Unobtrusive methods: an introduction

There is today, in social science circles, a simple and persistent belief that knowledge about people is available simply by asking. We ask people about themselves, and they tell us. Either we ask them a series of questions in a survey or we have a discussion with them in a structured, semi-structured or ‘unstructured’ interview. In any case, the assumption is that important ‘truths’ about people are best gained through talk—a sometimes direct, sometimes subtle, interrogation of experience, attitude or belief. Because the least engaging talk is often seen as superficial it is also seen as the least valid (although the most reliable). Questionnaire surveys, then, are often viewed as the most blunt instrument to record the complexity of human drama. Although often using fewer people, in-depth interviews and the detailed analysis of their ‘texts’ are seen to penetrate more deeply and sensitively into the subtle world of social and personal meaning. Debate circles, and then becomes tautology. How important is personal meaning if this is not broadly representative? How important can community representativeness be if the responses themselves are hopelessly unrepresentative of the participating individuals? All of this debate comes under the guise of the strengths and limitations of the qualitative versus the quantitative approaches to methods of social research. Yet, as I write this I am increasingly aware that, by and large, we are really speaking about one broadly similar approach to social research. We are writing and debating issues about the information we gain from others when we talk or write to them.

About the only thing that is certain about this method is that it
is popular. So, in sociology at least, surveys and interviews tend to be the favoured style of empirical investigation. But this was not always so for sociology and, furthermore, it is not the case for the other social sciences investigating the nature of human culture.

Emile Durkheim, Max Weber and Karl Marx, just to name three of the most well-known figures of sociology’s early beginnings, spent most of their time in libraries. Durkheim’s archival work with suicide statistics is still debated and celebrated even today, despite its several methodological flaws (Douglas, 1967). History has a long tradition of this type of archival work. Anthropology and education have long favoured the combination of interviewing and extensive periods of observation and informant networking. Both geography and archaeology have interrogated physical objects as evidence for their understanding of culture. In communication and media studies, students of culture have examined art, cinema and music, an extension of the general humanities interest in creative literature. And, although most methodologists in these social sciences in general, and in sociology in particular, will advocate the combined use of these methods, actual teaching practice reveals otherwise. Most disciplines train their own with their tried, true and favourite few methods. It is therefore unusual to find an historian with a questionnaire, just as it raises eyebrows to see a sociologist measuring the height of tombstones in a local cemetery. And so with these circumstances and habits as background, this book is designed to explore other methods of studying human culture which, when combined with other methods, may increase our confidence about what we think we are learning about human beings.

In sociology, one commonly finds a token lecture, or book chapter in a methods text, devoted to methods other than surveys or perhaps observations. This chapter or single lecture is usually entitled ‘unobtrusive measures’ or ‘methods’. Sometimes ‘non-reactive measures’ is the favoured title. These titles refer to social science methods which do not disturb the social environment. They are methods which do not involve talking with people. They are a collection of all the other ways one may learn about human beings and their social world without interrupting them to ask questions. In this chapter I will provide a brief outline of what is meant by the phrase ‘unobtrusive methods’. I will then rehearse the advantages and disadvantages of these methods in general. Before proceeding to the following chapters on design and analysis I will spend the final part of this chapter introducing some basic but important concepts in the field of research methods.
Unobtrusive methods

In 1966, Eugene Webb, Donald Campbell, Richard Schwartz and Lee Sechrest published a book entitled *Unobtrusive Measures: Non-Reactive Research in the Social Sciences*. A witty and clever book, it introduced readers to the study of physical traces, archival work, simple observation and the use of hardware. ‘Chapter nine’ contained only Cardinal Newman’s epitaph ‘From symbols and shadows to the truth’, while the previous ‘chapter’ contained a single paragraph quote from a statistician imploiring us to use ‘all available weapons of attack’. The chapter on physical traces gave an overview of the many ways that physical objects can suggest forms of human activity: the wear of floor tiles around museum exhibits as indicators of popular exhibits; the setting of car radio dials as indicators of favourite stations; the wear on library books and rub and fold marks in their pages; content analysis of household or institutional garbage; content analysis of toilet graffiti; gender differences in the shape or height or inscription on tombstones; and so on.

The chapters on archival work begin with the example of a tombstone inscription—an example, I think, more befitting the category of physical traces then ‘archives’. However, the review describes the analysis of actuarial (births, deaths and marriage) records; political and judicial records including content analysis of political speeches; government records (power failures, parking meter collections, weather records); media, such as newspapers, and also hospital medical records. Beyond these official sources Webb and his colleagues also discuss the private record: diaries; sales records; advertising; letters; junk mail; suicide notes; and so on.

The chapters on observation outlined studies of hair length, clothes, shoe styles, jewellery, houses, body movement expressions, superstitious behaviour (of baseball players), personal space and public location of furniture, car behaviour, conversation. There is discussion of participant and non-participant observation and also ‘contrived’ observation, meaning the use of hidden hardware such as cameras, tape recorders, one-way mirrors, ‘electric eye’ and pressure-measuring devices. In this section, experimental manipulation is also viewed as non-reactive as long as the manipulation is not seen by the subject. The Australian social psychologist Stephen Bochner (1979) also views the manipulative experiment as a non-obtrusive measure. Bochner has made ‘wrong number’ phone calls to assess ‘helpfulness’; has staged fake collapses on trains to assess
the same; staged shoplifting to assess shopper reporting behaviour and so on.

However, Webb et al. and Bochner emphasise that these types of experiments can be classified as ‘non-reactive’ or ‘unobtrusive’ because the people in them are unaware that they are part of an experiment. This ‘ignorance’ means that their reactions will be natural and therefore not threaten the validity of the findings. This is a very dated view of social research, one which assumes no ethical dilemma in involving people in an experiment without their permission. It also assumes that, providing subjects remain unaware, people going about their ordinary business can be freely side-lined into an experiment that only the experimenter thinks is important. This is an ethically questionable set of attitudes and practices. If people are to be manipulated in some way, permission should be sought because the results may be adverse or embarrassing. For example, a fake collapse may induce a real one in someone shocked by the fake incident. Testing the reporting behaviour of shoppers to a shoplifting event may create quite a deal of emotional turmoil and anxiety both in those who report and in those who choose not to report. Second, lack of awareness in subjects may indeed be unobtrusive for the purposes of validity but it is nevertheless intrusive for those people because their activities have been disturbed by the researcher’s activities. The method is therefore socially as well as ethically intrusive. The greater concern for the effect of reactivity on the research findings and the lower importance attached to social intrusiveness led Webb and his colleagues to drop ‘unobtrusive measures’ from the title in the second edition of their book. ‘Non-reactive’ was included in the new title and it assumed greater emphasis.

The happy disregard for the feelings and time of ‘subjects’ in manipulative experiments conducted in real life settings is a reflection of the minimal level of interest in ethics in recent social science methods texts. Ironically, in the same volume of collected essays as Bochner’s description of manipulative experiments (Sechrest, 1979), J.W. Berry in another chapter declined to include these as unobtrusive measures.

Although Unobtrusive Measures was a successful book (it had sold 125 000 copies up to 1979) (Sechrest, 1979), the use of these methods has remained modest. The original work was then re-issued in a more recent edition (Webb et al., 1981), but the major problem with both this and the earlier work was the out-dated techniques. Like the earlier discussion concerning ethics and the
Unobtrusive methods include:

- written and audio-visual records
- material culture (physical objects, settings and traces)
- simple observations
- hardware techniques, for example camera, videos etc.

Unobtrusive methods do not include:

- interviews, questionnaires
- manipulative experiments
- tests, for example, psychometric tests

Manipulative experiment, Unobtrusive Measures did not include recent developments in computer technology, grounded theory and post-structuralist modifications to content analysis, nor the recent interest and revival of the camera and video. The renewal of interest in cultural studies and its semiotic methods for analysing music, art and film were also either not considered or were considered too briefly by Webb and his colleagues, even into the early 1980s.

For newcomers to these methods, the other problem is the lack of practical guidance in the design of research in general and the execution of unobtrusive measurement in particular. The relationship between the technique and how this might complement lines of thinking about a subject or how this might test or generate theory was largely assumed. Unobtrusive methods were discussed separately from the context of the research enterprise as an investigation which occurs partly in the head, partly in the library and partly in the field. Only the field was given prominence and, especially for undergraduates, this was a disembodied presentation of the research experience. Apart from these problems of history and audience, unobtrusive measurement, like any other set of methods, has its strengths and weaknesses.

**General advantages and disadvantages**

The advantages of unobtrusive research have been well summarised by Rathje (1979) and Babbie (1989). First, unobtrusive measures tend to assess actual behaviour as opposed to self-reported behaviour. One of the major sources of error in questionnaires and interviews is believing what respondents say they do or do not
believe. The use of unobtrusive methods enables researchers to literally see for themselves. Second, unobtrusive measures are usually safe, both for researchers and other people. Observations, if made discreetly, are harmless and non-disturbing to others; archival and physical trace examination does not even involve physical contact or proximity to other people. For researchers, door-to-door interviewers do not have to deal with territorial dogs or irate respondents, if the information they are seeking can be collected in unobtrusive ways.

Third, unobtrusive methods, because they do not disrupt others, are easily repeatable. This enables re-checking of findings and allows questions of reliability and validity to be re-examined by others. Because of the non-disruptive nature of these methods, the fourth advantage is that people do not react to the researcher. Observations can be discreet and non-involving. As Berry (1979) points out, although some observers may be obtrusive, this observer effect erodes after time.

Fifth, access is not usually a problem. Because researchers rarely need the co-operation of others, research access is much easier. In interviews, each potential respondent must be given an explanation of the research, its possible benefits and harm, and permission must then be sought. For archival work, however complicated the procedure, this may only need to be undertaken once. For simple observations, this procedure may be dispensed with altogether. The study of books or tombstones similarly may require only courtesy permission sought only once.

The sixth advantage is that unobtrusive research is usually inexpensive. Observations, archives and physical trace work are simple, and the major expense is time and a record book, compared with typing, printing and copying expenses for surveys or statistical data analysis, and time and skill in processing survey results.

Finally, because unobtrusive methods are so non-disruptive, inexpensive, accessible and safe, they are ideal for longitudinal study designs—those that follow activities over a period of time. This means, for example, that political or demographic records can be examined over years or decades or that household garbage can be sampled over several weeks instead of just the once, as in cross-sectional studies.

The disadvantages of unobtrusive measures are that the original record, especially for archival sources, may itself be distorted either to hide information or to create a different impression to an outside reader. Not everyone reveals absolutely all in a personal diary (in
case siblings or parents read it, or journalists steal it); not all basic statistics are ‘basic’, for example since suicide was regarded as a serious sin by Catholics, many causes of death give another ‘cause’ on death certificates.

Second, unobtrusive methods are dogged by the usual emic/etic problems. This means that interpretation of physical traces or observations may be from the point of view of the stranger, or outsider (etic) and therefore may fail to grasp important in-group meanings (emic).

Third, intervening variables may also distort data. Rathje (1979) gives the example of garbage analysis which does not take into account recycling practices or hobbyists who sort their garbage for glass, bottles, pop sticks, milk cartons and paper. Cross-sectional work, whether these be trace analyses or interviews, all suffer from similar sources of error. Cross-sectional studies are one-off ‘slices of life’ and are therefore prone to oversimplification. Sechrest and Phillips (1979) document other intervening variables—the graffiti artist who records a non-existent romance or the alcoholic who deposits his bottles in his/her neighbour’s rubbish bin.

Other disadvantages relate to common sources of error such as selective recording of observational data. Certain objects and relations may more likely be recorded by observers with different interests, biases and backgrounds. A male observer of women may notice different features of interaction, mannerisms and dress than a female observer of women, and vice versa. Other sources of error may come from over-reliance on single methods. The research methodological wisdom for surveys and ethnographies is also true for unobtrusive methods—multiple methods are best. Finally, unobtrusive methods (unlike surveys) are limited in the potential areas open to interrogation. Verbal methods, such as interviews, have ‘an ability to reach into all content areas’ (Webb et al., 1966, p. 181),

The advantages of unobtrusive methods are:

- the study of actual rather than reported behaviour
- safety
- repeatability
- non-disruptive, non-reactive
- easy accessibility
- inexpensive
- good source of longitudinal data
but this broadness is often difficult to match with unobtrusive method, however imaginative and creative one might be.

The disadvantages of unobtrusive methods are:

- distortion of original record
- decontextualising (emic/etic)
- intervening variables
- selective recording
- single method over-reliance
- limited application range

The above list of advantages and disadvantages in the use of unobtrusive measures highlights or underscores a deeper concern of all researchers. This is the problem of reliability, validity and ethics. As a preliminary and as background to the following chapters I will summarise some of these issues as they reflect generally on social science methods.

An introduction to some basic research terms

In an ideal and artificial way, we can speak about two types of social research, one described as ‘theoretical’ and the other type often called ‘empirical’. Theoretical research is often library-based research which primarily uses books and articles. The aim of the research is to discuss a theoretical idea, an explanation, through the use of logical reasoning. In this way, certain explanations are modified, challenged or extended by providing a new or different perspective. However, there is no attempt to test this analysis or argument against first-hand collected evidence.

Empirical research is meant to extend beyond books and articles alone so that information (sometimes referred to as ‘data’) is gathered from other sources—usually people. Anthropologists conduct empirical research by entering villages or cities and watching and talking to people. Sociologists may also engage in this kind of empirical research or they may simply distribute a survey questionnaire. Social psychologists also use surveys or, alternatively, they may conduct social experiments either in laboratories or ‘in situ’ ones as Bochner (1979) has done with shoppers or train commuters.

Empirical work does not confine itself to simply interacting with
people in one form or another and recording their responses. Empirical work broadly means to test or derive an explanation from active enquiry. This enquiry is commonly through surveys of one sort or another but may also include most of the unobtrusive methods we have mentioned. So research which takes as its data source observations, physical traces and artifactual material such as film, art or music can all be called empirical work. Archival work is sometimes viewed as empirical or historical/theoretical. Because archival work often relies on second-hand information rather than on data gathered directly, this type of work is often viewed as simply historical (Woodland, 1979, p. 66).

All social research involves methods, that is, ways of proceeding and collecting information. This ranges from simple procedures such as borrowing and reading books to more complicated empirical procedures such as participant observation. Each method requires that one or a number of techniques be mastered in order to apply the method competently. Techniques are the detailed ways, or steps, involved in applying the method. So, for example, if interviewing is the chosen method, the application of this method will require certain technical skills. These techniques range from arranging the order of questions, gaining respondent trust and rapport, ensuring that questions are not leading or loaded in meaning to the technical problem of coding and statistical analysis of responses. An unobtrusive example of the method–technique idea may be the simple observation method. For this method, certain techniques such as coding and recording observations, and deciding on sampling frames are part of the successful execution of the method.

The concern with successful and appropriate methods for the research task has to do with every researcher’s deeper concern for the issues of reliability and validity. Reliability, or a reliable method, refers to a method which, if used by others in similar conditions to the original research, will actually turn up the same or highly similar results. There is little point in skipping through a cemetery and, after a quick browse through the epitaphs, concluding that the graves of men enjoy longer epitaphs than women if the next person who skips through arrives at the opposite conclusion. Research must be systematic, organised and disciplined so that those who re-test or re-examine your source of data will arrive at similar findings. This is one important source of confidence for you and others that your method is a good, reliable one.

The second major source of confidence concerns the validity of the method. Validity, or the issue of how valid a method is, refers
to how well a method measures what it claims to measure. Consider the example of social class. There are many possible methods of measuring social class. Some may argue that asking people to tell you their occupation is a reliable and valid measure of social class. Individuals are usually quite happy to disclose their occupation, and occupational prestige is a valid measure of social class (Daniel, 1983). This is because occupations are tied closely to other indicators of class such as income and education. On the other hand, some people might regard simply observing the car that people usually drive as a valid measure of social class. However, many working-class people drive expensive cars and many middle-class people drive inexpensive cars. Quite a few business people rent cars that they could not afford to buy while more than a few wealthy people drive inexpensive and old vehicles. Many people do not own cars and some people drive other people’s cars, particularly young people driving their parents’ cars. So observation of people in their cars is a much less valid measure of social class than asking people their occupations. However, combining the observations with interviews may actually increase the validity of the findings because one method may turn up findings which can be explored by the other.

The issue of validity is not intrinsic to a method because this validity can only be assessed in relation to the problem to be researched. Observations of cars are probably less valid sources of data than interviews with their drivers when it comes to assessing social class.

Sampling is another issue in social research. If you wish to understand the daily life of Swiss migrants who own coffee shops in Melbourne, it would be desirable to study them all, if their population is less than fifty. However, if you wish to study the daily life of Melbourne’s university students you will be obliged to study a sample because the population in which you are interested numbers thousands. How do you know if your sample truly represents the rest of the population of university students? This is a question commonly at the centre of sampling concerns. The ideal is to procure a sample that has all the main features of the population and does not over- or under-represent one or more of these features. There must be so many men and so many women; there should be so many school leavers and so many mature-aged students included; there will need to be a certain percentage of the sample who are from professional, science- and arts-based courses; so many from part-time and full-time enrolments; so many born in
Australia and others who were born overseas; so many undergraduates and so many postgraduates; and so on.

Sampling does not only apply to people. It also applies to observations, when and whom one observes. Sampling also applies to physical traces from graffiti to tombstones. In archival work, a sampling frame or system may be useful in examining the contents of diaries and letters or government records, particularly if the volume of these is enormous.

The main research terms are:

- **theoretical**—research based on other research, reason and second-hand information.
- **empirical**—research based on first-hand experience and designed to test or generate theory.
- **methods**—ways of proceeding and collecting information.
- **techniques**—steps involved in the execution of the method.
- **reliability**—the dependability or confidence one has that if a method is used by others in similar circumstances that they will arrive at similar findings.
- **validity**—the precision or confidence one has that the method measures what it claims to measure.
- **population**—the total number of people, physical traces, pages, words etc. (called ‘units’) that you may wish to know about or research.
- **sample**—a systematically collected part or specimen of the population which may give you some informative ideas about the population as a whole.

Finally, all good research is concerned, not simply with issues of how confident we are that our findings will be believed (theory vs. empirical work; how sound or appropriate the methods; validity vs. reliability; how careful the sampling) but also with **ethics**. Ethics should be understood to be a normal part of any concern with method. Because methods are about ways of proceeding, ethics concerns itself with the most socially responsible way of doing this. Research ethics refers to the responsibility that researchers have towards each other, the people who are being researched, and the wider society which supports that research.

Researchers are expected to consider the **safety** and welfare of those people who participate in the research. The community
expects that no harm should come to people who are the subject of research. Furthermore, researchers should protect the confidences and identity of those they research, they should guard the privacy of those they study. In this respect, peoples’ lives should not be unduly intruded upon. The community also rightly expects that any research which involves certain groups or that may have findings which publicly reflect on them in some way, seek the subject’s permission or consent.

Cheating is also a practice which is not welcome in social research. One should not deceive the people who are the subject of the study; one should not falsify or misrepresent the findings of research; one should not use the theoretical or empirical work of others without acknowledgment; and, finally, one should not claim, through authorship, research to which one did not actively contribute.

Another ethical issue concerns the use to which research may be put. Some research is acquired through significant expense of time and convenience of respondents or subjects and then the findings simply rest on library shelves. Much thesis work for higher degrees suffers this fate, a practice which is arguably irresponsible. Research findings should be disseminated in professional and/or community circles if at all possible. If this is not practicable then out of courtesy those who participated in the research might be informed of the findings for their effort.

Other research findings may be put to negative use by governments or by other sectional community interests. Groups involved in advertising may use findings to exploit the vulnerability of some groups, while other agencies may use social research findings to persecute dissident or marginal groups. All research has social implications. Splitting the atom or documenting the plight of the rural poor are findings useful to someone. The ethical concerns are: who are these people and to what use will they put these findings and, if I anticipate possible harm, what steps should I take to protect my respondents?

Webb and his colleagues (1966) in their original work devoted two out of 225 pages to a discussion of ethics. Their conclusion was that so few people could agree on a comprehensive criteria for ethical research that a separate work would be needed. And with that assertion the four authors dust off their responsibilities to discuss research and ethics as integrated concerns and activities. In the second edition (Webb et al., 1981), this oversight is addressed with a specific chapter but a certain type of hedging around the
issues continues. The authors, now numbering five, rehearse the pros and cons of privacy, consent, confidentiality and protection of subjects vis-a-vis covert observations, archives and other non-reactive methods. Issues of cheating and the social and political uses of findings are ignored perhaps because the authors feel that these matters have more to do with self and/or peer regulation. Consent, privacy, confidentiality and protection directly concern respondents or subjects and it is this ‘direct relationship’, focusing on ‘the other’, which drives their interpretation of research ethics. This means, of course, that only one side of the moral equation in research is being explored.

Furthermore, Webb and his colleagues maintain that ethical criteria for research are difficult to arrive at and suggest only that researchers keep a watchful eye on state, national and institutional developments in the area of research ethics policy. No practical suggestions for researchers, especially for novices, are made. Just as methods must be chosen with a research problem in mind, ethics should also be discussed in this context. I have said elsewhere (Kellehear, 1989) that ethics cannot simply imply the use of broad checklists. Research ethics often arise from, and are suggested by, the research endeavour itself. In this context, ethical dilemmas and issues should be discussed with co-researchers at the time of research planning as part of the design. Ethical problems may be identified at this stage and ways to overcome them planned. As the research progresses from design to field, further problems may present themselves that were not anticipated. As with similar methodological problems, these should be shared and discussed with others. If one is a lone researcher, one should still always discuss potential ethical issues with other researchers. Ethical concerns are social. Ethical guidelines are developed because we desire to avoid harming others. This social concern is about accountability and it therefore reaches its optimal consideration only if discussed with others.

When the findings have been analysed and are part of a final report, thesis or article, dissemination and implications of dissemination are important topics of ethical discussion. I am not referring here to submissions which may be taken to institutional committees—sometimes referred to as ‘ethics committees’. Where these exist, researchers may or even must avail themselves of their scrutiny and advice. And even though I think that the proliferation of such formal devices has its merits, the disadvantage is that this may abrogate the researcher from the responsibility of seeing ethics as
part of the ongoing process of research. Too often ethics committees monitor only the first stage of research, the proposal. Too often the major ethical dilemmas arise in later parts of the research, the field and the report. Consequently, all researchers should monitor and discuss these issues among themselves as ongoing concerns and practical problems.

As ethics committees focus on research subjects (animals or humans), these committees often give the false impression that research ethics apply mainly to that particular interface. That focus ignores other ethics such as cheating with results, copyright infringement, choosing not to publish one’s findings etc. These and many other examples are not covered by that interface. The stated priorities of ethics committees can give the false impression that ethics is about ‘what we do to others’ rather than the wider moral and social responsibilities of simply being a researcher. Ethics is always about fair and honest dealing, whether towards an active participant or with colleagues or State agencies, or towards owners of a diary, for example. I will spend a little time at the end of each subsequent chapter outlining some of the areas of possible ethical concern when we cover the various types of unobtrusive research.

And, finally, ethical problems occur over the three phases of the research process and discussion with others in each of these is the best way of self-monitoring.

The three phases of research are:

- research design
- in the field
- write up and public reporting
Recommended reading

Babbie, E. (1969), *The Practice of Social Research*, 5th edn, Wadsworth, Belmont, CA (especially part 5 including appendices A and B)
Most books or articles on research design begin with abstract principles and end in one of two ways: either the advice concludes with an example or, alternatively, with a short discussion of how research reports should be presented. The abstract principles introduce difficult ideas such as ‘conceptual definitions’, ‘problem analysis’, ‘paradigm selection’ and so on. The example of design toward the end of that kind of discussion is designed to shore up all the readers who got lost in the preceding discussion. Advice which takes this approach moves from the abstract to the concrete tasks of design. I think this process of explanation should be reversed. It is more helpful and enabling to move from the more easily understood aspects of research design to the more abstract. So, I will begin with the main ways in which research is presented and then look at the rationale and reasons behind the design.

Every research report has subtle differences in presentation which are due to personal style and the idiosyncratic demands of the data collected. However, the main influence on research reports which determines their presentation is the author’s methodological preference. By methodological preference I mean whether researchers start out with a theory which they wish to test (hypothetico-deductive) or whether they conduct research to develop theory (ethnographic-inductive research).

**Hypothetico-deductive design**

The hypothetico-deductive design is so called because it tests
hypotheses (hypothetico) and it does this by testing a general theory on a particular sample of cases. It moves, therefore, from the general idea/theory/hypotheses to the particular (deductive) sample of a study. The first section of this kind of research report is the literature review. In the literature review researchers identify and discuss the main literature which is relevant to the research endeavour. If the research is about ‘car theft in urban areas’ then the literature will contain all or the main studies on car theft in urban areas. The discussion will assess the strengths and weaknesses in former studies and summarise the main findings and explanations (theories). The extensiveness and depth of this literature review will depend on whether the research is for an article, a report, or for a thesis or book. If the literature review is written for a journal article, the review is usually brief. The review will contextualise the proposed or actual research and highlight the main gap to which the current research responds. For a book or a thesis, a literature review may be anything up to 20 000 words of extensive and exhaustive critique and evaluation. This is because authors are attempting to appear to master the whole area of their interest so as to impress colleagues or examiners. In any case, the literature review is always an evaluative task which poses questions and identifies gaps or omissions in the study of a certain area.

The next major section in an hypothetico–deductive report is the ‘theoretical framework’. The theoretical framework is the outline of an explanation that you believe will address the gap or omission in the literature. It is an idea or set of ideas which, if supported by some empirical evidence, will allow the research area to proceed further than it has hitherto. In my research with the dying (Kellehear, 1990) my review of the literature revealed two problems with the sociology of death and dying. First, I did not agree that we are a ‘death-denying’ society as many did and do still believe. Second, the sociology of death and dying had studied death fairly extensively but not the behaviour of the dying. If I could show that a dying role still existed in modern society then that would be strong criticism of the idea of social denial. This is because dying, to be considered a public form of behaviour, would need to be seen as a set of mutual expectations and exchanges. How would I test this idea and what might a dying role be? I combed the historical and anthropological literature on dying and I noted that the behaviour of those dying in most times and places had several reoccurring features in common.

Five features of what many have called ‘the good death’ were:
awareness of dying (from self or others), adjustments to illness and altered social relations, preparation for death, disengaging from work and saying good-bye. The ‘good death’ therefore, was my ‘theoretical framework’, my set of ideas which would add to our understanding of dying and help challenge the notion that we are a ‘death-denying society’. These five features needed identification and discussion with any supporting literature brought to bear on the ideas themselves. Furthermore, these ideas would serve two further practical functions. First, they would serve as themes or discussion areas in my interviews and, second, they would serve as hypotheses.

As hypotheses, each of these features of the ‘good death’ had to be specified in more precise terms. Did farewells really take place between dying people and their intimates? For most or for only a few? If most of the dying made farewells then the hypothesis here is considered proven and one feature of the modern ‘good death’ is established, at least for this study. Theoretical frameworks are a \textit{priori} organising ideas, that is, ideas developed \textit{before} the empirical encounter with the world.

The next section in a hypothetico–deductive report is methods. The methods section identifies the main methods and techniques employed to collect the data for or against the theory. This may involve describing the choices of interviews, observations or archival work. Many studies employ only one method, such as interviews, while others combine several. The choice must be explained and preferably justified in terms of past research and/or current resources. The simple choice of methods is not the only issue discussed. The finer points of research design are also rehearsed and justified here: studies might be cross-sectional, that is a once-only study in one timeframe (for example, a survey of voting attitudes in February 1993); they might also be longitudinal—a series of studies of the same people, concerning the same issues, over a period of time (for example, a voting attitude survey of the same people conducted annually over five years). Some research designs might be experimental, that is testing individual reactions to an object or activity that you, as researcher, are manipulating. In this context, less obvious, but no less important, are design considerations which focus on issues such as social bias in question style, sample selection or choice of methods. This is particularly important if it can be shown that the design might distort or discriminate against one or more social groups. (For an example of this see Eichler’s 1988 discussion of gender bias in research design.) In this
context, the limitation of the method and design should also be discussed here along with any other ethical considerations.

The section on method is followed by one on results. Traditionally, this section is the one which contains the statistics. I say ‘traditionally’ because the hypothetico–deductive style has usually been home to the positivist approach to research. The questionnaire–measurement interests of this approach have usually favoured statistical techniques and it is the results section where these are rehearsed and corralled. In a short article the results section can be quite major. Here, hypotheses are supported or discarded, interesting ‘levels of significance’ identified, and frequencies which allude to other interesting patterns of behaviour or belief are described. For observational studies, a quick overview of one’s observations is also contained in this section.

Finally, a discussion section appears. Discussion sections of a report, thesis or article are designed to link back to the literature review and theoretical framework sections of the report. How right were we after all? How wrong were we? Where did we go wrong? How complete is our explanation now that the evidence from this

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<tbody>
<tr>
<td>• literature review</td>
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<tr>
<td>— reviews previous studies and theories, evaluates</td>
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<tr>
<td>— identifies gaps and omissions of previous work, locates present study</td>
</tr>
<tr>
<td>• theoretical framework</td>
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<tr>
<td>— outlines a theory or explanation which addresses past omissions</td>
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<tr>
<td>— provides detailed theoretical exposition of these ideas</td>
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<tr>
<td>— suggests hypotheses</td>
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<tr>
<td>• methods</td>
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<tr>
<td>— identifies methods appropriate to the theory</td>
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<tr>
<td>— justifies and explains the choice of methods</td>
</tr>
<tr>
<td>— ethical discussion</td>
</tr>
<tr>
<td>• results</td>
</tr>
<tr>
<td>— description of statistical analysis, observations or other measurements</td>
</tr>
<tr>
<td>• discussion</td>
</tr>
<tr>
<td>— attempts to explain the findings</td>
</tr>
<tr>
<td>— refers back to literature and theory section</td>
</tr>
<tr>
<td>— suggestions for future work</td>
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particular study is all in? What findings need further explanation? How to account for these findings in the light of the theory? Does the theory need modification and in what ways? How might those modifications themselves seek empirical validation and support in further work?

The above presentation format is also the basic outline of research design. However, research design is not simply about the major steps to research writing. Design is also about what method or methods are best chosen for the research question you have in mind. If your main interest is in generalising from your data, you will need information which is reliable and representative. Often, your sample will be large—counting 200 tombstones or collecting 200 questionnaires. If you are primarily interested in meaning and experience, you might choose to confine yourself to ten long interviews or a lengthy, thematic analysis of personal diaries or journals.

The hypothetico–deductive rationale for research comprises:

- read first (literature review)
- get an idea (theoretical framework)
- go out (methods)
- test it (results)
- see if you were right in the first place (discussion)

However, not everyone thinks that this is the best way to undertake social research. There is a belief that the hypothetico–deductive approach imposes a set of meanings on social phenomena. It also excludes from study ideas which are not part of the original theory. In these senses, quantitative/theory-testing/deductive approaches develop an ‘outsider’s view’ of the social phenomena that are being studied (etic viewpoint).

Those who feel that these criticisms should be incorporated in the research design tend to design their work differently.

**The ethnographic–inductive design**

The ethnographic–inductive design is so called because it has often been favoured by anthropologists in their fieldwork. Anthropologists develop a picture of society through a multitude or combination of
methods. These primarily include observations of one sort or another but also include some interviews, the use of informants, and the study of physical objects, geography and ecosystems. The ‘ethnographic method’, then, is less a method than an approach to analysing and portraying a social system. The ethnographer attempts to understand the commonsense meanings and experiences of the participants of a social system. This is sometimes referred to as attempting to understand the social system from ‘the insider’s’ point of view (emic viewpoint). From a study of this system of social life, one attempts to develop an explanation about the development, maintenance and salience of certain social processes. In this sense, one moves from the particular case (the study) to the general social theory, an inductive movement of thought which is sometimes referred to as ‘grounded theory’.

These studies also begin with a literature review. The aim of the literature review is not simply to gain an impression of theoretical and empirical omissions alone, although this is not unimportant. The task of the literature review is also to develop a ‘sense of place’. By this I mean to develop a social picture of the setting and its people. Whether you are interested in the experiences of inmates in a prison or the social life of the Fijian-born Indian, the review of the literature should help convey past academic attempts to tell this story. The literature review then, for inductive research designs, is not only an evaluation of past literature, it is also the background to the culture studied, with imperfections of the literature noted and discussed.

The issue of correspondence is important to both hypothetico-deductive and ethnographic–inductive studies. The idea of correspondence is actually quite simple and can be encapsulated in the following question: how well does my social description correspond with the reality? In ethnographic–inductive designs, researchers often take the view that the theory, the explanations, the connection between action and interpretation, should be suggested by the social system itself. They are interested in immersing themselves in the social system, or the accounts of that system, and developing the theory by observing how patterns of meaning emerge from the social practices and beliefs of those they are studying. These emerging patterns are the social stimuli upon which a theory is constructed.

It follows from these beliefs that the literature review section is not followed by a theoretical framework section. Instead, ethnographic description follows the literature review. In this section the
setting, the people and their way of life are described in consider-
able detail. Since the foundation of any theory will be developed
on the basis of this description, that description must be thorough.
Like a novelist, observations and interviews must be attentive,
receptive, facilitative and guided only in informal and informed
ways. The richness of this description forms the basis of this section
which may be entitled ‘ethnographic description’.

The section which follows the ethnographic description is usu-
ally the discussion section. Note that, in addition to the omission
of a formal theoretical framework section, no results section exists
either. The ethnographic description section is the ‘equivalent’ of a
positivist’s results section. The discussion is usually quite lengthy
and sometimes may include several subsections. Whatever the
particular style, the idea is nevertheless quite similar. The discus-
sion should attempt to construct a social portrayal of the people
studied vis-a-vis the past understanding of them as contained in
the academic literature.

The abstract social processes, symbols and structures which
underlie the ethnography should now be brought to the fore of the
study in this section. The connections between the various abstract
explanations should be justified by their close links with the narra-
tive account or observations. Sometimes the discussion section is
not sharply divided from the ethnography but rather is a self-reflec-
tive and critical extension of it. The important point to realise is
that the important analytic energies which drive the analysis, and
hence the written presentation, are description (ethnography) and
explanation (theory).

A section describing methods may occur in two places. Either
reflections and descriptions of method may be placed in an appen-
dix or, alternatively, this discussion may occur after the literature
review. If the methodological discussion occurs after the literature
review it may not do so as a formal section. Sometimes a section
entitled something like ‘Background to the study’ might contain
among other topics, discussion of method. In this section one may
describe the physical setting, its demographic, geographic and
historical background as it is known. Also contained in this section
are reflections on the steps taken and difficulties encountered in
entering the field situation. Reflections on ethics and a review of
the methods employed in data collection may be part of this
preliminary exercise in self-reflection.

The above format or presentation is an expression of a research
design which seeks to develop explanation from ideas and experi-
ences suggested by the social system itself rather than simply from the academic’s discourse. It does not ignore that discourse but rather uses this as an instrument for orienting the researcher to past ways of understanding. Once oriented, the researcher then attempts to enter the world of the ‘other’ by actively cultivating an empathy for that world. This empathy together with field notes are ways in which the researcher will later construct a formal theory of social life.

The ethnographic–inductive rationale for research implies:

- reading first (literature review)
- gaining experience, participate, listen, record (ethnographic description)
- describing the theoretical implications of what you saw/heard (discussion)
- explaining where you were and how you went about your task of understanding (background to the study)

The above organisation/designs for writing and research are illustrated in a general perusal of the academic social science literature. From that perusal you will see that psychologists and
quantitative oriented sociologists favour the hypothetico–deductive format. Anthropologists and qualitative sociologists tend to favour the ethnographic–inductive presentation. You might examine the following examples for further reflection in this area.

Some examples of the hypothetico–deductive design:

Some examples of ethnographic–inductive design:

Note carefully that the above examples of design and presentation are most commonly found in academic and professional journals. They are also the most common styles used in theses and formal reports. These are all areas of heavy peer review and regulation and this is the major reason for the high level of conformity and low level of imaginative and interesting presentation. When you begin to look beyond these specific instances and, say, browse academic books published by commercial publishers, things become rather more interesting and presentation of work takes on a diverse and less formalised appearance.

Both theoretical and empirical work of this type tends to shape itself around the main issues, themes or aspects of an argument. If an argument is ordered into five or six stages, or applies itself to three or four examples, then the chapters will follow or reflect that organisation. Sometimes a central argument in a book is not discernible so that perhaps the aim of the author/s is merely to show, or demonstrate, certain ways of seeing or analysing issues. The chapters will order themselves along those issues with preliminary and concluding chapters.

More often than not though, studies (empirical or theoretical) have something to say—they wish to persuade. Each author
attempts to work out the best way to do this through the organisation of the book, report or article. The story of the study must unfold in parts so that the reader is kept interested, all the while following the logical development of the author’s thought within the work’s organisation.

Many books do not have a discussion of literature separate to that of method. Many books omit a methods chapter altogether. A book that relies heavily on archival methods may simply state that and move on to the more important task of developing the insights from the study. Literature reviewed for the purpose of the study or argument might be integrated throughout a book. This is a favoured style of ‘post-structuralist’ researchers (also known by the equally ambiguous label ‘post-modernist’).

Post-structuralist writers, partly because they wish to avoid the authorial voice of ‘the expert’ and partly because they have no use for self-conscious ‘scientific’ presentations, often write as if they were telling a story. They are ‘up front’ with their attempts to tell a social story, explain an account of things, in a different way. They wish to reveal, in the re-examination of a piece of social reality, that which might not be obvious to the casual observer. They may use several examples to make their point or they may engage with several central writers to do this. Each presentation will reflect the idiosyncratic style and choices of each writer.

In these above respects, when referring to the organisation of commercially published books or, more specifically, the style of a certain group of qualitative writers (e.g. post-structuralists) no formulae of presentation can be outlined—almost anything goes! Doing justice to the research topic is confronted by the demands of doing justice to the writing as a literary exercise and the readers as potentially diverse audiences. A good research report or thesis does not make the best read, however clear the organisation of that report is meant to be. A good book, however, is more than a matter of clarity. It is also one of style, engaging persuasion and memorable reflections, and there is no ready design for these goals.

The earlier designs and presentations are themselves designed to cater for the needs of peer accountability—so that others can check your review, methods, results and thoughtful or thoughtless logic. Good books, designed for wide readership within and beyond one’s discipline, must meet broader and less tangible criteria for ‘good’ reading. For post-structuralist writers, ‘research’ is a ‘reading’ of the world, and the task is always persuasion rather than proving.
Their model, therefore, has always emulated the literary, creative model rather than the formalistic, scientific–academic model.

**Rationale and problems**

As I mentioned earlier the main influences behind the hypothetico–deductive design are the quantitative approaches to the social sciences. These approaches have had a number of philosophical influences which were important in their developing and justifying this approach. Quantitative researchers believe that their research designs are scientific. They, more than other social scientists, emphasise theory construction and concern for the issues of validity and reliability. Modelling themselves on their understanding of the physical sciences, they believe that theory building and testing is the way forward in understanding the world, including human behaviour. Measurement is important to this understanding because measurement provides a strong basis for testing old theories or developing new ones. The world ‘out there’ is a mystery and the task facing social science is to develop theories to explain it.

A narrow or exclusive focus on measuring things scientifically is usually referred to as ‘positivism’. The idea that the world can be understood in terms of relations between a thinking and knowing self and an outside, not-self world is part of the view called ‘empiricism’. An empirical view is one that says that the world ‘out there’ is a reality that can be visited and studied objectively. The aim of quantitative oriented scientists is to establish cause and effect and to examine the logic of the social universe. This concern with the logic and order of the world is sometimes referred to as ‘rationalism’.

<table>
<thead>
<tr>
<th>Philosophical influences behind hypothetico–deductive research are:</th>
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<tbody>
<tr>
<td>• empiricism—I go out into the world</td>
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<tr>
<td>• positivism—with my own theory and measure</td>
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<tr>
<td>• rationalism—a set of cause and effect relations</td>
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The ethnographic–inductive format, favoured by the qualitative researchers, is influenced by different philosophic traditions. Qualitative social scientists have strong reservations about imposing a
pre-structured theory onto the world. Human beings are not physical objects but, rather, conscious, decision-making and often irrational beings. Order is often unstable and changeable. Cause and effect are artificial concepts which oversimplify complex, continuous processes of metamorphosis and ambiguity. Social science should indeed go out into the world but with only a desire to listen and participate. One must bracket one’s former understanding about particular social phenomena and attempt to understand these processes from the point of view of the experiencer. This concern with the insider’s point of view is often called phenomenology, while a concern for the way in which people interpret and make sense of their world is called symbolic interaction. The world ‘out there’ is several ‘worlds’. There is less concern for the objective and more concern for how people make and understand their world. Worlds are ‘live-in’ places and the ethnographer must socially or at least psychologically, try to enter that world. The world is not objective but subjective.

The philosophical influences behind ethnographic–inductive research are:

- empiricism (naturalism)—I go out into the world (into ‘habitats’)
- phenomenology—and describe from the insider’s point of view
- symbolic interaction—the way people interpret the world

Within the qualitative group of researchers there is yet further dissent about how to conduct social research. One group of qualitative researchers does not believe that there is an objective world ‘out there’. The world ‘out there’ is, in fact, a purely social construction. People have ‘understandings’ about the world which they share with others as stories or narratives. However, these narratives are not simply interpretations about the world because the stories themselves actually constitute the world. In other words, the stories are instrumental in socially and physically shaping the world. The design of the world and the interpretation of the world are one. But the determining influence or energy comes from the dominant narratives.

The narratives, however, are not themselves any more objective than the world that they purport to interpret. On the contrary, the
stories people hold about their world—about housing, gender, health, religion or architecture—are built upon certain hidden agendas. The main way in which people understand things reveals other issues or symbols which may be denied, hidden, repressed or in any case effectively silenced. This principle, that culture is a network of narratives or stories built on the hidden, comes partly from psychoanalysis but also partly from literary theory. The views from this particular group of qualitative researchers are sometimes referred to as ‘post-structuralist’ or ‘post-modern’ or ‘social constructionist’ (see Lyotard, 1984). The aim of these researchers is to ‘rewrite the narrative’ by uncovering (‘deconstructing’) those hidden but powerful elements. The distinction between self and the world and theory and empirical work is spurious, that is, not what it seems. All social research which is critical and penetrating is deconstructive, unpeeling the variety of human meanings unconsciously inherited by people in the course of their life and socialisation.

### The philosophical influences behind post-structuralist research are:

- **phenomenology**—I describe (uncover, ‘deconstruct’), beginning from the native’s viewpoint
- **symbolic interaction**—how the dominant way people interpret the world
- **psychoanalysis/semiotics, literary theory**—is based upon one or several hidden conventions/agendas. These ‘rules’ behind the conventions have the effect of limiting/suppressing other voices, ideas, knowledge or experiences (for example, women, blacks, alternative health ideas, parapsychology etc.)

The differences between the quantitative and the qualitative research approaches, and between those whose qualitative approach is influenced by traditional anthropological or semiotic sources, is important. In the next chapter we will be analysing the main techniques used in interpreting data collected through the use of unobtrusive methods. The philosophic influences introduced here will also be useful in understanding which techniques are favoured by different researchers and the broad reasons behind those preferences. But before we launch into this technical exposition, now is a good time to have a brief word or two about ‘research ownership’.
Ethics and research ownership

Many people write alone. They design a study, collect experiences or data, go into a room somewhere and write all about it. Many theses are written this way. But beyond the writing of the solitary worker, many others work collaboratively in matters of design, data collection and analysis, and finally jointly write the report or publications which stem from the earlier work.

If you work alone on a theory and not see anyone, the work thereby produced is yours (assuming no plagiarism). Usually most people do not work that way. Help comes with contacts, access, advice, practical support, data analysis or reading report drafts and so on. Such helpers are acknowledged with a thank-you in the acknowledgments and a box of chockies in private. Here, too, are the people who participated in the study, those interviewed, relatives who own those letters and diaries and so on. Depending on how many of them there actually are, you might want to hold off on the chockies but somewhere, in good research, that reciprocity needs to be respected.

Then there are other people who are actually doing the study with you. These are the people who wrote part of the report or collected a large part of your data or helped in important ways in the actual design ideas. These people are usually co-authors of reports or publications which stem from the work. Some people believe that if you ‘pay’ a research assistant then they can be asked to do almost anything and should be happy with an acknowledgment. I think this exploitative practice is quality nonsense. A research assistant is a helper with transcription, statistical computation, typing and literature location, search and retrieval. As the task of the assistant becomes more complex and involving, the role of that person becomes one of research associate. This is a person who gathers a substantial amount of the data, who writes a major portion of a report or who contributes major ideas which change the design of the research in important ways.

Everyone has slightly different ideas on research assistants and associates and everyone has differing ideas on what ‘major contribution’ actually means. But if you are part of a group or team, ensure that you know your role and the credit which will be accorded to you for your work. These matters should never be left unclear (see Dunkin, 1992). A major role performed in the research should entitle you to co-authorship of some of the publications. That question should be settled clearly at the beginning of any
research collaboration. Anyone who tries to convince you otherwise is trying to sell you something. Don’t buy it!

I leave this chapter with a complaint sent to Kaz Cooke in her ‘Keep Yourself Nice’ column in The Age (25 January, 1992). It is signed ‘Nun’s Story’ and it is all too often a ‘common story’.

Dear Kaz,

I am a humble scientist, who does believe she is making a difference to patient care. My problem is that while I come up with the ideas, my medico boss insists on standing in the limelight. I know I should be pious and show humility, but inside my head I keep having very un-nice thoughts. How should I repent?

Nun’s Story, Brunswick

Sometimes people present ideas as their own on purpose, and sometimes they have mulled it over long enough in their spacious heads, they become convinced it was their brainwave all along. The various approaches you may employ include saying in front of other people, ‘I see you’ve implemented my idea for . . .’ (fill in flash of brilliance here). ‘I’ve been thinking more about it, and it might be even better if . . .’ (further insight here). Or you could tell him or her to knock it off. Or you could say, at an appropriate juncture, ‘That was my idea. Give it back, give me credit, or I’ll start calling you “Junior”’!

Recommended reading


Game, A. (1991), Undoing the Social, Open University Press, London, chapter 1


Minichiello, V. et al. (1990), In-depth Interviewing: Research People, Longman Cheshire, Melbourne, chapters 2 and 3


Najman, J. (1992), ‘Comparing alternative methodologies of social research:
an overview’, J. Daly, I. McDonald and E. Willis, *Researching Health Care: Designs, Dilemmas & Disciplines*, Routledge, London