4 Understanding research philosophies and approaches

LEARNING OUTCOMES

By the end of this chapter you should:

- define the key terms epistemology, ontology and axiology and explain their relevance to business research;
- explain the relevance for business research of philosophical perspectives such as positivism, realism, pragmatism, interpretivism, objectivism, and constructionism;
- understand the main research paradigms which are significant for business research;
- distinguish between main research choices: deductive and inductive.
- state your own epistemological, ontological and axiological positions.

4.1 Introduction

Much of this book is concerned with the way in which you collect data to answer your research question. You are not unusual if you begin thinking about your research by considering whether you should, for example, administer a questionnaire or conduct interviews. However, thoughts on this question belong in the centre of the research 'onion', by which means we have chosen to depict the issues underlying the choice of data collection techniques and analysis procedures in figure 4.1. Before coming to this central point we argue that there are important layers of the onion that need to be peeled away.

Indeed, some writers, such as Guba and Lincoln (1994:105), argue that questions of research methods are of secondary importance to questions of which paradigm is applicable to your research (we deal with paradigms later in this chapter). They note:

> 'both qualitative and quantitative methods may be used appropriately with any research paradigm. Questions of method are secondary to questions of paradigm, which we define as the basic belief system or world view that guides the investigation, not only in choices of method but in ontologically and epistemologically fundamental ways'.

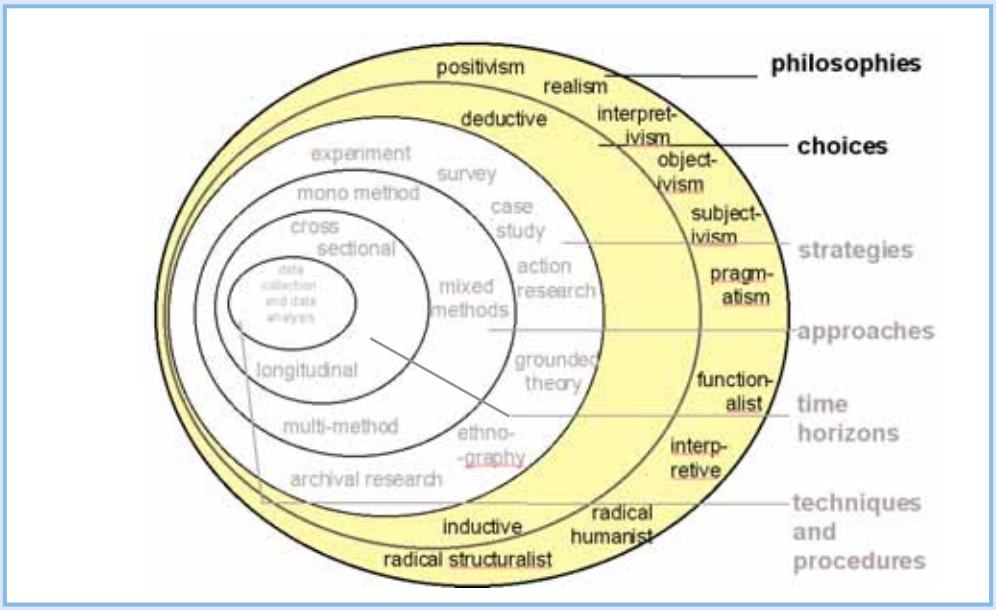

Figure 4.1 The research onion

This chapter is concerned principally with the first two of the onion's layers: research philosophy and research choice. In the next chapters we examine what we call research strategy, approaches and time horizons. The sixth layer, data collection techniques and analysis procedures are dealt with in Chapters 7–13.

In 2003 the *British Medical Journal* reported that the leading independent medical journal, *The Lancet*, last week took the unprecedented step of accusing a major European pharmaceutical company, of sponsoring biased research into its new anti cholesterol drug.

In his editorial in *The Lancet*, Richard Horton, the journal's editor, said the company's tactics 'raise disturbing questions about how drugs enter clinical practice and what measures exist to protect patients from inadequately investigated medicines'. He accused the clinical trials, which investigated the efficacy of the new drug, of including 'weak data', 'adventurous statistics', and 'marketing dressed up as research'. The editorial argued 'physicians must tell their patients the truth about the drug, that, compared with competitors, it has an inferior evidence base supporting its safe use'.

In the same edition of *The Lancet* the company issued a furious response. 'Regulators, doctors, and patients as well as my company have been poorly served by your flawed and incorrect editorial,' wrote the CEO. He said that he deplored the fact that a respected scientific journal should make such an outrageous critique of a serious, well studied, and important medicine.

Source: Dyer, O. (2003: 1005).

4.2 Understanding your research philosophy

In this first part of the chapter we examine **research philosophy**. This overarching term relates to the development of knowledge and the nature of that knowledge. At first reading this sounds rather profound. But the point is that this is precisely what you are doing when embarking on research- developing knowledge in a particular field. The knowledge development you are embarking upon may not be as dramatic as a new theory of motivation. But even if the purpose has the relatively modest ambition of answering a specific problem in a particular organisation it is, nonetheless, developing new knowledge.

The research philosophy you adopt contains important assumptions about the way in which you view the world. These assumptions will underpin your research strategy and the methods you choose as part of that strategy. In part, the philosophy you adopt will be influenced by practical considerations. However, the main influence is likely to be your particular view of the relationship between knowledge and the process by which it is developed. The researcher who is concerned with facts, such as the resources needed in a manufacturing process, is likely to have a very different view on the way research should be conducted to the researcher concerned with the feelings and attitudes of the workers towards their managers in that same manufacturing process. Not only will their strategies and methods probably differ considerably, but so will their views on what is important and, perhaps more significantly, what is useful.

In this discussion we examine three major ways of thinking about research philophosy: epistemology, ontology and axiology. Each contain important differences which will influence the way in which you think about the research process. This is the purpose of this chapter. It is not to offer a shopping list from which you may wish to choose that philosophy or approach that suits you best. It is to enhance your understanding of the way in which we approach the study of our particular field of activity.

Epistemology

Epistemology concerns what constitutes acceptable knowledge in a field of study. The most important distinction is one hinted at above in our example of two researchers' views of what they consider important in the study of the manufacturing process. The researcher (the 'resources' researcher) who considers data on resources needed is likely to be more akin to the position of the natural scientist. This may be the position of the operations management specialist who is comfortable with the collection and analysis of 'facts'. For that researcher, reality is represented by objects that are considered to be 'real', such as computers, trucks and machines. These objects have a separate existence to that of the researcher and for that reason, this researcher would argue that the data collected are far less open to bias and therefore more 'objective'. The 'resources' researcher would place much less authority in the data collected by the 'feelings' researcher, who is concerned with the feelings and attitudes of the workers towards their managers in that same manufacturing process. The 'resources' researcher would view the objects studied by the 'feelings' researcher - feelings and attitudes, as social phenomena which have no external reality. They cannot be seen, measured and modified like computers, trucks and machines. You may argue, of course, that human feelings can be, and frequently are, measured. Indeed the 'resources' researcher may place more authority on such data were it to be presented in the form of a table of statistical data. This would lend the data more objectivity in the view of the 'resources' researcher. But this raises the question of whether those data presented in statistical form is any more deserving of authority than

those presented in a narrative, which may be the choice of the 'feelings' researcher.

The 'resources' researcher is embracing what is called the **positivist** position to the development of knowledge whereas the 'feelings' researcher is adopting the **interpretivist** perspective. We deal with both in the next section on epistemology, as well as the stance of the researcher taking the position of the realist and the pragmatist.

Positivism

If your research philosophy reflects the principles of **positivism** then you will probably adopt the philosophical stance of the natural scientist. You will prefer 'working with an observable social reality and that the end product of such research can be law-like generalisations similar to those produced by the physical and natural scientists' (Remenyi et al., 1998:32).

Like the 'resources' researcher earlier, only phenomena that you can observe will lead to the production of credible data. To generate a research strategy to collect these data you are likely to use existing theory to develop hypotheses. These hypotheses will be tested and confirmed, in whole or part, or refuted, leading to the further development of theory which may then be tested by further research.

Box 4.1 WORKED EXAMPLE

The development of hypotheses

Brett was conducting a piece of research for his dissertation on the economic benefits of working from home of software developers. He studied the literature on home working in general and read in detail two past dissertations in his university library that dealt with the same phenomenon, albeit that they did not relate specifically to software developers. As a result of his reading Brett developed a number of theoretical propositions, each of which contained specific hypotheses. Listed below is that which Brett developed in relation to potential increased costs, which may negate the economic gains of home working.

Theoretical proposition: Increased costs may negate the productivity gains from home working.

Specific hypotheses:

1. Increased costs for computer hardware, software and telecommunications equipment will negate the productivity gains from home working.
2. Home workers will require additional support from on-site employees, e.g. technicians, which will negate the productivity gains from home working.
3. Work displaced to other employees and/or increased supervisory requirements will negate the productivity gains from home working.
4. Reduced face-to-face access by home workers with colleagues will result in lost opportunities to increase efficiencies, which will negate the productivity gains from home working.

Source: Developed from Westfall (1997).

The hypotheses developed, as in Box 4.1 lead to the gathering of facts that provide the basis for subsequent hypothesis testing. Both the examples we have cited so far, that of the 'resources' researcher and Brett in Box 4.1 will be concerned with facts rather than impressions. Such facts are consistent with the notion of 'observable social reality' similar to that employed by the physical and natural scientists to which we referred in Remenyi et al's (1998) definition earlier.

Another important component of the positivist approach to research is that the research is undertaken, as far as possible, in a value-free way. At first sight this is a plausible position, particularly when one contrasts the perspective of the 'resources' researcher with the 'feelings' researcher in our earlier example. The 'resources' researcher would claim to be external to the process of data collection in the sense that there is little that can be done to alter the substance of the data collected. The assumption is that 'the researcher is independent of and neither affects nor is affected by the subject of the research' (Remenyi et al., 1998:33). After all, the 'resources' researcher cannot change the fact that there are five trucks and ten computers. In Box 4.1 Brett would collect data that would facilitate the estimation of quantitative cost estimates and allow the hypotheses to be tested. The 'resources' researcher's claim to be value free is, on the face of it, rather stronger than that of the 'feelings' researcher. It may be argued that the 'feelings' researcher is part of the data collection process. It would be normal for at least part of the process of data collection on the feelings and attitudes of the workers towards their managers would include the personal involvement of the 'feelings' researcher with those workers. A personal interview, for example, will involve the 'feelings' researcher framing the questions to ask and interpreting the respondent's examples. It is hard to imagine that the 'feelings' researcher would ask every respondent exactly the came question in exactly the same way and interpret every response with computer like consistency. The 'feelings' researcher is a human not an automaton.

You may argue, of course, that, complete freedom from the inclusion of our own values as researchers is impossible. Even the researcher seeking to adopt a decided positivist stance exercises choice in the issue to study, the research objectives to pursue and the data to collect. Indeed, it could be argued that the decision to adopt a seemingly value free perspective suggests the existence of a certain value position.

It is frequently advocated that the positivist researcher will be likely to use a highly structured methodology in order to facilitate replication (Gill and Johnson, 2002). Furthermore, the emphasis will be on quantifiable observations that lend themselves to statistical analysis. However, as you read through this chapter and the next you will note that this may not necessarily be the case since it is perfectly possible to adopt some of the characteristics of positivism in your research, for example, hypothesis testing, and use largely qualitative methods.

Realism

Realism is another epistemological position which relates to scientific enquiry. The essence of realism is that what the senses show us as reality is the truth: that objects have an existence independent of the human mind. The theory of realism is that there is a reality quite independent of the mind. In this sense, realism is opposed to **idealism**, the theory that only the mind and its contents exist. Realism is a branch of epistemology which is similar to positivism in that it assumes a scientific approach to the development of knowledge. This assumption underpins the collection of data and the understanding of those data.

This meaning (and in particular the relevance of realism for business and management research) becomes clearer when two forms of realism are contrasted.

The first type of realism is direct realism. **Direct realism** says that what you see is what you get: what we experience through our senses portrays the world accurately. The second kind of realism is called **critical realism**. Critical realists argue that what we experience are sensations, the images of the things in the real world, not the things directly. Critical realists point out how often our senses deceive us. For example, when you next watch an international rugby or cricket match on television you are likely to see an advertisement for the sponsor in a prominent position on the actual playing surface. This looks like it is standing upright on the field. However, this is an illusion. It is in fact painted on the grass. So what we really see are sensations, which are representations of what is real.

The direct realist would respond to the critical realist that what we call illusions are actually due to the fact that we have insufficient information. We don't perceive the world in television images. We move around, move our eyes and ears, use all our senses. In the case of the television advertisement, the complete experience of it would include seeing it from all directions and angles.

A simple way to think about the difference between direct and critical realism is as follows. Critical realism claims that there are two steps to experiencing the world. First there is the thing itself and the sensations it conveys. Second, there is the mental processing that goes on sometime after that sensation meets our senses. Direct realism says that the first step is enough. To pursue our cricket (or rugby) example, the umpire who is the critical realist would say about his umpiring decisions: 'I give them as I see them!' The umpire who is a direct realist would say 'I give them as they are!'

Business and management research is concerned with the social world in which we live. So you may agree with writers such as Bhaskar (1989) who identify with the critical realist epistemology. Their argument is that as researchers we will only be able to understand what is going on in the social world if we understand the social structures that have given rise to the phenomena that we are trying to understand. In other words, what we see is only part of the bigger picture. Bhaskar (1989) argues that we can identify what we don't see through the practical and theoretical processes of the social sciences.

> Thus the critical realist's position is that our knowledge of reality is a result of social conditioning (e.g. we know that if the rugby player runs into the advertisement that is standing up he will fall over!) and cannot be understood independently of the social actors involved in the knowledge derivation process. Dobson (2002).

A further important point needs to be made about the distinction between direct and critical realism, both of which are important in relation to the pursuit of business and management research. The first relates the capacity of research to change the world which it studies. The direct realist perspective would suggest the world is relatively unchanging: that it operates, in the business context, at one level (the individual, the group or the organisation). The critical realist, on the other hand, would recognize the importance of multi-level study (for example, at the level of the individual, the group and the organisation). Each of these levels has the capacity to change the researcher's understanding of that which is being studied. This would be the consequence of the existence of a greater variety of structures, procedures and processes and the capacity that these structures, procedures and processes have to interact with one another. We would therefore argue that the critical realist's position that the social world is constantly changing is much more in line with the purpose of business and management research which is to often to understand the reason for phenomena as a precursor to recommending change.

Box 4.2 RESEARCH IN THE NEWS

Ageing is not all bowls, bingo and ballroom dancing

Look at television news stories about pensions and pensioners and you are likely to see images of people playing bowls, bingo and ballroom dancing. It seems that we have been conditioned socially to associate older people with activities such as these.

However, in January 2006 research results will be published in the UK which defines segments or niches within the older age group. These are not about age but about different life events, such as becoming a grandparent, finding new love, retirement, getting a new job, or coping with bereavement. The difference is that in the 1950s, today's 50- and 60-year-olds were the 'first' teenagers, and as such are no carbon copies of their own ageing parents.

Research from international design consultancy Ideo into this age group backs these findings up. It found that targeting older people alienates older people, too. It recommended talking to their interests and aspirations, not their age. Age, the agency concluded, is increasingly an irrelevance. So advertising and marketing that highlight these life events is becoming more popular instead. Saatchi and Saatchi's campaign for Ameriprise Financial in the US focuses on the idea that the baby boomer generation will approach retirement very differently to previous generations. Instead of using actors, Saatchi and Saatchi featured true stories of people from that generation, in an attempt to demonstrate their individuality.

Older celebrities, too, are not living up to the ageing stereotypes, and that makes them ideal spokespeople for this generation. US-based Fidelity Investments, for example, has appointed Paul McCartney as spokesperson. This may strike some consumers as a bizarre move for the ex-Beatle, but with his second wife and new baby, Mr. McCartney is seen as a realistic example of a 20th century man in his 60s.

But not all the blame for older people being ignored and patronised can be laid at the feet of the advertising and marketing industries. They may have a lot of money – they represent 50 per cent of total consumer spending in the US – but they are not always in a rush to spend it.

The biggest change for the ad industry to embrace is that the so-called "grey market" is no minority group. By 2041, more than 20m people in the UK will be over 60 – or 37 per cent of the population.

It seems that the grey market was the niche market. But as one researcher pointed out 'it's now more mainstream, and the upshot is that youth has become the niche."

Source: Dowdy (2005).

Interpretivism

You may be critical of the positivist tradition and argue that the social world of business and management is far too complex to lend itself to theorising by definite 'laws' in the same way as the physical sciences. Those researchers critical of positivism argue that rich insights into this complex world are lost if such complexity is reduced entirely to a series of law-like generalisations. If you sympathise with such a view your research philosophy is likely to be nearer to that of the interpretivist.

Interpretivism is an epistemology that advocates that it is necessary for the researcher to understand differences between humans in our role as social actors. This emphasises the difference between conducting research among people rather than objects such as trucks and computers. The term 'social actors' is quite significant here. The metaphor of the theatre suggests that as humans we play a part in on the stage of human life. In theatrical productions, actors play a part which they interpret in a particular way (which may be their own or that of the director) and act out their part in accordance with this interpretation. In the same way we interpret our everyday social roles in accordance with the meaning we give to these roles. In addition, we interpret the social roles of others in accordance with our own set of meanings.

The heritage of this strand of interpretivism comes from two intellectual traditions: **phenomenology** and **symbolic interactionism** (see chapter 9). Phenomenology refers to the way in which we as humans make sense of the world around us. In symbolic interactionism we are in a continual process of interpreting the social world around us (see Box 4.3) in that we interpret the actions of others with whom we interact and this interpretation leads to adjustment of our own meanings and actions.

Crucial to the interpretivist epistemology is that the researcher has to adopt an empathetic stance. The challenge here is to enter the social world of our research subjects and understand their world from their point of view.

Some would argue that an interpretivist perspective is highly appropriate in the case of business and management research, particularly in such fields as organisational behaviour, marketing and human resource management. Not only are business situations complex, they are also unique. They are a function of a particular set of circumstances and individuals. This immediately raises questions about the generalisability of research that aims to capture the rich complexity of social situations. However, the interpretivist would argue that generalisability is not of crucial importance. We are constantly being told of the ever-changing world of business organisations. If we accept that the circumstances of today may not apply in three months' time then some of the value of generalisation is lost. Similarly, if we accept that all organisations are unique, that too renders generalisation less valuable.

Box 4.3 FOCUS ON MANAGEMENT RESEARCH

The motivation of knowledge workers in The Japanese financial services industry

In their 2002 *Journal of Knowledge Management* study Kubo and Saka use an interpretive epistemology to study the motivation of knowledge workers in the Japanese financial services industry. This, they felt, was a particularly interesting study in view of the fact that businesses in Japan are being prompted to change their structure and management style with the rapid liberalisation and the world-wide development of information technology. The traditional Japanese management model, based on life-time employment and seniority-based salary systems, is under threat from "westernisation" of the financial industry.

Kubo and Saka's research is based on two data sources:

1. structured one and a half and two hours telephone interviews;
2. the primary researcher's own on-site observations during her five year long employment as a company analyst in a securities company.

Kubo and Saka's research shows that there are three major factors that have an impact on Japanese knowledge workers' motivation to be committed to working at the same financial firm for a long span of time. These are: monetary incentives, human resource development or personal growth, and job autonomy or task achievement. Kubo and Saka conclude that these findings raise considerable concerns about the ability of the traditional Japanese management model to meet the expectations of their knowledge workers.

Source: Kubo, I and Saka, A. (2002).

Ontology

We noted earlier that epistemology concerns what constitutes acceptable knowledge in a field of study. The key epistemological question is 'can the approach to the study of the social world, including that of management and business, be the same as the approach to studying the natural sciences?' The answer to that question points the way to the acceptability of the knowledge developed from the research process.

Ontology, on the other hand, is concerned with the nature of reality. To a greater extent than epistemological considerations, this raises questions of the assumptions researchers have about the way the world operates and the commitment held to particular views. The two aspects of ontology we describe here will both have their devotees among business and management researchers. In addition, both are likely to be accepted as producing valid knowledge by many researchers.

The first aspect of ontology we discuss is **objectivism**. This portrays the position that social entities exist in reality external to social actors concerned with their existence. The second aspect, **subjectivism**, holds that social phenomena are created from the perceptions and consequent actions of those social actors concerned with their existence.

Objectivism

This portrays the position that social entities exist in reality external to social actors. An example of this may be management itself (see Box 4.4). You may argue that management is an objective entity and decide to adopt an objectivist stance to the study of particular aspect of management in a specific organisation. In order to substantiate your view you would say that the managers in your organisation have job descriptions which prescribe their duties, there are operating procedures to which they are supposed to adhere, they are part of a formal structure which locates them in a hierarchy with people reporting to them and they in turn report to more senior managers. You may argue that managers in the

Box 4.4 WORKED EXAMPLE

A management exodus at On Tology

As part of a major organisational change all the managers in the marketing department of the chemical manufacturer On Tology left the organisation. They were replaced by new managers who were thought to be more in tune with the more commercially aggressive new culture that the organisation was trying to create.

The new managers entering the organisation filled the roles of the managers who had left and had essentially the same job duties and procedures as their predecessors.

John wanted to study the role of management in On Tology and in particular the way in which managers liaised with external stakeholders. He decided to use the new managers in the marketing department as his research subjects.

In his research proposal he decided to write a little about his research philophosy. He defined his ontological position as that of the objectivist. His reasoning was that management in On Tology had a reality that was separate from the managers that inhabit that reality. He pointed to the fact that the formal management structure at On Tology was largely unchanged from that which was practised by the managers that had left the organisation. The process of management would continue in largely the same way in spite of the change in personnel.

organisation where you are studying are different to managers in another organisation. For example, their duties may differ, and this points to the notion of management in your organisation being the creation of those social actors concerned with its creation, that is the managers themselves. But this is to miss the point that management in your organisation has a reality that is separate from the managers that inhabit that reality.

Subjectivism

The subjectivist view is that social phenomena are created from the perceptions and consequent actions of social actors. What is more, this is a continual process in that through the process of social interaction these social phenomena are in a constant state of revision.

Remenyi et al. (1998:35) stress the necessity to study 'the details of the situation to understand the reality or perhaps a reality working behind them'. This is often associated with the term constructionism, or **social constructionism**. This follows from the interpretivist position that it is necessary to explore the subjective meanings motivating the actions of social actors in order for the researcher to be able to understand these actions. Social constructionism views reality as being socially constructed. Social actors, such as the customers you may plan to study in your organisation, may place many different interpretations on the situations in which they find themselves. So individual customers will perceive different situations in varying ways as a consequence of their own view of the world. These different interpretations are likely to affect their actions and the nature of their social interaction with others. In this sense, the customers you are studying not only interact with their environment, they also seek to make sense of it through their interpretation of events and the meanings that they draw from these events. In turn their own actions may be seen by others as being meaningful in the context of these socially constructed interpretations and meanings. Therefore, in the case of the customers you are studying, it is therefore your role as the researcher to seek to understand the subjective reality of the customers in order to be able to make sense of and understand their motives, actions and intentions in a way that is meaningful.

All this is some way from the position that customer service in an organisation has a reality that is separate from the customers that receive that reality. The subjectivist view is that customer service is produced through the social interaction between service providers and customers and is continually being revised as a result of this. In other words, at no time is there a definitive entity called 'customer service'. It is constantly changing.

This objectivist- subjectivist debate is somewhat similar to the different ways in which the theoretical and practical approaches to organisational culture have developed in recent years. Smircich (1983) noted that objectivists would tend to view the culture of an organisation as something that the organisation 'has'. On the other hand the subjectivist's view would be that culture is something that the organisation 'is' as a result as a process of continuing social enactment. Management theory and practice has leaned towards treating organisation culture as a variable, something that the organisation 'has': something that can be manipulated, changed in order to produce the sort of state desired by managers. The subjectivist viewpoint would be to reject this as too simplistic and argue that culture is something that is created and re-created through a complex array of phenomena which includes social interactions, physical factors such as office layout to which individual attach certain meanings, rituals and myths. It is the meanings that are attached to these phenomena by social actors within the organisation that need to be understood in order for the culture to be understood. Furthermore, because of the con-

tinual creation and re-creation of an organisation's culture it is difficult for it to be isolated, understood and then manipulated.

Pragmatism

It is unavoidable that the debates on both epistemology and ontology have had a competitive ring to them. The debate is often framed in terms of a choice between either the positivist or the interpretivist research philosophy. Even if you accept the Guba and Lincoln (1994) argument we noted earlier, that questions of method are secondary to questions of epistemology and ontology, you would still be excused for thinking that choosing between one position or the other is somewhat unrealistic in practice. If this is your view then you would be adopting the position of the pragmatist. Pragmatism argues that the most important determinant of the research philosophy adopted is the research question- one approach may be 'better' than the other for answering particular questions. Moreover, if the research question does not suggest unambiguously that either a positivist or interpretivist philosophy is adopted this confirms the pragmatist's view that it is perfectly possible to work with both philosophies. This mirrors a theme which recurs in this book. This is that mixed methods, both qualitative and quantitative, are possible, and possibly highly appropriate, within one study (see section 5.4). Tashakkori and Teddlie (1998) suggest that it is more appropriate for the researcher in a particular study to think of the philosophy adopted as a continuum rather than opposite positions. They note that 'at some points the knower and the known must be interactive, while at others, one may more easily stand apart from what one is studying (Tashakkori and Teddlie, 1998:26).

Tashakkori and Teddlie (1998) contend that pragmatism is intuitively appealing, largely because it avoids the researcher engaging in what they see as rather pointless debates about such concepts as truth and reality. In their view you should 'study what interests you and is of value to you, study in the different ways in which you deem appropriate, and use the results in ways that can bring about positive consequences within your value system.' (Tashakkori and Teddlie, 1998:30).

Axiology

Axiology is a branch of philosophy that studies judgments about value. Although this may include values we posess in the fields of aesthetics and ethics, it is the process of social enquiry with which we are concerned here. The role that your own values play in all stages of the research process is of great importance if you wish your research results to be credible. This is why we think it is worth noting this important topic here, particularly through the example in Box 4.5.

Heron (1996) argues that our values are the guiding reason of all human action. He further argues that researchers demonstrate axiological skill by being able to articulate their values as a basis for making judgements about what research they are conducting and how they go about doing it. After all, at all stages in the research process you will be demonstrating your values. The example in Box 4.5 illustrates the relevance of values in research topic selection. Choosing one topic rather than another suggests that you think one of the topics is more important. Your choice of philosophical approach is a reflection of your values as is your choice of data collection techniques. For example, to conduct a study where you place great importance in data collected through interview work suggests that you value personal interaction with your respondents more highly than their anonymous views expressed through survey data.

An interesting idea which comes from Heron's (1996) discussion of axiology is the possibility of writing your own statement of personal values in relation to the topic you are studying. This may be more evidently applicable to some research topics than others. Those topics concerned with personal career development, for example, may be obvious candidates for this process. For example, it would be an issue of personal value that it is the responsibility of the individual to take charge of her own career development. In areas of finance it may be a strongly held value of the researcher that as much information as possible should be available to as many stakeholders as possible.

A statement of values may be of use both to you as the researcher and those parties with whom you have contact in your research. The use to you would be a result of your 'being honest with yourself' about quite what your values are. This would, for example, heighten your awareness of value judgments you are making in drawing conclusions from your data. These value judgments may lead to the drawing of conclusions which may be different from those drawn by researchers with other values. Other relevant parties connected with your research may include any fellow researchers, your supervisor and the university research ethics committee. This latter body may be of particular relevance to thoughts about the role of values in research topic choice and ways of pursuing research. Being clear about your own value position may help you in deciding what is appropriate ethically and arguing your position in the event of queries about decisions you have made. Chapter six goes into more detail about research ethics.

Box 4.5 RESEARCH IN THE NEWS

It's good to talk: but to drive at the same time?

There are some research topics which, by their very nature, are certain to arouse strong emotions. Therefore it is difficult to see how the research can be approached in a value free way. For example, who would argue that endangering life while using a mobile phone when driving is something that we do not have an opinion about?

Recent research by researchers at the University of Western Australia suggests that drivers are four times more likely to crash when using mobile phones, even if they use hands-free kits.

They reached their estimates by looking at the phone bill records of 456 drivers needing hospital treatment after road crashes in Perth, Australia.

For each driver, the researchers assessed phone use immediately before a crash and on trips at the same time of day 24 hours, three days, and seven days before the crash for comparison. Mobile phone use in the 10 minutes before a crash was associated with a four-fold increased likelihood of crashing. This finding was irrespective of whether the driver was using a hand-held or hands-free phone. Similar results were found for the interval up to five minutes before a crash.

Author Suzanne McEvoy and colleagues from the University of Western Australia said: "More and more new vehicles are being equipped with hands-free phone technology.

"Although this may lead to fewer hand-held phones used while driving in the future, our research indicates that this may not eliminate the risk. Indeed, if this new technology increases mobile phone use in cars, it could contribute to even more crashes."

A spokesman from the UK Royal Society for the Prevention of Accidents said: "This is exactly what we have said and have known for some time. "We hope that the people who callously think that their phone call is more important than somebody's life will get the message eventually when they see more and more research like this." He said the current ban on using hand-held mobiles while driving in the UK, which can carry the penalty of a fine and in the future possibly also penalty points on the driver's license, should be extended to hands-free phones. They said a possible solution might be to change mobile phones so that they cannot be used when vehicles are in motion, but added that industry was unlikely to embrace this.

Source: BBC News Online (2005)

Research paradigms

To draw this section on research philosophies together we explore research philosophy further through the concept of research paradigms. **Paradigm** is a term frequently used in the social sciences, but one which can lead to confusion because it tends to have multiple meanings. The definition we use here is that as paradigm is a way of examining social phenomena from which particular understandings of these phenomena can be gained and explanations attempted.

In our view the work of Burrell and Morgan (1979) is particularly helpful in summarising and clarifying the epistemologies and ontologies we have covered above. In addition, these writers have offered a categorisation of social science paradigms which can be used in management and business research to generate fresh insights into real life issues and problems.

In figure 4.2 we illustrate the four paradigms: functionalist; interpretive; radical humanist; and radical structuralist. Figure 4.2 shows that the four paradigms are arranged to correspond to four conceptual dimensions: **radical change** and **regulatory** and subjectivist and objectivist. The latter two terms are familiar to you from our discussion of ontology in the previous section. In relation to business and management, radical change relates to a judgment about the way organisational affairs should be conducted and suggests ways in which these affairs may be conducted in order to make fundamental changes to the normal order of things. In short, the radical change dimension adopts a critical perspective on organisational life. The regulatory perspective is less judgmental and critical. Regulation seeks to explain the way in which organisational affairs are regulated and offer suggestions as to how they may be improved within the framework of the way things are done at present. In other words, the radical change dimension approaches organisational problems from the viewpoint of overturning the existing state of affairs; the regulatory dimension seeks to work within the existing state of affairs.

Burrell and Morgan (1979) note that the purposes of the four paradigms are:

- to help researchers clarify their assumptions about their view of the nature of science and society;
- to offer a useful way of understanding the way in which other researchers approach their work;

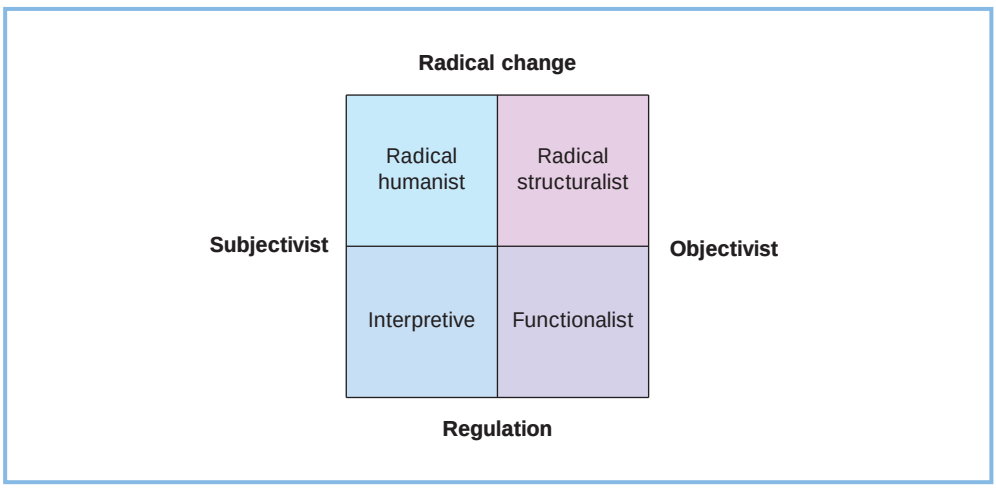

Figure 4.2 Four paradigms for the analysis of social theory

Source: Developed from Burrell and Morgan (1979: 22)

- to help researchers plot their own route through their research; to understand where it is possible to go and where they are going.

In the bottom right corner of the quadrant is the **functionalist paradigm**. This is located on the objectivist and regulatory dimensions. Objectivism is the ontological position you are likely to adopt if you are operating with this paradigm. It is regulatory in that you will probably more concerned with a rational explanation of why a particular organisational problem is occurring and developing a set of recommendations set within the current structure of the organisation's current management. This is the paradigm within which most business and management research operates. As Burrell and Morgan (1979: 26) note: 'it is often problem-oriented in approach, concerned to provide practical solutions to practical problems'. Perhaps the key assumption you would be making here is that organisations are rational entities, in which rational explanations offer solutions to rational problems. A typical example of a management research project operating within the functionalist paradigm would be an evaluation study of a communication strategy to assess its effectiveness and make recommendations as to the way in which it may be made more effective.

Contained in the bottom left corner of the quadrant is the **interpretive paradigm**. As has been noted, the philosophical position to which this refers is the way we as humans attempt to make sense of the world around us. The concern you would have working within this paradigm would be to understand the fundamental meanings attached to organisational life. Far from emphasizing rationality, it may be that the principal concern you have here is discovering irrationalities. Concern with studying an organization's communication strategy may soon turn to understanding the ways in which the intentions of management become derailed for completely unseen reasons, maybe reasons which are not apparent even to those involved with the strategy. This is likely to take you into the realm of organisation politics and the way in which power is used. In Burrell and Morgan's (1979: 31) words 'everyday life is accorded the status of a miraculous achievement'. Your concern here would not be to achieve change in the order of things, it would be to understand and explain what is going on.

In the top left corner the **radical humanist paradigm** is located within the subjectivist and radical change dimensions. As we said earlier, the radical change dimension adopts a critical perspective on organisational life. As such, working within this paradigm you would be concerned with changing the status quo, or in Burrell and Morgan's (1979:32) words 'to articulate ways in which humans can transcend the spiritual bonds and fetters which tie them into existing social patterns and thus realise their full potential'. The ontological perspective you would adopt here, as in the interpretivist paradigm, would be subjectivist.

Finally, in the top right corner of the quadrant is the **radical structuralist paradigm**. Here your concern would be to approach your research with a view to achieving fundamental change based upon an analysis of such organisational phenomena as power relationships and patterns of conflict. The radical structuralist paradigm is involved with structural patterns with work organizations such as hierarchies and reporting relationships and the extent to which these may produce dysfunctionalities. It adopts an objectivist perspective because it is concerned with objective entities, unlike the radical humanist paradigm which attempts to understand the meanings of social phenomena from the subjective perspective of participating social actors.

To illustrate the difference between the radical humanist and radical structuralist paradigms we use issue of discrimination in the workplace in Box 4.6.

Box 4.6 FOCUS ON MANAGEMENT RESEARCH

Employment discrimination against African American males

Discrimination in employment presents a particularly good example of the radical humanist and radical structuralist paradigms in business and management research. Assuming the existence of discrimination, the explanation may be due to the structures that exist in organizations such as the procedures used for advertising posts or conducting selection interviews. On the other hand the explanation may be embedded in the processes used for managing particular groups of employees. These are likely to focus on the informal way in which these procedures are conducted by managers, and other employees. So the radical structuralist approach will concentrate rather more on formal procedures (what should be done) than the radical humanist paradigm, where attention will be on what is done.

Slonaker and Wendt (2003), portray the difference between structure and process in an interesting way. They make the distinction between structural hiring activities (the front door) and the treatment that employees receive in the 'firing' process (the back door).

As a result of studying over 8000 discrimination claims to the legal authority in Ohio, Slonaker and Wendt's contention is that American organizations pay far more attention to front door issues than those which focus on employment termination. To illustrate their point they note that the USA HRM Certification Institute devote nineteen pages to hiring issues in their learning manual. Only four pages are devoted to involuntary terminations, including one paragraph on discrimination.

Slonaker and Wendt's findings show that only 7% of the discrimination claims filed between 1985-2001 related to discrimination in hiring. But 57% of all claims derived from discrimination in termination. Moreover, African American males filed more than eight times the amount of claims relating to termination as those that they filed which related to hiring.

The findings also showed that complainant African American males were in lower graded positions relative to non- African American males, had shorter employment duration, were more likely to be dismissed by their immediate supervisor (rather than HR professionals) and more likely to be dismissed due to 'disruptive behaviour'. This latter finding, the authors suggest, may be due to stereotyping on behalf of organisational supervisors.

The authors conclude that these results indicate discrimination against African American males. In addition, this discrimination occurs in the disciplinary processes adopted by supervisors despite the procedures drawn up by the organisation's HR professionals.

Source: Slonaker and Wendt (2003).

Box 4.7 WORKED EXAMPLE

An outline research proposal on corporate social responsibility using integrated paradigms

The purpose of Krista's dissertation is to understand how corporations implement corporate social responsibility (CSR) codes of conduct. Inherent in this exploration is an understanding of the following:

- what role corporations believe they have in society;
- how this impacts the types of CSR commitments they make in their codes of conduct;

- how these commitments are operationalised;
- how these actions are communicated to those who are asked or required to conduct them;
- how these individuals feel about their new responsibilities;
- how the actions were in fact carried out;
- what the targeted groups feel about the actions carried out;
- the successes and failures experienced during these processes.

Integrated research paradigm

Krista anticipates using both qualitative and quantitative techniques to collect data. However, she points out that the approach will not be from a positivist perspective, as she believes there is no truth or absolute reality to be discovered. She argues that codes of conduct are a human construct and the success or failure of implementing the code is dependent upon the perspective of the individuals or groups affected. Krista contends that this suggests a likely approach of interpretivist/ social constructivism/ interactionism (Mertens, 1998, Denzin, 2001, Aram and Salipante Jr., 2003). She notes that the individuals or groups affected by the codes of conduct are also situated in historical and cultural contexts, which impact on how they perceive the actions of the corporation and its value to them.

The focus of Krista's research will be on the corporation and what it has learned and has yet to learn about successful implementation of its code as defined by all affected groups, including the marginalised, oppressed and least powerful.

Krista's dissertation is likely to be approached from primarily an interpretivist or social constructionist perspective in that there are multiple realities to be understood and all impact the overall success or failure of the code implementation efforts. Identifying and understanding the relationships between multiple realities of code implementation will start to reveal the 'underlying patterns and order of the social world' (Morgan, 1980: 609) with regard to this phenomenon. She argues that the patterns and order themselves can provide insight into more successful or unsuccessful code implementation techniques and considerations. The end goals of Krista's research are two fold. The first goal is to help the corporation with its efforts to improve its social responsibilities to society as are appropriate to its unique context. The second goal is to empower stakeholder representatives to better communicate with the corporation in consensus building activities regarding needs and wants for both parties. Krista notes that the quantitative element of this dissertation will be used solely to determine the generalisability of this information for other corporations around the world and will not impact the overall perspective taken.

Due to the exploratory and descriptive nature of this research (Robson, 2002), data collection, organization and analysis will be guided primarily by a grounded theory, or inductive perspective, whereby the collection, examination and process of continual re-examination of data will determine the research findings.

As the social constructivist perspective is considered to be an integrated perspective, Krista contends that it is appropriate to also use mixed methods and approaches. She will use qualitative methods in the form of case studies to create an in-depth, rich account (Yin, 2003, Scholz and Tietje, 2002; Rubin and Rubin, 1995) of how corporations implement their codes of conduct and what stakeholders think about their efforts. The second phase of research will be used to determine if the code implementation practices identified in the case studies can be used to describe successful or unsuccessful implementation of CSR codes within a more general group of corporations. A survey will be conducted to determine whether the information found is more generalisable or specific to certain, unique corporations.

Bridging the relevance gap

Krista argues in her outline proposal that her dissertation will attempt to help bridge the 'relevance gap' between researchers and practitioners on CSR code implementation (Aram and Salipante, 2003; Tranfield and Starkey, 1998), by ensuring the research strategies (decided on in advance with the case study companies) and the outcomes are both rigorous and appropriate to solve the unique corporation's questions. Therefore, her research strategy will need to allow her to provide both context-specific recommendations and conclusions the corporation can use and data that is potentially generalisable to a wider range of corporations.

Krista points out that it is difficult at the earliest stages of her dissertation to predict whether the data collected from the study will be generalisable and that it is certain that the data will not be reproducible. Tsoukas (1994) discusses the inherent nature of change in all human activity and thus the expectation that change will occur in all systems, groups or individuals under study. Therefore, Krista argues, conducting research from an interpretivist perspective assumes that the research will be virtually impossible to reproduce.

Thus, Krista's dissertation is likely to be conducted from a social constructionist or interpretivist perspective, integrating qualitative and quantitative data collection techniques and analysis procedures to strengthen the validity and quality of data analysis and research findings. The purpose is to understand the different perspectives or realities that are constructed during the implementation of social issues, how history and culture impact these realities and how they impact the overall 'success' of implementation through revealing underlying social patterns and order.

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Which research philosophy is better?

It would be easy to fall into the trap of thinking that one research approach is 'better' than another. This would miss the point. They are 'better' at doing different things. As always, which is 'better' depends on the research question(s) you are seeking to answer. Of course, the practical reality is that research rarely falls neatly into only one philosophical domain as suggested in the 'onion' (see Figure 4.1). Business and management research is often a mixture between positivist and interpretivist, perhaps reflecting the

stance of realism. Indeed, later in this chapter we shall also be encouraging you to think in a more flexible way about the research approach and methods you adopt.

You may ask what practical use is an understanding of your philosophical position? Is it as much use as the outer layer on a real onion, which is cast aside, with only the inner layers retained? We think that it is of practical benefit to understand the taken-for-granted assumptions that we all have about the way the world works. Only if we have such an understanding can we examine these assumptions, challenge them if we think it appropriate, and behave in a different way.

4.3 Research choices

Chapter 2 notes that your research project will involve the use of theory. That theory may or may not be made explicit in the design of the research (Chapter 5), although it will usually be made explicit in your presentation of the findings and conclusions. The extent to which you are clear about the theory at the beginning of your research raises an important question concerning the design of your research project. This is whether your research should use the deductive process, in which you develop a theory and hypothesis (or hypotheses) and design a research strategy to test the hypothesis, or the inductive process, in which you would collect data and develop theory as a result of your data analysis. Insofar as it is useful to attach these approaches to the different research philosophies, deduction owes more to positivism and induction to interpretivism, although we believe that such labeling is potentially misleading and of no practical value.

The next two sections of this chapter explain the differences between these two approaches and the implications of these differences.

Deduction: testing theory

As noted earlier, deduction owes much to what we would think of as scientific research. It involves the development of a theory that is subjected to a rigorous test. As such, it is the dominant research approach in the natural sciences, where laws present the basis of explanation, allow the anticipation of phenomena, predict their occurrence and therefore permit them to be controlled (Collis and Hussey, 2003).

Robson (2002) lists five sequential stages through which deductive research will progress:

1 deducing a hypothesis (a testable proposition about the relationship between two or more concepts or variables) from the theory;
2 expressing the hypothesis in operational terms (that is, indicating exactly how the concepts or variables are to be measured), which propose a relationship between two specific concepts or variables;
3 testing this operational hypothesis (this will involve one or more of the techniques detailed in chapter 5);
4 examining the specific outcome of the inquiry (it will either tend to confirm the theory or indicate the need for its modification);
5 if necessary, modifying the theory in the light of the findings.

An attempt is then made to verify the revised theory by going back to the first step and repeating the whole cycle.

Deduction possesses several important characteristics. First, there is the search to explain causal relationships between variables. It may be that you wish to establish the reasons for high employee absenteeism in a retail store. After studying absence patterns it occurs to you that there seems to be a relationship between absence, the age of workers and length of service. Consequently you develop a hypothesis that states that absenteeism is more likely to be prevalent among younger workers who have worked for the organisation for a relatively short period of time. To test this hypothesis you utilise another characteristic, the collection of quantitative data. (This is not to say that deductive research may not use qualitative data.) It may be that there are important differences in the way work is arranged in different stores: therefore you would need to employ a further important characteristic of deduction approach, *controls to allow the testing of hypotheses*. These controls would help to ensure that any change in absenteeism was a function of worker age and length of service rather than any other aspect of the store, for example the way in which people were managed. Your research would use a *highly structured methodology* to facilitate replication (Gill and Johnson, 2003), an important issue to ensure reliability, as we shall emphasise in Section 5.6.

In order to pursue the principle of scientific rigour, deduction dictates that the researcher should be independent of what is being observed. This is easy in our example because it only involves the collection of absence data. It is also unproblematic if a postal survey is being conducted, although the high level of objectivity this suggests appears less convincing when one considers the element of subjectivity in the choice of questions and the way these are phrased.

An additional important characteristic of deduction is that concepts need to be *operationalised* in a way that enables facts to be measured quantitatively. In our example above the obvious one is absenteeism. Just what constitutes absenteeism would have to be strictly defined: an absence for a complete day would probably count, but what about absence for two hours? In addition, what would constitute a 'short period of employment' and 'younger' employees? What is happening here is that the principle of *reductionism* is being followed. This holds that problems as a whole are better understood if they are reduced to the simplest possible elements.

The final characteristic of deduction is generalisation. In order to be able to generalise statistically about regularities in human social behaviour it is necessary to select samples of sufficient numerical size. In our example above, research at a particular store would allow us only to make inferences about that store; it would be dangerous to predict that worker youth and short length of service lead to absenteeism in all cases. This is discussed in more detail in section 5.6.

Induction: building theory

An alternative approach to conducting research on DIY store employee absenteeism would be to go on to the shopfloor and interview a sample of the employees and their supervisors about the experience of working at the store. The purpose here would be to get a feel of what was going on, so as to understand better the nature of the problem. Your task then would be to make sense of the interview data you had collected by analysing those data. The result of this analysis would be the formulation of a theory. This may be that there is a relationship between absence and relatively short periods of employment. Alternatively, you may discover that there are other competing reasons for absence that may or may not be related to worker age or length of service. You may end up with the same theory, but you would have gone about the production of that theory in an *inductive* way: theory would follow data rather than vice versa as with deduction.

We noted earlier that deduction has its origins in research in the natural sciences. However, the emergence of the social sciences in the 20th century led social science researchers to be wary of deduction. They were critical of a process that enabled a cause–effect link to be made between particular variables without an understanding of the way in which humans interpreted their social world. Developing such an understanding is, of course, strength of inductive research. In our absenteeism example we would argue that it is more realistic to treat workers as humans whose attendance behaviour is a consequence of the way in which they perceive their work experience, rather than as if they were unthinking research objects who respond in a mechanistic way to certain circumstances.

Followers of induction would also criticise deduction because of its tendency to construct a rigid methodology that does not permit alternative explanations of what is going on. In that sense, there is an air of finality about the choice of theory and definition of the hypothesis. Alternative theories may be suggested by deduction. However, these would be within the limits set by the highly structured research design. In this respect, a significant characteristic of the absenteeism research design noted above is that of the operationalisation of concepts. As we saw in the absenteeism example, age was precisely defined. However, a less structured approach might reveal alternative explanations of the absenteeism–age relationship denied by a stricter definition of age.

Research using induction is likely to be particularly concerned with the context in which such events were taking place. Therefore the study of a small sample of subjects might be more appropriate than a large number as with the deductive approach. As can be seen in Chapter 10, researchers in this tradition are more likely to work with qualitative data and to use a variety of methods to collect these data in order to establish different views of phenomena (Easterby-Smith et al., 2002).

At this stage you may be asking yourself: So what? Why is the choice that I make about my research process important? Easterby-Smith et al. (2002) suggest three reasons. First, it enables you to take a more informed decision about your research design (see chapter 5), which is more than just the techniques by which data are collected and procedures by which they are analysed. It is the overall configuration of a piece of research involving questions about what kind of evidence is gathered and from where, and how such evidence is interpreted in order to provide good answers to your initial research question.

Second, it will help you to think about those research strategies and approaches that will work for you and, crucially, those that will not. For example, if you are particularly interested in understanding why something is happening, rather than being able to describe what is happening, it may be more appropriate to undertake your research inductively rather than deductively.

Third, Easterby-Smith et al. (2002) argue that knowledge of the different research traditions enables you to adapt your research design to cater for constraints. These may be practical, involving, say, limited access to data, or they may arise from a lack of prior knowledge of the subject. You simply may not be in a position to frame a hypothesis because you have insufficient understanding of the topic to do this.

Combining research choices

So far we have conveyed the impression that there are rigid divisions between deduction and induction. This would be misleading. Not only is it perfectly possible to combine deduction and induction within the same piece of research, but also in our experience it is often advantageous to do so.

Box 4.8 WORKED EXAMPLE

Deductive and inductive research

Sadie decided to conduct a research project on violence at work and its effects on the stress levels of staff. She considered the different ways she would approach the work were she to adopt:

- the deductive approach;
- the inductive approach.

If she decided to adopt a deductive approach to her work she would have:

1. to start with the hypothesis that staff working with the public are more likely to experience the threat or reality of violence and resultant stress;
2. to decide to research a population in which she would have expected to find evidence of violence, for example a sizeable social security office;
3. to administer a questionnaire to a large sample of staff in order to establish the extent of violence (either actually experienced or threatened) and the levels of stress experienced by them;
4. to be particularly careful about how she defined violence;
5. to standardise the stress responses of the staff, for example days off sick or sessions with a counsellor.

On the other hand, if she decided to adopt an inductive approach she might have decided to interview some staff who had been subjected to violence at work. She might have been interested in their feelings about the events that they had experienced, how they coped with the problems they experienced, and their views about the possible causes of the violence.

Either approach would have yielded valuable data about this problem (indeed, both may be used in this project, at different stages). Neither approach should be thought of as better than the other. They are better at different things. It depends where her research emphasis lies.

We return to the topic of using multiple methods in section 5.6. In the box opposite we summarise some of the major differences between deduction and induction.

At this point you may be wondering whether your research will be deductive or inductive. Creswell (1994) suggests a number of practical criteria. Perhaps the most important of these is the nature of the research topic. A topic on which there is a wealth of literature from which you can define a theoretical framework and a hypothesis lends itself more readily to deduction. With research into a topic that is new, is exciting much debate, and on which there is little existing literature, it may be more appropriate to work inductively by generating data and analysing and reflecting upon what theoretical themes the data are suggesting.

The time you have available will be an issue. Deductive research can be quicker to complete, albeit that time must be devoted to setting up the study prior to data collection and analysis. Data collection is often based on 'one take'. It is normally possible to predict the time schedules accurately. On the other hand, inductive research can be much more protracted. Often the ideas, based on a much longer period of data collection

Major differences between deductive and inductive approaches to research

Deduction emphasis

- scientific principles
- moving from theory to data
- the need to explain causal relationships between variables
- the collection of quantitative data
- the application of controls to ensure validity of data
- the operationalisation of concepts to ensure clarity of definition
- a highly structured approach
- researcher independence of what is being researched
- the necessity to select samples of sufficient size in order to generalise conclusions

Induction emphasis

- gaining an understanding of the meanings humans attach to events
- a close understanding of the research context
- the collection of qualitative data
- a more flexible structure to permit changes of research emphasis as the research progresses
- a realisation that the researcher is part of the research process
- less concern with the need to generalise

and analysis, have to emerge gradually. This leads to another important consideration, the extent to which you are prepared to indulge in risk. Deduction can be a lower-risk strategy, albeit that there are risks, such as the non-return of questionnaires. With induction you have constantly to live with the fear that no useful data patterns and theory will emerge. Finally, there is the question of audience. In our experience, most managers are familiar with deduction and much more likely to put faith in the conclusions emanating from this approach. You may also wish to consider the preferences of the person marking your research report. We all have our preferences about the approach to adopt. You may be wise to establish these before nailing your colours too firmly to one mast.

This last point suggests that not all the decisions about the research approach that you make should always be so practical. Hakim (2000) uses an architectural metaphor to illustrate the approach choice process. She introduces the notion of the researcher's preferred style, which, rather like the architect's, may reflect '. . . the architect's own preferences and ideas . . . and the stylistic preferences of those who pay for the work and have to live with the final result' (Hakim, 2000:1). This echoes the feelings of Buchanan et al. (1988:59), who argue that 'needs, interests and preferences (of the researcher) . . . are typically overlooked but are central to the progress of fieldwork'. However, a note of caution: it is important that your preferences do not lead to your changing the essence of the research question.

4.4 Summary

- The term research philosophy relates to the development of knowledge and the nature of that knowledge.
- Your research philophosy contains important assumptions about the way in which you view the world.
- There are three major ways of thinking about research philophosy: epistemology, ontology and axiology. Each contain important differences which will influence the way in which you think about the research process.
- Epistemology concerns what constitutes acceptable knowledge in a field of study.
- Positivism relates to the philosophical stance of the natural scientist. This entails working with an observable social reality and the end product can be law-like generalisations similar to those in the physical and natural sciences.
- The essence of realism is that what the senses show us is reality, is the truth: that objects have an existence independent of the human mind.
- Interpretivism is an epistemology that advocates that it is necessary for the researcher to understand the differences between humans in our role as social actors.
- Ontology is a branch of philosophy which is concerned with social beings.
- Objectivism is the philosophical position which holds that social entities exist in reality external to social actors whereas the subjectivist view is that social phenomena are created from the perceptions and consequent actions of social actors.
- Pragmatism holds that the most important determinant of the research philosophy adopted is the research question.
- Axiology is a branch of philosophy that studies judgments about value.
- Social science paradigms can be used in management and business research to generate fresh insights into real life issues and problems. The four paradigms explained in the chapter are: functionalist; interpretive; radical humanist; and radical structuralist.
- There are two main research choices: deduction and induction. With deduction a theory and hypothesis (or hypotheses) are developed and a research strategy designed to test the hypothesis. With induction, data are collected and a theory developed as a result of the data analysis.

SELF-CHECK QUESTIONS

Help with these questions is available at the end of the chapter.

4.1 You have decided to undertake a project and have defined the main research question as 'What are the opinions of consumers to a 10% reduction in weight, with the price remaining the same, of "Snackers" chocolate bars?' Write a hypothesis that you could test in your project.

4.2 Why may it be argued that the concept of the manager is socially constructed rather than 'real'?

4.3 Why are the radical paradigms relevant in business and management research given that most manages would say that the purpose of organisational investigation is to develop recommendations for action to solve problems without radical change?

4.4 If you were to follow up the Slonaker and Wendt (2003) study on discrimination against African-American males what philosophical stance may underpin your research choice?

4.5 You have chosen to approach your research project following a process of deduction. What factors may cause you to work inductively, although working deductively is your preferred choice?

REVIEW AND DISCUSSION QUESTIONS

4.6 Visit an online database or your university library and obtain a copy of a research based refereed journal article that you think will be of use to an assignment you are currently working upon. Read this article carefully. What research philosophy do you think the author has adopted? Use Section 4.2 to help you develop a clear justification for your answer.

4.7 Think about the last assignment you undertook for your course. In undertaking this assignment were you predominantly inductive or deductive. Discuss you thoughts with a friend who also undertook this assignment.

4.8 Agree with a friend to watch the same television documentary.

a To what extent is the documentary inductive or deductive in its use of data?

b Have the documentary makers adopted a positivist, realist, interpretivist or pragmatist philosophy?

Do not forget to make notes regarding your reasons for your answers to each of these questions and to discuss your answers with your friend.

PROGRESSING YOUR RESEARCH PROJECT

Diagnosing your research philosophy

Indicate your agreement or disagreement with each of these statements. There are no right or wrong answers.

		strongly agree	*agree*	*slightly agree*	*slightly disagree*	*disagree*	*strongly disagree*
1	For the topic being researched there is one single reality, the task of the researcher is to discover it.	❑	❑	❑	❑	❑	❑
2	Business and management research is value laden.	❑	❑	❑	❑	❑	❑
3	A researcher can not be separated from what is being researched and so will inevitably be subjective.	❑	❑	❑	❑	❑	❑
4	A variety of data collection techniques should be used, both quantitative and qualitative.	❑	❑	❑	❑	❑	❑

	strongly agree	*agree*	*slightly agree*	*slightly disagree*	*disagree*	*strongly disagree*
5 The reality of what is being researched exists independently of people's thoughts, beliefs and knowledge of their existence.	❑	❑	❑	❑	❑	❑
6 Researchers must remain objective and independent from the phenomena they are studying, ensuring that their own values do not impact on data interpretation.	❑	❑	❑	❑	❑	❑
7 Business and management research should be practical and applied, integrating different perspectives to help interpret the data.	❑	❑	❑	❑	❑	❑
8 Business and management researchers need to employ methods that allow in depth exploration of the details behind a phenomenon.	❑	❑	❑	❑	❑	❑

Now discuss your answers with your colleagues. To guide your discussion you need to think about:

What do you consider to be the nature of reality?
Why?

To what extent do your own values influence your research?
Why?

What is your relationship with what you research?
Why?

How might knowledge of this impact upon your own research?

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Maylor, H. and Blackmon, K. (2005), *Researching business and management*, Basingstoke, Palgrave Macmillan. Chapter 5 is a very approachable account of the major research philosophies.

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Tashakkori, A. and Teddlie, C., (1998), *Mixed methodology: combining qualitative and quantitative approaches*, Thousand Oaks, Ca.. Sage. There is some useful discussion relating to pragmatism in chapter 2 of this book.

CASE 4

Marketing music products alongside emerging digital music channels

Esmée had been working in the music industry as a Marketing Director for a small and successful independent record label for over fifteen years before deciding to study at University. She had witnessed many changes in the music industry over her career, the most significant of which was the transition from selling cassettes, vinyl records and CDs at retail to selling digital music online. She had observed that the music industry had not taken much notice of the potential for marketing and distributing digital music online until Shawn Fanning developed his peer-to-peer (P2P) file trading application, Napster, in 1999. While the music industry focused on shutting the service down, Napster became even more popular with music fans and consumers who were interested in discovering and sharing new music and creating custom compilations or playlists without having to buy entire albums. Early on, Esmée had decided that she needed to understand why Napster was so popular and consumers so enthusiastic about sharing music online. She decided to download the Napster application and was surprised to find older songs that were no longer available at retail, previously unreleased recordings, alternative studio versions and bootleg recordings made at live concerts. While searching for and downloading music, Esmée also began to interact with communities focused around their file trading activities. While the music industry viewed Napster and other P2P file trading applications with deep suspicion and focused on the issues of piracy and loss of royalties to shut them down, her interactions with P2P file traders provided her with significant insights into how the consumer's relationship to music was changing. P2P file trading applications and other digital music technologies represented new 'meanings' for music fans and distinct new channels for music marketing and distribution. As online music sharing became even more popular, Esmée observed that both major and independent record labels continued to struggle with and resist the very technologies that were fundamentally redefining their industry. She was puzzled by this and wanted to develop a more consolidated understanding of the current state of the music industry and to gain in-depth knowledge of the potential that new technologies had for transforming the entire industry.

Nearing the end of her studies, Esmée spent many weeks struggling with identifying the focus of her final research project and thinking about how her own value systems and beliefs were likely to impact on her research. She reflected that in the programme's Innovation and Technology Management module, she had learned about the technical and strategic issues of digital music distribution involving content creators, artists, record companies and retailers. After reading Premkumar's (2003) article Alternate Distribution Strategies for Digital Music, Esmée realised that success in digital music distribution hinged on the music industry's ability to identify and address the new marketing and sociological issues associated with the consumer's switch to new forms of music consumption and that record labels would need to re-evaluate their current practices in context of these new technologies and channels for music marketing and distribution. Additionally, while reading for the Leadership and Organisational Management module, she had come across Lawrence and Phillips' (2002) article on the cultural industries in which they observed that despite the social, economic and political significance of the cultural industries, management research had neglected to focus their efforts on cultural production. They argued that there was a need for empirical research into the organisational and managerial dynamics of cultural production and had found that even where it had been studied, many management researchers had failed to appreciate the particular nuances and dynamics that characterise these industries.

Esmée arranged a meeting with her supervisor

and outlined her realisation that 'managing' in the cultural industries related less to producing products and more to creating, managing and maintaining the meaning or 'symbolic aspect' of the product. She explained to him that this was especially relevant to the music industry's transition to digital music technologies and that her final project would focus on how traditional marketing departments in record labels could approach redefining their notions of 'music products' while adapting to emerging digital music distribution channels. This would entail understanding how the process of symbol creation and the management of meaning by record labels would need to be managed in order to adapt to the emergence of new symbols and potential meanings enabled by the development of new digital music technologies. She added that her experiences as a Marketing Director provided her with unique insights that would inform and guide her research. Her tutor responded by commenting that her research project sounded interesting and relevant and that, in his opinion, the best way forward would be to adopt a positivist research philosophy using a survey strategy and administering a questionnaire to marketing personnel across major and independent record labels in order to produce data suitable for statistical analysis. After the meeting, Esmée reflected on her tutor's comments. She was surprised that he proposed adopting a positivist philosophy. Based on her previous experiences with peer-to-peer communities, she believed that adopting an interpretivist philosophical stance and using unstructured interviews would be more suitable for her research project. Esmée contemplated on how she should communicate this to her tutor and on how she would be able to convince him that approaching her research project as an interpretivist and using unstructured interviews would be preferable and just as rigorous an undertaking .

Further reading

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QUESTIONS

1. Why is it important to consider epistemology and ontology when undertaking research?
2. What will Esmée need to do in order to respond or challenge her tutor's assertion that she adopt a quantitative methodology?
3. How does Esmée understand the role that her values play with regards to her research project?

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SELF-CHECK ANSWERS

4.1 Probably the most realistic hypothesis here would be 'consumers of "Snackers" chocolate bars did not notice the difference between the current bar and its reduced weight successor'. Doubtless that is what the Snackers' manufacturers would want confirmed!

4.2 Although you can see and touch a manager you are only seeing and touching another human being. The point is that the role of the manager is a socially constructed concept. What a manager is will differ between different national and organisational cultures and will differ over time. Indeed, the concept of the manager as we generally understand it is a relatively recent human invention arriving at the same time as the formal organisation in the past couple of hundred years.

4.3 The researcher working in the radical humanist or structuralist paradigms may argue that it is predictable that managers would say that the purpose of organisational investigation is to develop recommendations for action to solve problems without radical change because radical change may involve changing managers! Radicalism implies root and branch investigation and possible change and most of us prefer 'fine tuning' within the framework of what exists already, particularly if change threatens our vested interests.

4.4 The study does seem to have thrown up some very useful data which indicated the likelihood of discrimination against African-American males. However, the conclusions that the authors draw are tentative, given that they are largely based on survey evidence. This seems like a piece of research that would benefit from a study rooted in the radical humanist paradigm. Slonaker and Wendt may be perfectly justified in the drawing the conclusions they draw. But what they do not do is explain what it is that the supervisors actually do to generate the data which is evident. Neither do they explain what may motivate the supervisors' actions.

4.5 The question implies an either/or choice. But as you work through this chapter and, in particular, the next on deciding your research design, you will see that life is rarely so clear cut! Perhaps the main factor that would cause you to review the appropriateness of the deductive approach would be that the data you collected might suggest an important hypothesis, which you did not envisage when you framed your research objectives and hypotheses. This may entail going further with the data collection perhaps by engaging in some qualitative work, which would yield further data to answer the new hypothesis.