant key questions. You need to be clear on the purpose of each question, who will answer it, and how you intend to analyse responses. You also need to be mindful of the limits to what people are willing to disclose, being aware that this varies across different social and cultural groups in different contexts. Public housing tenants, for

instance, might be wary about offering candid opinions about their housing authority. Every question, then, needs to be carefully considered, and have a clear role and purpose.

Begin by drawing up a list of topics that you seek to investigate. When you have clarified these, develop specific questions. De Vaus (1995) suggests that it is helpful to think about four distinct types of question content:

- 1 *attributes* Attribute questions aim to establish respondents' characteristics (for example, age or income bracket, owner-occupier or private renter)
- 2 *behaviour* With behaviour questions, we are interested in discovering what people do (for example, recreation habits, extent of public transport use)
- 3 *attitudes* Questions about attitudes are designed to discover what people think is desirable or undesirable (for example, judgment on integrating social housing with owner-occupied housing)
- 4 *beliefs* Questions about beliefs aim to establish what people believe to be true or false (for example, beliefs on the importance of environmental protection).

A basic guiding principle for all these question types, however, is that you need to be sure that your target population will both understand the questions and have the knowledge to answer them. Asking respondents to comment, for instance, on whether they believe government planning policies have contributed to local coastal degradation might be beyond their ability to answer with any certainty.

Apart from the typology of question content, there is a range of questions types on which to draw. We commonly make a distinction between closed and open questions, each of which offers its own strengths and weaknesses. Closed questions may seek quantitative information about respondent attributes (for example, level of educational attainment) or behaviour (for example, how often and where respondents buy groceries). Some examples are set out in Box 10.1. Closed questions can ask respondents to select categories, rank items as an indicative measure of attitudes or opinions, or select a point on a scale as indicative of the intensity with which an attitude or opinion is held. A major benefit of closed questions is that their responses are easily coded and analysed, a bonus when interpreting a large number of questionnaires. Closed questions are demanding to design, however, as they require researchers to have a clear and full understanding of what the range of answers to a question will be. Respondents' answers are limited to the range of categories designed by the researcher as an exhaustive and exclusive list of possible answers, and this can be a limitation. Moreover, closed questions rest on the assumption that words, categories, and concepts carry the same meaning for all respondents and this may not always be the case. For example, how a respondent answers the question 'How often have you been a victim of crime in the past two years?' will depend on what the respondent includes in their definition of a crime (de Vaus 1995). A criticism of closed questions, then, is that 'one may learn more about the behaviour of the sample in responding to a set a categories...than about the behaviour under investigation' (Cox 1981, p. 264). This limitation can be lessened by offering an answer option such as: 'other (please specify)' or by using combination questions that request some elaboration or explanation for the selection made in a closed question (see Box 10.1).

In general, open questions have greater potential to yield in-depth responses in keeping with the thrust of qualitative research: to understand how meaning is attached to process.

BOX 10.1 TYPES OF QUESTIONNAIRE QUESTIONS

Closed questions

Attribute information

How often do you shop at this shopping mall?

- Less than once a week
- Once a week
- Twice a week
- More than twice a week

Category list

What was the main reason you chose to live in this neighbourhood?

- Proximity to work
- Proximity to family and friends
- Proximity to schools or educational facilities
- Proximity to shopping centre
- Proximity to recreational opportunities
- Environment
- Housing costs
- Good place to raise children
- Pleasant atmosphere of neighbourhood
- Other (please specify) _____

Rating

Please rank the reasons for buying your current house (Rank all relevant categories from 1 [most important] to 6 [least important]).

- Price
- Location
- Size
- Proximity to job/family
- Investment
- Children's education

Scaling

Please indicate how strongly you agree/disagree with the following statement:

- Having a mix of social groups in a neighbourhood is a positive feature.*
- Strongly disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly agree

Combination question

Have changes in the neighbourhood made this a better or worse place for you to live? (please tick the appropriate box).

- Changes have made the neighbourhood better
 - Changes have not made the neighbourhood better or worse
 - Changes have made the neighbourhood worse
- Please explain your answer below.

Open questions

What have been the biggest changes to the neighbourhood since you moved in?

What, if any, are the advantages for civic action groups of using the Internet, email and mobile phones?

Please describe any problem(s) you encounter using public transport?

Open questions offer less structured response options than closed questions, inviting respondents to recount understandings, experiences, or opinions in their own terms. Rather than offer alternative answers, which restrict responses, they provide space (and time) for free-form responses. Open questions also allow respondents to question the terms and structure of the questionnaire itself, demonstrating an alternative interpretation. For instance, in a questionnaire used by Winchester et al. (1997) in Carrington, New South Wales, concerning urban redevelopment and its impact on the close-knit nature of the stable community being researched, a respondent pointed out that it could not be assumed that a stable community implied a close-knit community, as the questionnaire seemed to suggest. She recounted examples of her own sense of detachment from that community. Open questions, then, are capable of yielding valuable insights, many of them unanticipated. Such scope, though, has led open questions to be characterised as 'easy to ask, difficult to answer, and still more difficult to analyse' (Oppenheim 1992, p. 113). An open format means responses may lack consistency and comparability. Certainly, respondents answer them in terms that suit their own interpretation. So open questions and the responses they yield are certainly more challenging to analyse than are their more easily coded closed counterparts (see chapter 14).

In summary, using open questions makes it possible to pose complex questions that can reveal, to a greater depth than closed questions, people's experiences, understandings, and interpretations of, as well as their reactions to, social processes and circumstances. Beyond capturing these accounts, answers to open questions can tell us a good deal about how wider processes operate in particular settings. Thus they enable research that addresses the two fundamental questions that Sayer (1992) poses for qualitative research: what are individuals' particular experiences of places and events; and how are social structures constructed, maintained, or resisted (see chapter 1).

Beyond choice of question content and type, general principles of questionnaire wording, sequence, and format are fundamental to a questionnaire's success. These are outlined in Box 10.2. Many of these principles revolve around clarity, simplicity, and logic. In question wording, you need to be sure that questions are sufficiently precise and unambiguous to ensure that the intent of your question is clear and well communicated. You should provide simple instructions on how to answer closed questions (e.g., how many responses the respondent can tick). It is worth being aware too that the ways particular questions are posed or how they relate to preceding questions can influence respondents' answers. For instance, Babbie (2001) demonstrates how greater support in questionnaire surveys is indicated habitually for the option worded as 'assistance to the poor' rather than as 'welfare', and for 'halting rising crime rate' rather than 'law enforcement'.

The flow and sequence of the questionnaire will be fundamental to respondents' understanding of the research purpose and to sustaining their willingness to offer careful responses and, indeed, to complete the questionnaire to its conclusion. Grouping questions into sections of related questions connected by introductory statements will help here. In general, open-ended questions are better placed towards the end of a questionnaire, by which time respondents are aware of the questionnaire's thrust and may be more inclined to offer fluid and considered responses. In terms of layout, aim for an uncluttered and spacious design that is easy and clear to follow. Where you use closed questions, aligning or justifying the space in which the answer should be provided will contribute to clarity as well as simplify-

BOX 10.2 GUIDELINES FOR DESIGNING QUESTIONNAIRE

- Ensure questions are relevant, querying the issues, practices, and understandings you are investigating.
- Keep the wording simple and appropriate to the targeted population's vernacular.
- Avoid double-barrelled questions (for example, do you agree that the Department of Housing should cease building public housing estates and pursue a social mix policy?).
- Avoid confusing wording (for example, why would you rather not use public transport?).
- Avoid leading questions (for example, why do you think recycling is crucial to the health of future generations?).
- Avoid questions that raise as many questions as they answer (for example, 'are you in favour of regional sustainability?' raises questions of what sustainability means, how a region is defined, and how different dimensions of sustainability might be prioritised).
- Order questions in a coherent and logical sequence.
- Ensure the questionnaire takes no longer than participants are willing to spend. This will depend on the questionnaire context (for example, whether it is conducted by telephone, face-to-face or by post). Generally, 20–30 minutes will be the maximum, though longer times (45 minutes) can be sustained if the combination of context and research topic is appropriate.
- Ensure a spacious layout with plentiful space for written responses to open questions.
- Use continuity statements to link questionnaire sections (for example, 'The next section deals with community members' response to perceived threats to their neighbourhood.').
- Begin with simple questions and place complex, reflexive questions or those dealing with sensitive or threatening topics later in the questionnaire.

ing coding responses in the analysis stage. You also need to be conscious with open-ended questions of the need to leave enough space for respondents to answer, without leaving so much as to discourage them altogether from offering a response. Finally, you should write a cover letter to be included with the questionnaire. Box 10.3 provides an example. The letter needs to provide general information about the purpose of the questionnaire, provide assurances about confidentiality, how the respondent was selected for inclusion in the research, how long the questionnaire will take to complete and, when relevant, instructions on how and when to return the questionnaire.

SAMPLING

Before administering a questionnaire, you will need to make a decision about the target audience, or **sample**. In quantitative research, questionnaires are used commonly to generate claims about the characteristics, behaviour, or opinions of a group of people ('the **population**') based on data collected from a sample of that population. The sample is selected carefully to be representative of the population (for example, tenants in public housing, the

BOX 10.3 SAMPLE COVER LETTER

School of Geography
 Geography Building
 East Valley University
 Kingsland 9222
 Telephone: (04) 89889778
 Facsimile: (04) 89889779

Leisure and recreation services in Port Andrew, East Valley

I am Edith Saunders, an Honours student with the School of Geography at the East Valley University. As part of my Honours research on leisure and recreation services in East Valley, I am investigating the use of and satisfaction with these services. The research is being conducted in collaboration with East Valley Council as part of their preparation for planning the extension of these services across the region.

The attached questionnaire asks about the way you use existing services, your satisfaction with them, and other leisure and recreation services you would see as desirable in the area. My research is focused on the Port Andrew area and you have been selected to receive this questionnaire as a local resident.

The questionnaire will take approximately 30 minutes to complete and completion is voluntary. The questions are asking primarily for your opinions—there are no right or wrong answers. All answers will be treated confidentially and anonymously—individuals will not be identifiable in how the research is reported.

Once you have completed the questionnaire, please return it in the reply-paid envelope provided. Return of the questionnaire will be considered as your consent to participate in the survey.

Your participation will be greatly appreciated. Your opinions are important in helping me to establish local service needs and, ultimately, will assist East Valley Council in planning the future provision of services in the locality.

Inquiries about this research can be directed to me at the above address.

Thank you in advance for your participation.

Yours faithfully,
 Edith Saunders

The University requires that all participants are informed that if they have any complaints concerning the manner in which a research project is conducted it may be given to the researcher or, if an independent person is preferred, to the University's Human Research Ethics Officer, Research Unit, East Coast University, 9222, Telephone (04) 8988 1234

residents of a given local government area, or people living with HIV/AIDS) such that the mathematical probability of the sample characteristics being reproduced in the broader population can be calculated (May 2001). In such cases, a list of the population in question, the **sampling frame**, is required so that a sample can be constructed (for example, the tenant list of a given public housing authority; a local electoral register; a health register of all

people in a given geographical area receiving treatment for HIV/AIDS). The rules surrounding sampling are drawn from the central limit theorem used to sustain statistical claims to representativeness, generalisability, and replicability (see McLafferty 2003; Parfitt 1997; Robinson 1998).

On the other hand, questionnaires used in qualitative research are likely to be used as a part of mixed-method research aimed at establishing trends, patterns, or themes in experiences, behaviours, and understandings as part of analysis of a *specific context*, without seeking to make generalisable claims about whole populations (Robinson 1998, p. 409). Hence, a more appropriate sampling technique for qualitative research is **non-probability sampling**, where generalisation to a broader population is neither possible nor desirable and sampling frames may not, in any case, be available. Specifically, purposive sampling (see chapter 5) is commonly used wherein sample selection for questionnaire respondents is made according to some known common characteristic, be it a social category (for example, male single parents), a particular behaviour (for example, women who use public transport), or an experience (for example, people who have been victims of crime). There are no specific rules for this type of sampling (de Vaus 1995). Rather, the determinants of the appropriate sample and sample size are related to the precise scope, nature, and intent of the research and to the expectations of your research communities.

As in all research these considerations are overlain by the limitations of resource constraints (time and money). Nonetheless, this does not imply the absence of a systematic approach; quite the opposite. Complex decisions need to be made about how to approach sampling. For instance, in research on what motivates 'sea-changers' to abandon city life and relocate to regional, coastal areas, researchers would need to take into account whether they should seek respondents in all age groups, all household types and all income categories. Research on people living with HIV/AIDS would need to take into account whether the researchers should target early-stage individuals only; both biological sexes or only one; people of any sexual orientation or a specific sexual orientation; only individuals infected from a particular source, and so on. Each decision is liable to have ramifications for how sample recruitment proceeds and what mode of questionnaire distribution is suitable. Both these cases illustrate the fundamental importance of research scope, purpose, and intent in shaping sampling approach and in determining appropriate sample size. Patton (1990) provides detailed treatment of various types of purposive sampling, along with a discussion of sample size, and chapter 5 provides an extended treatment of further pertinent questions regarding selecting cases and participants in qualitative research. In the end, claims de Vaus (1995, p. 78), 'decisions about samples will be a compromise between cost, (the need for) accuracy, the nature of the research problem and the art of the possible'.

PRE-TESTING

It is vital to try out a questionnaire before it is distributed. **Pre-testing** is where a questionnaire is piloted or 'road-tested' with a sub-sample of your target population to assess the merits of its design, its appropriateness to the audience, and whether it does in fact achieve your aims. Getting feedback at this stage from those with extensive questionnaire-design

experience and from those who might use the data generated (for example, in the example from Box 10.3, a local authority) will allow possible problems to be identified or improvements made. Scheduling a pre-testing stage provides the opportunity for post-test revisions that might dramatically increase the questionnaire's effectiveness.

Both individual question items and the overall performance of the questionnaire need attention at this stage. Are individual questions and question instructions easily understood? Would any of them benefit from the addition of written prompts? Do respondents interpret questions as intended? Do any questions seem to make respondents uncomfortable? Discomfort and sensitivity (perhaps the question is considered too intrusive) might be indicated by respondents' tending to skip or refuse to answer a specific question or section. Alternatively those outcomes could mean that respondents do not understand the question or do not have the knowledge or experience to answer it. On the questionnaire overall, consider how respondents react to the questions' order? Does it seem to them to flow logically and intuitively? Are there parts where the questionnaire seems to drag or become repetitive? Technical aspects can also be tested: is there enough space for respondents' to answer open questions? How long will the questionnaire take to complete? Do the data being generated present particular problems for analysis? If you plan to conduct the questionnaire face-to-face with respondents, the pre-test stage can also be a useful exercise in training and confidence-building.

MODES OF QUESTIONNAIRE DISTRIBUTION

Consideration of the mode of questionnaire distribution should be one of the earliest stages of your questionnaire design. It has significant implications for design, layout, question type, and sample selection. The main distribution modes are mail, face-to-face, and telephone. Each mode has distinctive strengths and weaknesses and the choice between them depends on the research topic, type of questions, and resource constraints. The best choice is the one most appropriate to the research context and target population while the success of any particular mode is dependent on a design appropriate to context and population. So the question is, what should researchers interested in qualitative research be aware of to inform the choice of mode?

Mail questionnaires have clear advantages of cost and coverage. They can be distributed to large samples over large areas (for example, an entire country or province) at relatively low cost. The anonymity they provide may be a significant advantage where sensitive topics are being researched, for example, those dealing with socially disapproved attitudes or behaviours such as racism or transgressive sexual behaviour, or topics involving personal harm such as experience of unemployment or experience of crime. Respondents may also feel more able to take time to consider their responses if unimpeded by the presence of an interviewer. Clearly, too, the absence of an interviewer means responses cannot be shaped by how, precisely, an interviewer poses a question.

Nonetheless, mail questionnaires are the most limited of the three modes in terms of questionnaire length and complexity. The scope for complex open questions particularly is limited too by the need for questions to be self-explanatory and brief, and this may be a significant

consideration for qualitatively oriented research. Once sent out, there is little control over who completes the questionnaire or, indeed, how it is completed; respondents may choose to restrict themselves to brief, unreflective, or patterned responses. A response to the question 'what do you value about living in this community?' might yield a response of several paragraphs from one respondent and the comment 'friends and neighbours' from another. There is no opportunity to clarify questions or probe answers. Nor is there control over the pattern and rate of response. Some parts of the target population may respond at a higher rate than others. It is common, for instance, for mail questionnaires to achieve significantly higher response rates in wealthier neighbourhoods than less socially advantaged neighbourhoods. Finally, mail questionnaires can be subject to low response rates unless respondents are highly motivated to participate. Response rates of 40% are not uncommon though effective follow-up steps can increase this somewhat (May 2001; Robinson 1998).

Distributing questionnaires by email is a recent variation on mail distribution. Distribution will be shaped by the age, class, and gender biases that shape computer-use and email patronage (see Gibson 2003). Careful consideration needs to be given to whether the bias in who can be reached by email is problematic for the research in hand. One distinct advantage of electronic distribution is the ability to incorporate colour images and graphics without associated printing costs. This opens up new opportunities for more complex questions to be posed, increasing their potential for generating rich qualitative data. The few geographers who have taken advantage of this distribution mode report strong response rates with respondents characteristically submitting lengthy commentaries on open questions (Hoggart, Lees, and Davies 2002); a plus for qualitative research.

Qualitative research is often well served by using an interviewer to conduct face-to-face questionnaires, although this is a costly option. The major benefits of this mode arise because having an interviewer present allows complex questions to be asked (see chapter 6). It also enables the interviewer to take note of the context of the interview and of respondents' non-verbal gestures, all of which add depth to the qualitative data collected (May 2001). As an interviewer you can motivate respondents to participate and to provide considered, qualitatively informative responses. Moreover, people are more likely to offer long responses verbally than in writing. Perhaps more crucially, face-to-face questionnaires provide the opportunity for questions to be clarified and vague responses probed (see chapters 6 and 7 for related discussions). For example, adding probes like 'why is that exactly?', 'in what ways?', or 'anything else?' can elicit reflection on an opinion or attitude. Long questionnaires can also be sustained because direct contact with an interviewer can enhance respondent engagement. It is a major benefit for qualitative research to be able to pose complex questions and elicit more in-depth and engaged qualitative responses. Moreover, this level of engagement can also secure high response rates—Babbie (2001) estimates 80–85%—with a minimal number of nil response and 'don't know' answers. However, the level of interviewer skill demanded to secure all of these outcomes should not be underestimated.

As Kevin Dunn discusses more fully in chapter 6, the presence of an interviewer can be a powerful means of collecting high quality data, but it introduces limitations too. Interviewer/respondent interaction can produce 'interviewer effects' that shape the responses offered. People filter their answers through a sense of social expectations, especially when

interviewed face-to-face (Lee 2000). They may censor their answers according to perceived social desirability. That is, they may avoid revealing socially disapproved behaviours or beliefs (such as racism) or revealing negative experiences (for example, unemployment). One means of dealing with this is to incorporate a self-administered section in the questionnaire or to reassure respondents of a guarantee of anonymity. Moreover, interviewers' presence (as embodied subjects with class, gender, and race characteristics) can also affect the nature of responses given. For instance, Padfield and Procter (1996) suggest that the gender of the interviewer introduces significant variations. So, while distinct benefits arise from using face-to-face distribution, there are drawbacks. Perhaps the most limiting of these is the practical consideration of cost. Interviewer-administered questionnaires are expensive and time consuming and tend to be restrictive spatially and with respect to population coverage. However, as we suggested before, this may not be a significant drawback if a particular, localised population group is targeted.

While the opportunities for personal interchange are more restricted in telephone than in face-to-face questionnaires, the telephone mode still offers the chance for dialogue between researcher and respondent and can secure some of the associated benefits along with a certain anonymity that may limit problematic interviewer effects. Conducting questionnaires over the phone may encourage respondent participation, being potentially less threatening than opening the door to a caller wishing to administer a questionnaire. However, telephone delivery constrains the scope for lengthy questionnaires, with about thirty minutes being the maximum time respondents are willing to participate (de Vaus 1995). Besides, because they rely on a respondent's memory, the question format must be kept simple and the number of response categories in closed questions needs to be limited. However, the advent of **CATI (computer-assisted telephone interviewing)** and 'Voice Capture' technology is significantly enhancing telephone questionnaires (see Babbie 2001, p. 265) and extending their potential in this regard. Moreover, they can be administered with great convenience and at relatively low cost.

Telephone questionnaires may be reliant on a telephone directory as a sampling frame and this can introduce class and gender biases amongst respondents as well as placing ex-directory numbers beyond reach. If telephone numbers are available for a purposefully selected group of people then this may not pose a problem. Historically, telephone surveys have had good response rates (Feitelson 1991) and follow-ups by a simple call-back can be conducted much more conveniently than for face-to-face or mail questionnaires. However, in the present climate of public concern over unsolicited marketing calls, approaches by telephone are increasingly likely to face rejection by recipients or to be screened out by answering machines.

MAXIMISING QUESTIONNAIRE RESPONSE RATES

Questionnaire response rates are shaped by the research topic, the nature of the sample, and the quality and appropriateness of questionnaire design as much as by the mode of distribution. In any case, questionnaire response rates tend to be higher when using a purposive sample, wherein interest in the research topic may be strong. Regardless of the mode of distribution, response rates can be improved by undertaking a series of strategies before questionnaire distribution and as follow-up (Dillman 1978) in order both to maximise

BOX 10.4 STRATEGIES FOR MAXIMISING RESPONSE RATES

Strategy	Face-to-face	Telephone	Mail
• Ensure mode of distribution is appropriate to the targeted population and research topic	✓	✓	✓
• Send notification letter introducing the research and alerting to the questionnaire's arrival		✓	✓
• Place newspaper advertisement in local/community newspaper/magazine introducing the research and alerting to the conduct of the questionnaire	✓	✓	✓
• Ensure questionnaire is concise	✓	✓	✓
• Ensure appropriate location of approach	✓		
• Ensure appropriate time of approach	✓	✓	
• Vary time if no contact is made initially	✓	✓	
• Pre-arrange time/location for conduct of questionnaire, if appropriate	✓	✓	
• Ensure reply-paid envelope is included in mail-out			✓
• Print questionnaire on coloured paper to distinguish it from introductory material or other mail			✓
• Send follow-up postcard thanking early respondents and reminding others (about one week after initial receipt)			✓
• Send follow-up letter and additional copy of questionnaire (two to three weeks after initial receipt)			✓
• Avoid abrasive manner	✓	✓	
• Dress appropriately to the target population	✓		

participation and minimise non-responses. Box 10.4 summarises the key strategies and indicates to which modes of distribution they are appropriate.

ANALYSING QUESTIONNAIRE DATA

Widespread acceptance of mixed-method research ensures that questionnaire analysis will often involve a search for both quantitative and qualitative data. Quantitative data arises

primarily from closed questions that provide counts of categorical data (for example, age and income bands, frequency of behaviour) or measures of attitudinal or opinion data (see Box 10.1 for examples). Questions such as these are relatively easy to code numerically and analyse for patterns of response and relationships between the variables that questions have interrogated (May 2001). Indeed response categories can be pre-coded on the questionnaire, simplifying matters even further (see de Vaus 1995 or Robinson 1998 for more detail). The analysis of qualitative responses is more complex. The power of qualitative data lies in its revelation of a respondent's understandings and interpretations of the social world and these data, in turn, are interpreted by the researcher to reveal the understandings of structures and processes that shape respondents' thought and action (for elaboration see Crang 1997a; Robinson 1998, pp. 426–7). Chapters 14 and 15 attend to the techniques and challenges of coding and analysing qualitative data in detail. Nonetheless, it is worth raising some important points specific to analysing qualitative data arising from questionnaires.

In qualitative responses the important data often lie in the detailed explanations and precise wording of respondents' answers. For qualitative research, then, it is best to avoid classifying qualitative responses into simple descriptive categories so as to report on them quantitatively, stating, for example, that '49% of respondents had positive opinions about their neighbourhood'. There are two problems here. First, such reporting gives the misleading impression that findings are quantitative and could be used to draw generalisations. It may well be statistically misleading, too, to report in this form the results of what might be a relatively small purposive sample. Second, this approach involves 'closing' open questions so that much of the richness of how respondents constructed, in this example, their positive understandings and experiences of their locality, is lost. Certainly, classifying qualitative responses into descriptive categories allows us to simplify, summarise, compare, and aggregate data, but this kind of approach forfeits the nuance and complexity of the original text. To report on observations in this way is unlikely to contribute much to our understanding of the meanings and operations of social structures and processes and people's interpretations and behaviour in relation to them. It is more attuned to the thrust of qualitative research to analyse data gained from a questionnaire by sifting and sorting to identify key themes and dimensions as well as the broader concepts that might underlie them (see the discussion of analytical coding in chapter 14). Reporting findings in these terms is much more meaningful than falling back on awkward attempts to quantify the data.

Further, in analysing qualitative responses we need to be aware that qualitative research makes no assumption that respondents share a common definition of the phenomenon under investigation (be that quality of neighbourhood, experience of crime, understanding of health and illness...). Rather it assumes that variable and multiple understandings co-exist in a given social context. We need to incorporate this awareness into how we make sense of respondents' qualitative answers. Indeed, one of the strengths of using questionnaires in qualitative research can be their ability to identify variability in understanding and interpretation across a selected population, providing the groundwork for further investigation through additional complementary methods such as in-depth interviews.

Finally, keep in mind that qualitative data analysis is sometimes referred to as more of an art than a science (Babbie 2001). It is not reducible to a neat set of techniques. Though

useful procedures can be followed (see chapter 14), they may need to be customised to the unique concerns and structure of each questionnaire and the particular balance of quantitative and qualitative data it gathers. For this reason, and others, at all stages of the process of analysis we need to be mindful of engaging in critical reflexivity, especially when considering how our own frames of reference and personal positions shape the ways in which we proceed with analysis (see chapters 2 and 16).

CONCLUSION

In seeking qualitative data, questionnaires aim not just to determine qualitative attitudes and opinions but to identify and classify the logic of different sets of responses, to seek patterns or commonality in responses, and to explore how these relate to concepts, structures, and processes that shape social life. This is no easy undertaking and questionnaires struggle with the tensions of seeking explanation while being limited in their form and format to obtaining concise accounts.

Hoggart, Lees, and Davies (2002) argue that the necessarily limited complexity and length of questionnaires prevent them from being able to explain action (as this requires us to understand people's intentions), the significance of action, and the connections between acts. Compared with the depth of information developed through more intensive research methods such as in-depth interviews, focus groups, or participant observation, questionnaires may provide only superficial coverage. Nonetheless, they can help us begin this explanation in that they are useful for identifying regularities and differences and highlighting incidents and trends (see de Vaus 1995 for an extended critique).

Yet, there are ways to construct and deliver effective questionnaires that are largely qualitative in their aspirations, being mindful of the possibility of acquiring deep analytical understandings of social behaviours through careful collection of textual materials. Certainly, the interview, through its record of close dialogue between researcher and respondent, provides the most powerful way of uncovering narratives that reveal the motivations and meanings surrounding human interactions, and questionnaires can only ever move incompletely in this direction. However, by not requiring close and prolonged engagement with the research subject, the questionnaire offers opportunities to reach a wide range and great number of respondents and to collect data on their lived experiences. This extensiveness and diversity makes questionnaires an important, contemporary research tool.

KEY TERMS

CATI (computer-assisted telephone interviewing)
closed questions
combination questions
mixed-method research
open questions

population
pre-testing
probability sampling
purposive sampling
sample
sampling frame

REVIEW QUESTIONS

- 1 Why are open questions more suited to qualitative research than closed questions?
- 2 Why is the choice of the mode of questionnaire distribution specific to the nature of the sample and the nature of the research topic?
- 3 Why should we avoid 'closing' open question responses for the purpose of reporting findings?
- 4 What are the limitations of the use of questionnaires for qualitative research?

SUGGESTED READING

- Babbie, E. 2001, *The Practice of Social Research*, 9th edn, Wadsworth, Belmont, CA, chapters 9 and 13.
- de Vaus, D. A. 1995, *Surveys in Social Research*, UCL Press, London, chapter 6.
- Hoggart, K., Lees, L. and Davies A. 2002, *Researching Human Geography*, Arnold, London, chapter 5.
- Parfitt, J. 1997, 'Questionnaire design and sampling', in R. Flowerdew and D. Martin (eds), *Methods in Human Geography. A Guide for Students Doing a Research Project*, Addison Wesley Longman, Harlow, pp. 76–109.

Doing Discourse Analysis

Gordon Waitt

CHAPTER OVERVIEW

My hope in writing this chapter is to generate enthusiasm for geographical research employing discourse analysis. My intention is to provide some advice on doing discourse analysis to facilitate the design of research. I first outline why some geographers have been inspired by this approach. I suggest how Foucauldian discourse analysis is a break from other critical methods applied to textual analysis, including content analysis, semiology, and iconography. The theoretical underpinnings of the method provided by Michel Foucault, a French poststructuralist philosopher, is a key source of difference. I therefore condense Michel Foucault's contribution to discourse analysis by sketching out his key theoretical concepts and their methodological implications. To discuss the methodological implications of doing discourse analysis I draw upon the advice of feminist geographer Gillian Rose and linguist Norman Fairclough. I provide a list of questions to help implement a Foucauldian approach to discourse analysis and illustrate their implications for 'doing' geography by drawing upon examples. This chapter should therefore be read only as an appetiser as there are many forms of discourse analysis. The suggested readings provide a much larger selection of the theoretical and methodological possibilities.

INTRODUCTION: GEOGRAPHICAL KNOWLEDGE AS AN EXPRESSION OF HUMAN IDEAS

We must not imagine that the world turns towards us a legible face which we would have only to decipher. The world is not the accomplice of our knowledge; there is no prediscursive providence which disposes the world in our favour (Foucault 1981, p. 67).

Many geographers are constantly challenged by the writings of the French philosopher Michel Foucault to reflect upon geographical knowledge. Challenges for both what is geographical