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In psychology, the received understanding holds that qualitative methods have emerged in force during the last three decades. Before this time, mainstream psychology was a quantitative monolith smothering any other perspective on what psychology should be. This is not entirely a fiction but it is a creation myth rather than a precise and historical accurate account of the dark days before qualitative psychology. Probably my experience is a little different from that of most psychologists. At the end of my first year as a psychology student, along with my peers, I was sent for six months to the factory floor (and eventually the personnel offices) of Morganite Carbon which was then in Battersea, London. The reason? Essentially to experience life as a factory worker and to write a project on my experiences. In other words, participant observation or ethnography – and the experience of real life. At the end of every couple of terms we were sent to other locations. I spent six months at the prison in Wakefield and another six months at St George’s Hospital, London. At Wakefield, I did my first study of sex offenders (possibly the first ever study by a psychologist of sex offenders in the United Kingdom). This was an interest which was to resurface years later with my studies of sexual abuse and paedophiles. At St George’s Hospital my colleagues included Fay Fransella an important figure in the field of George Kelly’s personal construct theory – an early precursor of social constructionist approaches in qualitative psychology. Indeed, I attended the first conference on personal construct theory while at Brunel University and, I am assured though cannot vouchsafe it, so was in the presence of George Kelly himself. Actually we got rather a lot of personal construct theory.

At Brunel, I remember being fascinated by the sessions on psychoanalysis given to us by Professor Elliot Jacques. Not only was Jacques famous at the time as an organisational psychologist bringing psychoanalytic ideas to industry but he was the originator of the concept of the midlife crisis! However, the key influence on any psychology student who studied at Brunel University at that time was Marie Jahoda. Ideas and questions where what counted for Marie Jahoda. She had worked with or knew anyone who was important in the social sciences at large. Sigmund Freud was a friend of her family. She would speak of ‘Robert’ in lectures – this was Robert Merton, the great theorist of sociology. She had worked with and had been married to Paul Lazarsfeld, the great methodologist of sociology. And she had been involved in some of the most innovatory research in psychology – the Marienhall unemployment study. The ‘problem’ – meaning the intellectual task – was key to doing research. The ways of collecting data merely followed they did not lead; analysis was a way of life.

I have never worked in the environment with just a single academic discipline – always there have been sociologists, psychologists and smattering of others. My first academic job ever was at the Centre for Mass Communications Research at the University of Leicester. Now it is remarkable just how important the field of mass communications research has been in the development of qualitative research methods. For example, the focus group, participant observation, audience
studies, narrative/life histories and so forth either began in that field or were substantially advanced by it. More than anything, it was a field where psychologists and sociologists collectively contributed. Of course, the styles of research varied from the deeply quantitative to the equally deeply qualitative. Different problems called for different methods. I also remember some radical figures such as Aaron Cicourel, a cognitive sociologist influenced by Erving Goffman and Harold Garfinkel, visiting. Cicourel was a pioneer in the use of video in his research. During a seminar in which he agonised over the issues of coding and categorisation I remember asking Cicourel why he did not simply publish his videotapes. There was a several seconds delay but eventually the reply came. But ethnographic methods are the methods of ordinary people so why bother with the researcher?

Paradoxically, I have always been involved in teaching quantitative methods – I was paid to do so as a postgraduate and from then on. Nevertheless, in academic life you are what you teach for some curious reason. The opposition of qualitative and quantitative is not inevitable; many researchers do both. Aaron Cicourel went along a similar route:

I am NOT opposed to quantification or formalization or modeling, but do not want to pursue quantitative methods that are not commensurate with the research phenomena addressed. (Cicourel interviewed by Andreas Witzel and Günter Mey, 2004, p. 1)

He spent a lot of time as a postgraduate student learning mathematics and quantitative methods:

... if I criticized such methods, I would have to show that my concern about their use was not based on an inability to know and use them, but was due to a genuine interest in finding methods that were congruent or in correspondence with the phenomena we call social interaction and the ethnographic conditions associated with routine language use in informal and formal everyday life settings. (Witzel and Mey, 2004, p. 1)

There is another reason which Cicourel overlooks. Quantitative methods can have a compelling effect of government and general social policy. Being able to speak and write on equal terms with quantitative researchers is important in policy areas of the sort that my research was based.

By concentrating on the problem, rather than the method, a researcher makes choices which are more to do with getting the best possible answer to the question than getting a particular sort of answer to the question. For that reason, qualitative approaches are just part of my research. However, where the question demands contextualised, detailed data then the method became just me, my participants and my recording machine. Some of my favourites among my own research research involved just these.

Qualitative methods in psychology are becoming diverse. Nevertheless, there is not quite the spread of different styles of research or epistemologies for research that one finds in other disciplines. Ethnographic methods, for example, have not been common in the history of psychology – a situation which persists to date. But discourse analytic approaches, in contrast, have become relatively common. I would not encourage any researcher in either of these directions unless their research problem is likely to be best answered by either of these. This may not please all qualitative researchers but any hegemony in terms of method in psychology to my mind has to be a retrograde step. So this book
takes a broad-brush approach to qualitative methods in psychology. First of all, it invites readers to understand better qualitative data collection methods. These are seriously difficult ways of collecting data if properly considered and there is little excuse ever for sloppy and inappropriate data collection methods. They are simply counterproductive. It is all too easy to take the view that an *in-depth interview* or a focus group is an easy approach to data collection simply because they might appear to involve little other than conversational skills. But one has only to look at some of the transcripts of such data published in journal articles to realise that the researcher has not put on a skilled performance. It needs time, practice, discussion and training to do qualitative data collection well. Secondly, I have covered some very different forms of qualitative data analysis methods in this book. These are not all mutually compatible approaches in every respect. Their roots lie in very different spheres. *Grounded theory* derives from the sociology of the 1960s as does *conversation analysis*. *Discourse analysis*, has its roots in the ideas of the French philosopher Michel Foucault but also in the sociology of science of the 1970s. *Interpretative phenomenological analysis* is dependent on phenomenology with its roots in philosophy and psychology. *Narrative analysis* has a multitude of roots but primarily in the *narrative psychology* of the 1990s. And *thematic analysis*? Well – it all depends what you mean by thematic analysis as we shall see.

There is an important issue to raise. Perhaps it is best raised by quoting from Kenneth J. Gergen, one of the key, original figures in the move towards qualitative methods in psychology. In the following he describes his early experience as a psychological researcher:

> My early training was in scientific psychology, that is, a psychology based on the promise that through the application of empirical methods, sound measures, and statistical analysis we would begin to approach the truth of mental functioning . . . I learned my lessons well, how to produce from the messy confines of laboratory life the kinds of clear and compelling ‘facts’ acceptable to the professional journals. A few tricks of the trade: pre-test the experimental manipulations so to ensure that the desired effects are obtained; use multiple measures to so ensure that at least one will demonstrate the effects; if the first statistical test doesn’t yield a reliable difference, try others that will; if there are subjects who dramatically contradict the desired effect, even the smallest effect can reach significance; be sure to cite early research to express historical depth; cite recent research to demonstrate ‘up-to-date’ knowledge; do not cite Freud, Jung or any other ‘pre-scientific’ psychologist; cite the research of scientists who are supported by the findings as they are likely to be asked for evaluations by the journal. Nor was it simply that mastering the craft of research management allowed me to ‘generate facts’ in the scientific journals; success also meant research grants, reputation, and higher status jobs. (Gergen, 1999, p. 58)

Quite what Gergen hoped to achieve by this ‘confession’ is difficult to fathom. As a joking pastiche of mainstream psychology it fails to amuse. In writing this book, I hope to share some of the very positive things that qualitative psychologists can achieve and important ideas which can inform the research of all psychologists irrespective of their point of balance on the qualitative–quantitative dimension. Making research better, then, is an important objective of this book – deriding the work of researchers struggling as we all do to understand the world they live in is not on my agenda. Research is about knowing
in the best way possible – which is not an issue of the general superiority of one method over others.

This book has a modular structure. It is not designed to be read cover to cover but, instead, it can be used as a resource and read in any order as need demands. To this end, the following pedagogic features should be noted:

- There is a glossary covering both the key terms in qualitative analysis in this book and the field of qualitative research in general.
- Most of the chapters have a common structure wherever possible. So the data collection methods chapters have a common structure and the data analysis chapters have a common structure.
- Material is carefully organised in sections permitting unwanted sections to be ignored perhaps to be read some time later.
- Each chapter includes a variety of boxes in which key concepts are discussed, examples of relevant studies described, and special topics introduced.
- Each chapter begins with a summary of the major points in the chapter.
- Each chapter ends with recommended resources for further study including books, journal articles and web pages as appropriate.

Dennis Howitt
September 2009
Qualitative methods may seem to be relatively new in psychology but they have a deep, complex history both in psychology and, importantly, in other disciplines. While it is possible to claim that the growth spurt of the embryo qualitative psychology can be clearly seen to have its origins in the 1980s, a qualitative tradition can be identified which harks back to the beginnings of modern psychology in the late nineteenth century and no doubt earlier. The scope of qualitative methods in psychology is quite broad and a range of intellectual traditions in psychology and other disciplines have made substantial contribution to the field. Thus there is a richness in the history of qualitative methods in psychology which belies many descriptions of the history of psychology and which should be appreciated by any researcher wishing to understand this expanding field. Of course, qualitative psychology is different from quantitative psychology in endless ways and any researcher trained on a purely quantitative diet typical of many psychologists may experience something of a culture shock. This does not mean that they will hate and loathe qualitative psychology – merely that it may appear alien and different, though perhaps whetting the appetite for new challenges. After all, the philosophical foundations of qualitative psychology are very different from those of quantitative psychology, and its methodological foundations are in many ways the reverse of the dominant approaches of mainstream psychology. The procedures for data analysis in qualitative psychology involve an intimacy of working with the data which those used to conventional quantitative analysis involving statistical methods may find disconcerting.
The two chapters which constitute Part 1 of this book involve some embedded objectives:

- To provide a broad understanding of how qualitative psychology differs from quantitative psychology.
- To provide a review of the psychology which explains just why qualitative methods were so slow in emerging in psychology compared to related disciplines.
- To provide a picture of the development of qualitative psychology from within the discipline, under the influence of related disciplines such as sociology and, as a consequence, of some of the disillusionment with the methods of mainstream psychology.

There is no comprehensive history of qualitative research in psychology. The references to the history of qualitative psychology tend to be brief and, if not mistaken, suggest that mainstream psychology essentially smothered qualitative psychology in the antagonist philosophy of positivism. Positivism is essentially a description of the assumptions and characteristics of sciences such as physics and chemistry. For example, they are characterised by the search for universal laws, quantification and empirical investigation. It is claimed by qualitative researchers and others that psychology adopted this approach to its detriment. There are doubts that qualitative psychology was anathema to positivism though claims which are made frequently tend eventually to be believed. What seems clear is that the majority of psychologists in the early history of modern psychology tend to adopt working practices which were not conducive to the ideas of qualitative psychology. Where did these research practices come from? They seem to have originated in attempts by psychologists to emulate the working practices of the natural sciences. Amongst these, especially physics had had spectacular successes in the nineteenth century. Practices such as experimentation, measurement, reductionist thinking and so forth are all fundamental influences of the natural sciences on early psychological researchers. The problem was not just one for psychology and one should remember qualitative methods were also fairly poorly developed in related disciplines such as sociology in the nineteenth and early twentieth centuries. It was not until the 1950s and 1960s that qualitative methods began to develop as an effective challenge to quantitative methods and grand theory in sociology. Thus it is not absolutely correct to suggest that distinctive features of the discipline of psychology were responsible for the late emergence of qualitative psychology. For some reason, though, qualitative psychology emerged two or three decades later than did the qualitative tradition in sociology, though both disciplines were, of course, subject to many of the same influences.

The idea of qualitative psychology eventually defeating the dragon of positivism is a heroic view on the history of qualitative psychology but essentially a false one. We shall see that positivism did dominate the early period
of modern psychology but not to the exclusion of quite different approaches. Positivism and qualitative psychology are not entirely incompatible - if one understands quite what positivism assumes and something about what qualitative methods do. Pinning the blame for the late emergence of qualitative psychology on positivism amounts to a ‘creation myth’ rather than an explanation. Positivism was not seen as applying to every academic discipline or aspects thereof. The ideas of positivism really only apply to the physical sciences though there is plenty of evidence that psychologists thought that it applied to psychology itself. This is, then, not attributable to positivism but to practitioners’ erroneous ideas about positivism. It would be something of a shame if qualitative researchers - who arguably have and need a relatively subtle understanding of the philosophical underpinnings of their chosen approach - propagate erroneous versions of the history of psychology themselves. It is probable that the ‘received’ vision of the nature of psychological research was responsible for the relative neglect of qualitative methods in psychology. Furthermore, the success of the quantitative version of psychology should not be overlooked. To be sure, qualitative researchers have numerous cogent criticisms of mainstream psychology. But these do not take away the influential position, if not power, achieved by psychology during the twentieth century and still today compared with many other disciplines. Thus psychology is a profession in the fullest meaning of the word whereas this is nowhere near so clear for related disciplines such as sociology and social anthropology. This is a plea for clarity about the history of psychology as well as one for understanding of the influence of other social scientific disciplines on the development of qualitative psychology. Quantitative research provided an effective and rewarding model for psychologists during the twentieth century which was not emulated in the same way or to anywhere the same degree of success in other disciplines.

Finally, we read history with hindsight and from a current perspective. It is impossible - albeit desirable - to understand history as it was experienced. One can’t, and to attempt to do so is a fruitless endeavour. But simple things might help provide a more acceptable rounded understanding of the development of qualitative methods. The numbers of psychology students graduating today are massive compared with the early days of the discipline. This means that part of the reason for the late development of qualitative psychology may be due to the limited numbers of personnel. Other fields of psychology, besides qualitative methods, began to flourish in the 1980s and 1990s - these include decidedly non-qualitative sub-fields of psychology such as forensic, health and counselling psychology. Forensic psychology had lain largely dormant from the early 1900s only to begin to prosper in the 1980s - just when qualitative psychology emerged. The point is, of course, that as psychology approached a critical mass it achieved more potential to embrace a wider variety of interests. Indeed, some might say that the critical mass encouraged these changes. For much of its history as embraced
in the first two chapters of this book, psychology as a discipline would only have been able to muster in total the numbers who devote themselves to these recent specialized interests in psychology.

Chapter 1 concentrates on two things:

- Describing the essential characteristics of qualitative methods in psychology.
- Discussing the origins of quantification in psychology, including statistical thinking.

The chapter demonstrates something of the subtlety of the philosophical underpinnings of the quantitative-qualitative debate.

Chapter 2 looks at the varied contributions that psychologists have made throughout the history of psychology which are essentially qualitative in nature and tries to explain the roots of these approaches in psychology and related disciplines. The following seem clear:

- Qualitative approaches have been part of psychology throughout its modern history.
- Many of the early examples of qualitative research in psychology have become ‘classics’ but it is hard to find a clear legacy of them in the history of modern psychology.
- Most of the early examples of qualitative research in psychology involve distinctly qualitative data collection methods although distinct and frequently used methods of qualitative data analysis did not really emerge until the 1950s and 1960s in related disciplines and, probably, not until the 1980s in psychology.
- Qualitative psychology has developed a basis in the institutions of psychology (learned societies, conferences, specialised journals, etc.) which largely eluded it in its early history.
CHAPTER 1
What is qualitative research in psychology and was it really hidden?

Overview

- Qualitative research in psychology is rapidly emerging as an important focus for psychological research and theory. Although there is a long history of qualitative methods in psychology, it is only since the 1980s that qualitative methods have made significant inroads. Among the distinguishing features of qualitative research are its preference for data rich in description, the belief that reality is constructed socially, and that reality is about interpretation and not about hypothesis testing, for example.
- Psychology has historically constructed itself as being a science but, then, largely identified the characteristics of science in terms of numbers and quantification which are not essential features of science.
- Positivism has frequently been blamed for the distorted nature of psychology's conception of science. This, however, tends to overlook that both Comte’s positivism and logical positivism were more conducive to qualitative methods than mainstream practitioners of psychology ever permitted.
- The dominant psychologies since the ‘birth’ of psychology in the psychology laboratory in the 1870s have been introspectionism, behaviourism and cognitive psychology.
What is qualitative research?

According to Smith (2008) ‘We are witnessing an explosion of interest in qualitative psychology. This is a significant shift in a discipline which has hitherto emphasized the importance of quantitative psychology’ (p. 1). The history of qualitative research in psychology has been somewhat enigmatic but there is a history nonetheless. It would be impossible to ignore the new focus on qualitative psychology in psychology though it is doubtful whether this is indicative of a demise of mainstream psychology, many parts of which are untouched by the new qualitative methods. It seems certain that psychologists in the future will be much better versed in qualitative as well as quantitative methods. Psychological research continues to expand exponentially and the sophistication of researchers also increases as new demands are made on the discipline. Qualitative methods are decidedly part of the future of psychology and they are likely to be better integrated into the mainstream of psychology than at any time previously. Inevitably, then, qualitative psychology will be a feature of every psychologist’s training.

It is surprisingly difficult to define what qualitative psychology is. For one thing, it has many different constituent parts. Probably many students see in qualitative methods freedom from the tyranny of numbers and statistics which mar their training in psychology. To equate qualitative with the absence of numerical methods has the advantage of mapping closely onto the experiences of many students of psychology. But it is not quite so simple. It is not the case that psychology breaks down into research in which numbers and statistics are used and research where they are not. There are many research reports which lack numbers and statistics yet are nevertheless decidedly quantitative overall rather than qualitative in their tone. Similarly, you will find numbers and statistics in research reports which are decidedly qualitative in their approach but for which some quantitative information is helpful. So the idea of qualitative research being research entirely in a statistics-free zone fails to effectively distinguish qualitative from quantitative research.

It is impossible to suggest one characteristic which invariably, unassailably and essentially distinguishes qualitative from quantitative methods. Consequently,
it is preferable to identify the range of features which typify qualitative research methods though by no means are all of them characteristic of all types of qualitative research methods. The following are the five features which Denzin and Lincoln (2000) list as major defining characteristics of qualitative research:

- **Concern with the richness of description**  
  Quantitative researchers value data which is rich in its descriptive attributes. So they tend to favour data collection methods which obtain detailed, descriptive data such as that produced by using in-depth interviewing methods, focus groups and the taking of detailed field notes. In contrast, perhaps a little stereotypically, quantitative researchers obtain much more restricted and structured information from their research participants. This is inevitably the case when simple rating scales or multiple choice questionnaire methods are used.

- **Capturing the individual’s perspective**  
  Qualitative methods emphasise the perspective of the individual and their individuality. The use of rich data-gathering methods such as the in-depth interview and focus groups encourage this emphasis on the individual’s perspective. Quantitative researchers, to the extent that they deal with individuals, will tend to focus on comparisons of people on some sort of abstract dimension such as a personality dimension.

- **The rejection of positivism and the use of post-modern perspectives**  
  Qualitative researchers tend to reject *positivist* (see Box 1.1) approaches (i.e. those based on a conventional view of what science is – or *scientism*) though qualitative and quantitative researchers both rely on gathering empirical evidence which is an important aspect of positivism. Quantitative researchers tend to retain the view that reality can be known despite the problems involved in knowing it. For example, the quantitative researcher mostly uses language data as if such data directly represent reality (i.e. the data refer to some sort of reality) whereas most modern qualitative researchers take the view that language may be a window onto reality but cannot represent reality. The post-positivist view argues that, irrespective of whether or not there is truly a real world, a researcher’s knowledge of that reality can only be approximate and that there are multiple versions of reality. In qualitative research, relatively few researchers believe that the purpose of research is the creation of generalisable knowledge. This is a major objective of quantitative research, of course, and quantitative researchers are inclined to make generalisations on the basis of limited data – sometimes as if universally applicable principles have been identified. Positivism is discussed in detail in Box 1.1 and pages 8–9 of this chapter.

- **Adherence to the postmodern sensibility**  
  The *postmodern* sensibility, for example, reveals itself in the way that qualitative researchers are much more likely to use methods which get them close to the real-life experiences of people (in-depth interviews, for example) than quantitative researchers who are often content with a degree of artificiality such as that arising from the use of laboratory studies. Verisimilitude seems much more important to qualitative researchers as a whole and less so to many quantitative researchers in psychology. Qualitative researchers are often portrayed as having a caring ethic in their research and they may undertake ‘political’ action conjointly with their participants as well as engaging in extensive dialogue with them. The sense of personal responsibility in their interactions with their research participants is often promoted as a feature of qualitative research. Some of these features are particularly evident in feminist (action) research where the
Box 1.1

KEY CONCEPT

Auguste Comte’s Positivism

Perhaps more important than the notion of science in critiques of mainstream psychology are the numerous references to ‘positivism’. Indeed, the terms positivism and positivist take on the aspect of pejorative terms when used by researchers. Better to use a four letter word than either of these. Given that positivism is not easily defined and that it is used as an ‘emotive term’ (Silverman, 1997, p. 12), its popularity as an abusive epithet may reveal a lack of understanding rather than an insightful analysis. Nevertheless, the term positivism refers to a major epistemological position in psychology and other related disciplines. Epistemology means the study of knowledge and is concerned with (a) how we can go about knowing things and (b) the validation of knowledge (the value of what we know). Positivism is a philosophy of science which had its historical beginnings in the Enlightenment. This is the important historical period which dominated the eighteenth century. The idea of positivism was systematised in the work of Auguste Comte (1798–1857) in France – he is also credited with coining the term sociologie or sociology (it was previously social physics!). In his writings, Comte proposed a social progression which he referred to as the law of three phases to describe the process of social evolution.

The phases are the theological, the metaphysical and the scientific (Figure 1.1). Importantly, the scientific phase was also named by Comte the positive phase – hence the close link to this day between the terms science and positivism. The theological phase is the earliest and in which, essentially, knowledge about society was through reference to god and religion. Religion is a major factor in the continuity of people’s beliefs so that people’s beliefs in the theological phase are the ones that their ancestors previously held. The metaphysical phase is also known as the stage of investigation as it involved reasoning and the asking of questions rather than the reference to established theological given-knowledge. This phase is

![FIGURE 1.1 Comte’s stages of social evolution](image-url)
objectives of the researcher, for example, is not merely to identify women’s experiences but to change the way things are done on the basis of this research. For instance, in feminist research on pornography (e.g. Itzin, 1993) researchers and activists have often indistinguishable (i.e. they are one and the same person). Other good examples of this in feminist research are child abuse, rape, domestic violence and so forth.

Examination of the constraints of everyday life

Some argue that quantitative researchers overlook characteristics of the everyday social world which may have an important bearing on the experiences of their research participants. Qualitative researchers tend to have their feet more firmly planted in this social world, it is argued. So, for instance, in qualitative research reports much greater detail is found about the lives of individual research participants than would be characteristic of quantitative research reports.

Based even on these criteria, it should be readily seen why it is easier to come to an overall judgement that a particular study is qualitative or quantitative than to come up with a simple acid test to say which is which. So we should not be surprised to find that other authorities list different but overlapping characteristics which they believe capture the broad flavour of the difference between qualitative and quantitative research. Consequently, it is intriguing to note that Denzin and Lincoln’s (2000) list given above of the characteristics of qualitative research has very little overlap with those of Bryman (1988). Nevertheless, most researchers would feel that the following list from Bryman also does a lot to capture this essential difference between qualitative and quantitative research:

- Quantitative data is regarded as hard and reliable whereas qualitative data is regarded as rich and deep. Traditionally, mainstream psychologists often spoke of hard data as opposed to the more subjective soft data.
- Research strategies in quantitative research tend to be highly structured whereas those of qualitative research are relatively unstructured.
The social relationship between the researcher and participant is distant in quantitative research but close in qualitative research.

Quantitative researchers tend to see themselves as outsiders whereas qualitative researchers tend to see themselves as insiders. That is, there is relatively little ‘distance’ between researcher and participant in qualitative research.

Quantitative research tends to be about the confirmation of theoretical notions and concepts (as in hypothesis testing) whereas qualitative research is about emerging theory and concepts.

Research findings in quantitative research tend to be *nomothetic* whereas they tend to be *idiographic* in qualitative research. Nomothetic refers to studying groups or classes of individuals, which leads to generalised explanations, whereas ideographic refers to the study of an individual as an individual.

In quantitative research, social reality is seen as static and external to the individuals where in qualitative research social reality is constructed by the individual.

Some approaches to qualitative psychology, however, lack some of these ‘defining’ characteristics. That is, researchers sometimes mix-and-match the different features of qualitative and quantitative research. Figure 1.2 summarises the major qualities of qualitative research.

**Science as normal practice in qualitative and quantitative research**

Mainstream psychology usually defines itself as being scientific (and it is not unknown among qualitative researchers). The word science has its roots in the Latin *scire* which means to know. However, science has come to mean a particular way of knowing – what we call the scientific approach. Psychology textbooks are replete with claims about psychology as a science. The professional bodies controlling psychology seem to have no qualms about identifying...
psychology as a science. For example, the British Psychological Society, on its website, announces that ‘Psychology is the scientific study of people, the mind and behaviour. It is both a thriving academic discipline and a vital professional practice’ (http://www.bps.org.uk/, retrieved 25 August 2009). Similarly the American Psychological Association claims ‘The objects of the American Psychological Association shall be to advance psychology as a science and profession and as a means of promoting health, education, and human welfare . . .’ (http://www.apa.org/about/, retrieved 15 July 2008). Precisely what this means, in practice, is far harder to pin down. Just how do psychologists construe science? Come what may, precisely what psychologists take to be science is not clarified anywhere on these websites. One accusation regularly made against psychology is that in actuality it employs a somewhat idiosyncratic (if not peculiar) ‘received view’ of what science is.

This received view of science can more or less be effectively summarised as follows (Woolgar, 1996, p. 13):

- ‘Objects in the natural world are objective and real, and they enjoy an existence independent of human beings. Human agency is basically incidental to the objective character of the world “out there”.’
- ‘It follows from this that scientific knowledge is determined by the actual character of the physical world.’
- ‘Science comprises a unitary set of methods and procedures, concerning which there is, by and large, a consensus.’
- ‘Science is an activity that is individualistic and mentalistic. The latter is sometimes expressed as “cognitive”.’

Woolgar argues that none of the above has survived critical examination by researchers studying the scientific process. That is, psychology’s conception of science is flawed – a point which has been echoed repeatedly by qualitative researchers. Each has been overturned and appear in reverse form as principles in qualitative psychology. The alternative argument is that science is socially constructed by human beings:

- who can never directly observe the ‘real’ world;
- who impose a view of the nature of the world through science;
- who show relatively little consensus as to the appropriate methods and procedures; and
- who act collectively and socially as part of the enterprise of science.

Qualitative researchers commonly refer to the constructivist nature of science as if it is a justification for the qualitative approach to psychological research. Maybe so but it is questionable whether quantitative researchers, in general, would disagree with them. Hammersley (1996) paints a picture of the typical researcher as being involved to a degree in both qualitative and quantitative research. They make a rational choice between them in the light of the research task in hand. There is a lot of research which refuses to be easily classified as either qualitative or quantitative. According to Hammersley:

It is certainly not the case that there are just two kinds of researcher, one who uses only numbers and another who uses only words. It is true that there are research reports that provide only numerical data and others that provide only verbal data, but there is a large proportion of studies that use both. (Hammersley, 1996, p. 161)
Possibly this the picture of a multitasking qualitative and quantitative researchers is not so true of psychology as other disciplines.

Nevertheless, the image of researchers able to flit between qualitative and quantitative research methods is a reassuring one. However, one should be careful about the implication of the claim. It is quite common that researchers collect both qualitative and quantitative data within the same study. For example, they might use both questionnaires and in-depth interviews in a study. In other words, the mixture is in terms of data collection methods. It is probably not so true that researchers commonly flit between quantitative and qualitative data analysis methods of the sort dealt with later in this book. Qualitative methods in psychology include a substantial range of different research activities. This range includes focus groups, in-depth interviewing, discourse analysis, conversation analysis, narrative psychology, grounded theory, phenomenology, interpretative phenomenological analysis, participant observation, ethnographic studies, narrative analysis and so forth. Importantly, this list includes both qualitative data collection methods (e.g. focus groups) and qualitative data analysis methods (e.g. grounded theory). It is important to distinguish between the two since qualitative data collection methods do not necessarily mean a qualitative data analysis method will be used. This is a really important matter since what distinguishes current qualitative research from that which occurs in psychology’s historic past is its interest qualitative analysis procedures. Qualitative data collection methods such as in-depth interviewing have a long history in psychology; in contrast, qualitative data analysis methods are a comparatively recent feature (see Figure 1.3).

According to Hammersley (1996), there is a view among qualitative researcher that qualitative and quantitative research can be regarded as two separate and distinct paradigms for research. The idea of scientific paradigms originated in Thomas Kuhn’s (1922–1996) book *The Structure of Scientific Revolutions* (1962). Kuhn’s argument was that science does not progress gradually through a steady accumulation of knowledge. Instead, the process involves revolutionary shifts in the way science looks at its subject matter. A paradigm shift describes
when one view becomes untenable and is replaced by something radically different. A paradigm is a sort of worldview – a comprehensive way of looking at things which is more extensive than, say, a theory is. So a paradigm shift is a fundamental change in the ways in which scientists view the world. As scientists become aware of anomalies thrown up by the current paradigm then this eventually leads to a crisis in the discipline which encourages new ideas to be tried. Perhaps the move from behaviourism to cognitivism in psychology can be regarded as an example of a paradigm shift. Kuhn’s book was a milestone and particularly notable for promoting the idea that science is socially constructed. Again this is an important view on science for qualitative researchers. However, be very careful as Kuhn does not write about the social sciences in the book.

It seems unlikely that we are on the cusp of a paradigm shift in psychology in which a failing quantitative paradigm is being replaced by a newer qualitative one. For one thing, mainstream psychology is a demonstrably successful enterprise in all sorts of walks of life and in a whole variety of research areas. Psychology has never at any point in its modern history been monolithically quantitative in nature – alternative voices have regularly been heard both criticising and offering alternatives to quantification. While qualitative research was never dominant in the history of psychology, nevertheless qualitative and quantitative research have coexisted and can be illustrated in various significant research studies in psychology’s history. Whether this coexistence has always been one of happy bedfellows is quite a different question.

The beginnings of modern psychology: introspectionism

It is a matter of choice whether one chooses 1876 or 1879 as the symbolic origin of modern psychology. If one opts for 1876 then this is the date when William James (1842–1910) set up a small laboratory at Harvard University for teaching psychological psychology. Opt for 1879 then this is the date when the first psychology laboratory for research purposes was established by Wilhelm Wundt (1832–1920) in Leipzig, Germany. Of course, one can find quite a great amount of psychology before this time but either 1876 or 1879 can be regarded as a particularly iconic moment in the history of psychology. The history of modern psychology pans out fairly smoothly from that time on and, more importantly, either date entwines the origins of psychology as lying in the psychology laboratory. Jones and Elcock (2001) describe this as an origin myth (i.e. creation myth) which involves a self-serving element whereby the beginnings of modern psychology are identified as being in the psychology laboratory. For much of the twentieth century the laboratory experiment was the mainstay of psychology and one of its most characteristic features. This probably gives the impression that psychology and statistical quantification went hand-in-hand from that time onwards. Not quite so.

To put this in quite another way, what sort of psychology would have been taught at the time of the founding of these two laboratories? According to Adams (2000) and others, introspectionism was a major force in German and then American psychology around the time when modern psychology ‘was born’. Introspectionism is the doctrine that valid psychological knowledge should be best on the researcher ‘looking inward’ at their own conscious sensations,
perceptions, thoughts and so forth. The purpose of introspection was the identification of the elements of the mind – much as chemists produced tables of the elements of the physical world. The interrelationships between the different elements were also an aspect of the study. They had few philosophical concerns and were essentially empiricists cataloguing their observations. The method of introspection was to turn thinking ‘inwards’ in order to scrutinise the researcher’s own experiences. In other words, introspection is internal self-observation. As a research methodology, introspection is a distinctly first-person approach and very different from the third-person study which characterises the vast outpourings of psychological research over the last 150 years or so. It is interesting then that not only has Wilhelm Wundt been lofted on high as the founding father of psychology because he set up the first psychology research laboratory but he has also been dubbed the founder of the introspectionism. In other words, the first scientific psychology was introspectionism which held sway between 1860 and 1927, by which time behaviourism was beginning to dominate the discipline. However, it is wrong to characterise Wundt as an introspectionist if this term is intended to imply an exclusive commitment to introspectionist methods.

According to Baars (1986), the typical account of Wundt in modern psychology is a caricature of the man himself originally misformulated by introspectionism’s leading American advocate, Edward Titchener (1867–1927), who had been student of Wundt’s. The term structuralism was used in place of introspectionism by Titchener since introspectionists studied the structure of human thought. The truth is that Wundt did see a place for the systematic self-observation of introspectionism but felt that it was useless for more complex mental processes such as the higher mental functions and emotions. Equally he did not feel that social and cultural psychology could be advanced using the experimental methods of the introspectionists. Wundt, nevertheless, did produce a popular account of self-observation in 1912/1973. This provides a good illustration of how the introspectionist would go about research. Basically the research is carried out on oneself and, in the following, one is being directed to listen to a series of beats of a metronome:

Now let us proceed in the opposite direction by making the metronome beats follow each other after intervals of $\frac{1}{2}$ to $\frac{1}{4}$ of a second, and we notice that the feelings of strain and relaxation disappear. In their place appears excitement that increases with the rapidity of the impressions, and along with this we have generally a more or less lively feeling of displeasure . . . (Wundt, 1912/1973, p. 51)

Titchener and another of Wundt’s students, Oswald Külpe (1862–1915), were responsible for the method of trained observation which characterised introspectionism. The behaviourist psychology which displaced introspectionism was fiercely critical of the product of these trained observations.

Control and replicability were part of the intellectual armoury of introspectionism. It should be added that among the general principles of introspection, according to Tichener (1898), was one of impartiality, which meant that the researcher should not approach the investigation with preconceived ideas or expectations of what they are likely to find. Another principle was that of attentiveness, which meant that the researcher should not speculate about the research activity and why the research is being done during the introspection phase. The study is to be taken seriously in its own right. These principles resonate
with some of the principles of modern qualitative research – for example, bracketing (or epoché) in Interpretative phenomenological analysis (Chapter 11) calls for the analyst to abandon outside influences. However this concept came into interpretative phenomenological analysis from phenomenology not directly from introspectionism. After Tichener’s death, few psychologists practised internal observation of the sort employed by introspectionism. Instead, the observation turned to third parties such as observations of rats.

It is important also to distinguish between introspectionism and phenomenology which has had an important influence on qualitative psychology through interpretative phenomenological analysis. Phenomenology is not a subfield of introspectionism but a reaction against introspectionism. The important name in phenomenology was the Austrian-born philosopher Edmund Husserl (1859–1938). In the following, Husserl’s name and phenomenology are used interchangeably but the message is clear – introspectionism and phenomenology are distinct and incompatible intellectual traditions:

Husserl’s tendency is in a different direction. If anything, his philosophy is ‘extroceptive,’ moving toward phenomena as objects, in the broadest sense, of perceptual acts. The ‘glance’ – to use Husserl’s language – of the phenomenologist is directed towards what is represented in experience, not toward a repository of mixed sensations within the psyche. The only way to account for the persistence of the accusation of introspectionism in connection with phenomenology is that the term itself has been abused, turned first into an epithet and then into an anachronism. (Natanson, 1973, p. 43)

Husserl’s phenomenology went on to have a major influence on philosophy in continental Europe. However, the real battle against introspectionism was won by behaviourism which dominated the psychology of the United States and much of the rest of the world for the greater part of the twentieth century. The behaviourist’s fight was led by ideas drawn from logical positivism. So behaviourism replaced introspectionism as the dominant form of psychology early in the twentieth century.

The logical positivists, behaviourism and psychology

The word positivism has its origins in the work of Auguste Comte (Box 1.1). Positivism is another of those concepts which is used somewhat imprecisely but also can be used as an epithet with pejorative connotations to describe mainstream, non-qualitative, psychology (Box 1.1). Positivism became the dominant view in the philosophy of science during the first part of the twentieth century – especially logical positivism which had a profound impact on behaviourism in terms of what science is seen as being. The defining features of logical positivism were its dependency on empiricism together with the use of logical deductions from mathematics and other concepts. The logical positivist movement began to emerge in Vienna prior to the the First World War though only became widely established in the rest of Europe and America in the 1920s and 1930s. Migration of important members of the movement was largely responsible for its spread and leading figures in logical positivism moved to the United States. Nevertheless, it was not until 1931 that the American philosopher A.E. Blumberg (1906–1997) first used the term logical positivism.
to describe the philosophy of the Vienna School. The Austrian philosopher Herbert Feigl (1902–1988) and the German philosopher Rudolf Carnap (1891–1970), important members of the school, moved to the United States and were highly influential on a key player in the methodology of behaviourist psychology, S.S. Stevens (1906–1973). One might be forgiven for not knowing who Feigl or Carnap were; however, Stevens’s legacy impacts to this day on every student who has struggled with the concepts of nominal, ordinal, interval and ratio levels of measurement in statistics classes. He was also primarily responsible to the idea of operational definitions entering psychology in the mid-1930s – which he got from the logical positivists although it was the physicist Percy Bridgeman’s (1882–1961) idea. Operationism is the idea that concepts in science (including psychology) are defined by the processes used to measure them.

Logical positivism was a philosophy of science and also selectively defined what science was for behaviourism’s adherents. Behaviourism developed in the United States under the influence of the psychologist John Watson (1878–1958) though behaviourism in psychology took a number of directions. Watson’s behaviourism saw psychology as (a) part of natural science and (b) an objective experimental approach to the prediction and control of behaviour – following Comte’s view that the purpose of science as lying in prediction. The behaviourist school of psychology embodied key positivist principles in a search for the laws of human behaviour. Sometimes these laws were formulated in mathematical terms, as in the work of Clark Hull (1884–1952).

Logical positivism argued that, scientifically, knowledge came from one’s direct observations based on experience and from the application of tight logical reasoning (i.e. logical tautologies – the operational definition is a good example of a logical tautology since it has to be true no matter what). Among the characteristics of science according to the positivist view and hence behaviourism were the following:

- Science is a cumulative process.
- Sciences are reducible ultimately to a single science of the real world.
- Science is independent of the characteristics of the investigator.

Most qualitative researchers would reject most of this.

Watson saw that replacing introspectionism by his vision of a behaviourist psychology brought with it the possibility of making psychology like other sciences:

This suggested elimination of states of consciousness as proper objects of investigation in themselves will remove the barrier from psychology which exists between it and the other sciences. The findings of psychology become the functional correlates of structure and lend themselves to explanation in physico-chemical terms. (Watson, 1913, p. 175)

In other words, psychology would be reducible to physiology in keeping with the reductionist principle in logical positivism. For Watson, psychology was a natural science which would eventually be reducible to a science like physics and chemistry. The influence and dominance of behaviourism on psychology was most apparent between 1920s and 1960s after which it was in decline and cognitive psychology was in its ascendency. Important behaviourist psychologists included Edward Thorndike (1874–1949), Edward Tolman (1886–1959) and, for the very early part of his career, Albert Bandura (1925– ) who later had a
major impact on cognitive psychology. Particular mention should be made of the radical behaviourism of B.F. Skinner (1904–1990). Perhaps because of its tight logical foundation, which is a characteristic inherited from the logical positivists, radical behaviourism can be seen as the epitome of logical positivism in psychology.

Logical positivism, it should be noted, gave to psychology through its influence on behaviourism the principle of verification. This means that ideas (maybe theories or hypotheses) are only meaningful to the extent that empirical research allows them to be tested to see whether they remain true or whether they should be rejected. This principle is shared by quantitative as well as some qualitative psychology though in a slightly modified form.

The Australian philosopher John Passmore (1914–2004) famously signalled the ultimate demise of logical positivism in the following words:

Logical positivism, then, is dead, or as dead as a philosophical movement ever becomes. But it has left a legacy behind. In the German-speaking countries, indeed, it wholly failed; German philosophy, as exhibited in the works of Heidegger and his disciples, represents everything to which the positivists were most bitterly opposed. . . But insofar as it is widely agreed that . . . philosophers ought to set an example of precision and clarity, that philosophy should make use of technical devices, derived from logic, in order to solve problems relating to the philosophy of science, that philosophy is not about ‘the world’ but about the language through which men speak about the world, we can detect in contemporary philosophy, at least, the persistence of the spirit which inspired the Vienna circle. (Passmore, 1967, p. 55)

Once again, in this we can see in logical positivism traces of ideas which are endemic in qualitative psychology. For example, the phrase ‘the language through which men speak about the world’ is almost a sentiment straight from discourse analysis (Chapter 9). Nevertheless, as Passmore explains in his reference to Martin Heidegger (1889–1976), logical positivism lost the intellectual battle to philosophies which played a central role in the development of postmodernism, deconstruction and hermeneutics, all of which are key aspects of some forms of qualitative psychology.

Given the response of psychology to logical positivism, it is noteworthy that the logical positivists in general did not write about the possibility of a qualitative psychology (Michell, 2003). However, an exception to this was Rudolf Carnap who was mentioned earlier. Michell summarises the relationship between positivism and qualitative psychology based on Carnap’s writings as follows:

Positivism does not dismiss the possibility of non-quantitative methods in psychology. It was actually a much more subtle, complex and tolerant philosophical position than many detractors now recognize. At heart, it involved a romantic view of science, and it anticipated post-positivist relativism, but the fact that positivists valued science meant that they were sensitive to the dangers of applying quantitative methods in inappropriate contexts. (Michell, 2003, pp. 24–5)

Unfortunately, even if logical positivism was not entirely antagonistic to qualitative psychology, this was probably lost to the mainstream behaviourist psychologist. A careful reading of logical positivist writings might have served
the working psychologist well but, if we accept Michell’s analysis, the signs are that few went back to logical positivist philosophers in order to understand what they actually wrote.

Possibly the reasons underlying for the model of science used by behaviourist psychologists may not reside primarily in positivism. For example, Noam Chomsky (1928– ), a linguist and philosopher but highly influential on the demise of behaviourism and the rise of cognitive science, raised a quite distinct level of explanation when asked about behaviourist psychology’s impact:

Well, now you’ve raised the question of why behaviorist psychology has such an enormous vogue, particularly in the United States. And I’m not sure what the answer to that is. I think, in part, it had to do with the very erroneous idea that by keeping close to observation of data, to manipulation, it was somehow being scientific. That belief is a grotesque caricature and distortion of science but there’s no doubt that many people did have that belief. I suppose, if you want to go deeper into the question, one would have to give a sociological analysis of the use of American psychology for manipulation, for advertising, for control. A large part of the vogue for behaviorist psychology has to do with its ideological role. (Chomsky, quoted in Cohen, 1977).

One way of interpreting Chomsky’s comments is to suggest that there was big money for university’s selling the technology of behavioural control. Whatever the accoutrements of such a discipline then they would be reinforced by this economic success.

The quantitative dominance of mainstream psychology

A full understanding of the position of qualitative methods in psychology requires an appreciation of the nature and extent of the ethos of quantification which has pervaded psychology for much of its history. Histories of psychology, almost without exception, simply do not include qualitative approaches. Try as one may, it seems impossible to identify precisely when the distinction between quantitative and qualitative research emerged in psychology (or other disciplines for that matter). Maybe this is because different words such as objective–subjective or hard–soft research were used for essentially the same distinction though with their own particular (unacceptable) overtones. Whatever the words used, quantification has long been a source of criticism from within psychology in psychology. The earliest psychological writing contrasting quantitative and qualitative that I have found is by Gordon Allport:

If we rejoice, for example, that present-day psychology is . . . increasingly empirical, mechanistic, quantitative, nomothetic, analytic, and operational, we should also beware of demanding slavish subservience to these presuppositions. Why not allow psychology as a science – for science is a broad and beneficent term – to be also rational, teleological, qualitative, idiographic, synoptic, and even non-operational? I mention these antitheses of virtue with deliberation, for the simple reason that great insights of psychology in the past – for example, those of Aristotle, Locke, Fechner, James, Freud – have stemmed from one or more of these unfashionable presuppositions. (Allport, 1940, p. 25)
A later but perhaps more thorough critique of quantitative methods is to be found in Brower (1949). Reading his criticism, it is evident that a vision of what quantification’s alternative might be is missing. Furthermore, no mention of the word qualitative is to be found in Brower’s paper – he merely writes about ‘non-quantitative’ as if the alternative was the absence of quantification. It is interesting to read Brower’s account of quantification in psychology as being ‘insistently demanded’, a ‘natural accompaniment’ of an age of engineering and physical science, and emulating physics as the prototypical science:

Quantitative methods have found an extraordinary degree of application in psychology and have been insistently demanded on the American scene for a number of reasons. First of all, they represent a natural accompaniment of our mechanical age and the emphasis on engineering and physical science. Secondly, we have unwittingly attempted to emulate physics as the prototype of science without elaborating the intrinsic differences between psychology and physics. The methodology of physics makes possible a degree of detachment of subject-matter from observer which can, thus far, be obtained in psychology only by doing damage to the phenomenon through artificialization. In the history of modern physics, astronomy, chemistry, etc., the recognition of the ‘personal equation’ certainly was a boon to the development of those fields. While the facts of individual differences in perception were derived from psychology, physical scientists did not find it necessary to incorporate psychological methods, e.g., introspection, along with their factual data. As psychology grew on the substrate of natural science, however, not only were the facts of physics incorporated into psychology but the principal method as well: quantification. (Brower, 1949, pp. 325–326)

In other words, one does not need to dig too deeply into the philosophical basis of psychology in order to understand why quantification is so deeply embedded in its collective psyche. The way in which psychologists go about the practice of psychological research is the consequence of their understanding of what that practice consists of. There is no doubt, and examples will be provided later, that there has been a qualitative ethos in psychology which has manifested itself in some classic studies. Nevertheless, it is clear that quantitative approaches have tended to dominate the ways that psychologists have seen that psychology should be done. Box 1.2 discusses a radically different conceptualisation of the nature of science.

If positivism does not account for the dominance of quantitative methods in psychology, then what does? Michell (2003) argues that the ‘quantitative imperative’ best describes psychology’s orientation rather than any philosophical considerations. The quantitative imperative is the idea that the scientific study of anything involves measuring that thing. Science and measurement go together and, as a consequence, non-quantitative methods are held to be pre-scientific. But where does this ‘quantitative imperative’ originate? According to Michell, it is an ancient, still deeply ingrained idea. The notion that quantification and science are inseparable has it roots in the Ancient Greek pre-Socratic Pythagoreans (some 500 years BC). Of course, Pythagoras was an important figure in mathematics who believed that mathematics underlay the principles governing phenomena observed in the world. Such a belief is understandable given some of Pythagoras’s achievements. For example, Pythagoras discovered mathematical ratios in things so apparently different as geometry, astronomy and music. For example, in music, a note an octave above another in pitch has twice
Social constructionism is a broad church and the beliefs of social constructionist thinkers difficult to define. That is, there are a range of intellectual foundations of social constructionism and none are shared by every social constructionist thinker. Burr (2003) suggests that to be described as a social constructionist, one of the following assumptions derived from Gergen (1985a) have to be met at a minimum (see Figure 1.4):

- **Knowledge sustained by social processes** Social constructionists argue that knowledge is constructed by people through their interactions. Our version of knowledge is therefore substantially the product of language in the form of conversation, etc. in our everyday lives.

- **Historical and cultural specificity of language** The way that we think about any aspect of the world will vary in different cultures and in the same culture at different time periods. For example, once suicide was regarded as a crime and the body of a person committing suicide punished as if they were alive (Szasz, 1986). Within living memory, attempted suicide was a crime in the United Kingdom.
CHAPTER 1 WHAT IS QUALITATIVE RESEARCH IN PSYCHOLOGY AND WAS IT REALLY HIDDEN?

- **Critical position on ‘taken-for-granted’ knowledge** The usual view of mainstream psychology, it is argued, is that the researcher can observe the world objectively. This sort of assumption as well as other assumptions of mainstream psychology would be questioned from the social constructionist perspective which hold that the ways in which people perceive the world do not correspond to a reality.

- **Knowledge and social action are integrated** The different constructions that we have about the world each have their implications for different sorts of social action. So ideas that illegal drug users are ‘medically sick’ has implications for their treatment which are different from the implications of regarding them as criminal.

The origins of social constructionist thinking dig deep into the history of postmodernism itself which has its background in the arts such as cultural studies and literature. Postmodernism rejects modernistic ideas which even in art included basic rules such as the ‘rule of thirds’ putatively underlying good composition. The postmodern position is one of a multiplicity of different perspectives on the world which are incompatible with the idea that there can be grand theories which explain what underlie the world and existence. Berger and Luckmann (1966) produced a crucial book *The Social Construction of Reality* (discussed in Chapter 2) which was a decisive moment in sociology as well as establishing the constructionist perspective on the social sciences in general - and eventually psychology. In general, in psychology the constructionist position served as a radical critique of the work of mainstream psychologists. However, more importantly, it became a focus of styles of research - many of them discussed in this text - which can broadly be divided into two sorts:

- **Interactionally focused** This is what Burr (2004) calls micro-social social constructionism and Danziger (1997) called light social constructionism. This is essentially the idea that the world as experienced by people is created or constructed through the regular everyday social interactions such as conversations between people (one aspect of discourse). This is a continual, regular process of everyday life. Although this is part of the work that discourse analysts and, to a lesser extent, conversation analysts, this approach can be attributed to the work of Kenneth Gergen (e.g. 1999) and John Shotter (e.g. 1995).

- **Societally focused** Burr (2004) calls this macro-social constructionism and Danziger (1997) calls this dark social constructionism. This form of social constructionist thinking regards social power as being central and a crucial aspect of what is constructed through discourse. Michel Foucault was particularly influential on this particular for of social constructionism. So it concentrates on such things as institutional practices and social structures.

The distinction between these two types of social construction is more or less in terms of the idea of agency (Burr, 2004). The type of social interaction which is involved in the interactionally focused form of social constructionism involves an active participant in a conversation contributing to the process of construction. In the societally focused form of social constructionism the idea is created that the participant in conversation is relatively powerless to produce social change - that is, change in the power structure of society.

The differences between social constructionist approaches to psychology and the quantitative approaches which tend to dominate the field are clearly major. They are not entirely incompatible but they are opposites on a major continuum. Related, but not identical, dimensions of the differences between social constructionist and quantitative approaches include the following:
The frequency of vibration. Nevertheless, Aristotle (384–322 BC) questioned how attributes such as colours and tastes could be numbers.

The idea that mathematics underlies all that we experience has had an unchequered presence in ideas about science from Pythagorean times until the present. A closely linked idea is that mathematics would replace other sciences. Physics, especially, among the sciences has had spectacular success in terms of expressing its findings in terms of mathematics from Isaac Newton’s (1643–1727) discoveries onward and this accelerated in the light of scientific successes in the first part of the twentieth century. Consequently:

It dominated scientific thinking in the physical sciences, and this meant that it cast an irresistible shadow over aspiring sciences, such as psychology, that were modeled upon quantitative natural science. (Michell, 2003, p. 12)

The belief in the success of the science of physics buttressed the quantitative imperative in psychology which, as a developing discipline, sought to emulate the science of physics (Michell, 2003, p. 12). Not surprisingly, early experimental work in psychology could be distinctly quantitative in nature. A good illustration lies in psychophysics which involved studying things such as the way in which we perceive loudness or brightness or weight. Important researchers including Gustav Fechner (1801–1887) developed mathematical models to link experience with the physical reality underlying such sensations.

**Statistics and the quantitative ethos in psychology**

In the 1930s and then following the Second World War, there was a growing methodological consensus in psychology which involved various elements thought to be necessary for scientific rigour. These include null hypothesis testing and Fisher’s work on experimental design which gave rise to the analysis of variance. For Michell (2003), as with Chomsky (1973), this methodological consensus ‘owed more to the values of window-dressing than to any values implicit in logical positivism’ (p. 16). Michell shares the view of others that the...
methodological consensus served psychology well in terms of the economics of research funding and was responsible for the resistance to qualitative methods. That is to say, the sophisticated quantitative methodologies used by psychologists resulted in high status for their research and, hence, attracted funding. Current dominant psychological research has remained substantially determinedly quantitative in style.

Although statistical techniques were first developed in late Victorian times, they were not generally and routinely incorporated into psychological research until just before the mid-twentieth century. While it is important to differentiate between quantification in psychology and the use of statistics in psychology (i.e. it is possible to have a quantitative psychology without statistics), there is little doubt that statistics played a powerful role in shaping much of modern psychology.

Concepts which seem to be fundamentally psychological in nature frequently have their origins in statistics. In particular, the concept of the variable is so wedded to psychological thinking that it vies to be one of the discipline’s core concepts. But variables did not enter psychological thinking until towards the middle of the twentieth century – long after the first psychology laboratory. We will return to this later. Statistical methods have influenced many aspects of psychological theory. For example, statistical techniques such as factor analysis have had important impacts on the study of personality and intelligence. In modern times, to give a rather different example, smallest space analysis has had a major impact on quantitative approaches to profiling crime from the characteristics of the crime scene. In brief, smallest space analysis allows a researcher to find the underlying dimensions along which different crime scenes differ. This simplifies the way in which different crime scenes may be compared. Without dwelling on the point too long, the intimate relationship between psychological research and statistics verges on the indecent. That is, the influence of statistics on psychology has sometimes left the discipline exposed as concentrating on trivial matters such as significance testing and neglecting substantial questions about the nature of psychology itself. Nevertheless, it is impossible to know how differently psychology would have developed without the influence of statistics. As we have seen, psychology has had a powerful impetus towards quantification for all of its modern history.

The relationship between statistical thinking and mainstream psychology is, historically, a fairly confusing one. There have always been a small number of psychologists who have contributed to the development of statistical techniques which are now part of psychology but also other disciplines. Good examples of these are Charles Spearman (1863–1945) who is known for a version of the correlation coefficient known as the Spearman rank correlation coefficient but, more importantly, developed the earliest most basic form of factor analysis as part of his studies of the structure of intelligence; Louis Thurstone (1887–1955) who extended this work in ways that led to one of the most useful, early techniques of factor analysis, which played an enormous role in the development of psychological tests and measurements; and Louis Guttman (1916–1987) who could be described as much as being a sociologist as a psychologist, contributed statistical methods such as multidimensional scaling to the statistical repertoire. No doubt there are others but the point remains that typically psychologists are not the innovators in the field of statistics but its users.

So like their philosophy, psychologists often borrow their statistical techniques. The typical psychologist just uses statistics. Many of the statistical innovations
which have been utilised by psychologists were imported from other fields. The origins of regression and the correlation coefficient, for example, were outside psychology. Regression is a biological concept and the statistical analysis of regression was introduced by Francis Galton (1822–1911). Galton was interested in the inheritance of characteristics. His ideas eventually led to what we now know as the correlation coefficient – the standard deviation came from Galton’s ideas too. The form of the correlation coefficient which is known to all psychologists worldwide was developed by Karl Pearson (1857–1936) – the Pearson (product–moment) correlation coefficient. Pearson was not a psychologist and is probably best described as a mathematical statistician. He eventually became a professor of eugenics. His son, Egon Pearson (1895–1980), was also a statistician and he, along with Jerzy Neyman (1894–1981), was responsible for one of the most important statistical influences on psychology which also vies for the title of the most destructive – hypothesis testing and statistical significance. This process of testing the null hypothesis to see whether it can be rejected has almost been drummed into every psychology student since the middle of the twentieth century. Worse still, it is presented as the process by which good research proceeds! That is, statistical significance becomes the primary criterion of worthwhile research to the exclusion of every other indicator of quality in research. Finally, one should not overlook the dominance of the ideas of Ronald Fisher (1890–1962) on the design of experiments and the all-important statistical method of analysis of variance. Virtually all of these statistical techniques will be familiar in name if not in more detail to practically any psychologist, no matter where in the world. They have grown to be the common currency of the discipline.

However, statistical techniques were not integral to psychology during the 50 years after the first psychological laboratory had been set up. According to Danziger and Dzinas (1997), psychologists, in general, were becoming familiar with statistical ideas from about the 1930s onwards. As previously noted, the 1930s marked the introduction of the term ‘variable’ into psychology. While the ‘variable’ is embedded in psychology talk nowadays (it was another concept originating in the work of Karl Pearson), its absorption into psychology was initially fairly slow. However, it was the cognitive-behavioural psychologist Edward Tolman (1886–1959) who actually made significant impact on psychology when he introduced the terms independent and dependent variables. Whether or not we regard the term variable as a piece of jargon, its use in psychology has resulted in a view of the world as being made up of variables. Seen as conceptual conveniences, variables constitute a way in which psychologists tend to distance themselves from what they study. The attraction of using the terms independent and dependent variables, according to Danziger and Dzinas (1997) was that they effectively replace the terms stimulus and response which were the legacy of behaviourism. The growth in the use of the term variables cannot be accounted for by the grown in the use of statistics in research. The increased use of statistics in the 1940s and 1950s followed after the term variable had been virtually universally adopted by psychologists. Robert Woodworth’s (1869–1962) highly influential psychology textbook of that time incorporated the independent–dependent variable terminology so this may have been a major influence. Whatever the reason, with a few rare exceptions such as Guttman’s facet theory (Canter, 1983; Shye and Elizur, 1994), mainstream psychologists have lived comfortably in a world constructed from variables. Variable, despite being a common term throughout psychology, is rarely found in qualitative research reports and stands out like a sore thumb when it occurs in that context.
It is worth noting that there have been claims that the quantitative psychologist is a disappearing breed with few keen to take their place (Clay, 2005). This is not a suggestion that mainstream quantitative psychology is declining but signals a shortage of psychologists with specialist training in statistics, measurement and methodology rather than those who routinely use quantification in their research work:

Psychologists of the 1960s... saw themselves as leaders in statistical, measurement and design issues. Psychology departments often had quantitative specialists, and graduate students were well equipped to handle the quantitative aspects of their research. By 1990, that legacy had faded along with the number of students aware of, interested in and able to enter the field. (Clay, 2005, p. 26 print version)

This could be another way of saying that the forces which shaped behaviourist psychology are no longer so potent. Nevertheless, there are still a lot of psychologists with more than a passing interest in quantitative research.

The trouble with history is that the imagination includes the now. So, without really ever thinking it, our picture of the psychology of the past is seen through the psychology of today. And it is difficult to imagine this earlier psychology free from the methodological and statistical baggage that has dominated psychology for more than half a century. But such a psychology can be found in some of the classic papers in psychology. A good example comes from the work of Edward Tolman who was responsible for the introduction of the concept of cognitive maps – which is still a current concept in research. The most sophisticated ‘statistical’ methods in his *Cognitive Maps in Rats and Men* (Tolman, 1948) are graphs. This is readily available on the Web at Classics in the History of Psychology (http://psychclassics.yorku.ca/Tolman/Maps/maps.htm). Other papers in this archive will give you a feel of the nature of early psychological writings.

## CONCLUSION

The story so far has taken us through the philosophical changes in psychology that shaped the discipline since Victorian times until the 1960s. Our quest was to find just why psychology as a whole took a quantitative route over this period. Although positivism is often held to be responsible for this, this philosophy either in Comte’s version or as logical positivism does not reject qualitative methods in psychology. However, perhaps it is wrong to assume that psychologists’ philosophical knowledge was typically sophisticated enough to appreciate this. The great emphasis of psychology on experimentation for much of its history is very evident and the best model for how to do experiments was the highly successful and quantitative, science of physics. Of course, historically psychology as a discipline was closer to the sciences in terms of what it studied and consequently how it should be studied than were the social sciences in general. In other words, the bias to quantification was a matter of psychological practices rather than philosophy. There is a clear bias towards quantification. However, quite why psychology took its quantitative route is difficult to explain in terms of those philosophies.
The dominance of behaviourist psychology in the first half of the twentieth brought with it the stimulus and response taken from the physiological work of Ivan Pavlov (1849–1936) on the conditioned reflex. Psychology was reduced to seeking the stimulus which led to the response which, in itself, pushes the researcher towards quantification – there is not a lot more to do but count. All of this happened long before psychologists in general included statistics into the psychology toolkit. Indeed, it is important to distinguish between quantification in psychology and statistical applications in psychology. They are very different. Quantification in psychology is about the idea that psychological systems are fundamentally mathematical in nature. Statistics is built on top of this principle; nevertheless statistics is not the reason for the principle. Of course, statistics is the most obvious interface for most psychologists with quantification in psychology so inevitably the ideas of quantification and statistics tend to meld together. Statistical thinking had not fully integrated into the work of psychologists until the 1950s. It can be seen as the consequence of the quantitative imperative in psychology rather than its cause. In a phrase, psychology was a quantitative discipline long before it was a statistical one.

There had been many voices of dissent against positivism in psychology. As we will see in Chapter 2, the vocal tide for change strengthened throughout the twentieth century. However, Henwood and Pidgeon (1994) identify Wilhelm Dilthey (1833–1911) as possibly the earliest proponent of the view that psychology should seek understanding rather than causal mechanisms. Prus commented:

Dilthey clearly articulated his disenchantments not only with the positivist notions of determinism, causation, and reductionism that were already rampant in psychology at the time, but also with what he felt was the misplaced irrelevancy of their inquiry to human lived experience... He was particularly troubled by the failure of psychology to recognize the culturally mediated (intersubjective) nature of human experience. (Prus, 1996, p. 38)

Although still a major force, the behaviourism project was on the brink of its decline in the 1950s. Withering criticisms were part of it but it increasingly could not deliver what psychologists needed it to deliver. The emergence of behaviourism caused psychology ‘to lose its mind’. Its predecessor introspection was all in the researcher’s mind. Psychologists were becoming dissatisfied with the hard-science project of behaviourism but researchers in fields such as sociology were also examining their disciplines critically. In sociology, wanton empiricism and theory so grand that it did not join up with research data brought about a major reorientation to qualitative research which, generally, had had poor esteem up to this point. A general shift to qualitative research was underway in the discipline at this time – a shift which was to have its impact on qualitative psychology some years later (and other disciplines on the way). In psychology, the shift was in a different direction and towards cognition or cognitivism in which psychology got back its senses. Cognitive science began to be a big player in the 1960s. It was interdisciplinary in scope and cognition in various guises has dominated psychology ever since.

In the next chapter, we will unpick the story of qualitative methods in psychology and the influence of the broader social sciences on this process.
KEY POINTS

- Many characteristic features have been suggested to differentiate qualitative research from quantitative research. While none of these definitely separates the two in every circumstance, it is clear that the ethos of qualitative psychology is different from the ethos of quantitative research in psychology. Qualitative and quantitative psychology often appear to have very different conceptions of the nature of science.

- Positivism has been argued to have been the philosophical force behind behaviourism which dominated academic psychology for much of the first half of the twentieth century. There is some question about this since logical positivism and Comte’s positivism do not, in themselves, dismiss the possibility of a qualitative approach to psychology.

- The quantitative ethos in psychology is part of the long-term view that the world, ultimately, can be reduced to mathematical relationships. This view emerged from the work of Pythagoras and was reinforced by the mathematical successes of physics as the dominant discipline in science.

- Statistics was a relatively late introduction to psychology and so is best seen as the product of the quantitative imperative in psychology rather than its cause.

ADDITIONAL RESOURCES


