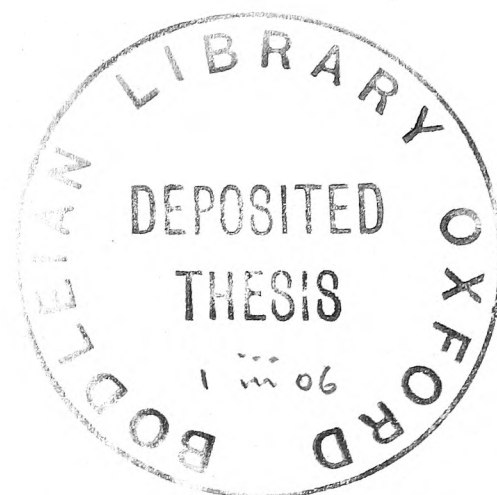


Interpretation in the Arts and the Social Sciences

Peter Barnes, Balliol College

Submitted for the Degree of Doctor of Philosophy, Michaelmas Term 2004 [ie 2005]

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Thesis Abstract

This thesis makes a contribution to the debate about the status of the social sciences. Many philosophers have argued that the social sciences are unlike the natural sciences because they involve a kind of interpretative inquiry which has no parallel in the natural sciences. Stronger versions of this argument suggest that the social sciences are dominated or exhausted by interpretation. In many cases, this stronger claim is supported by an appeal to an analogy between interpretation in the social sciences and interpretation in the arts.

The claim of this thesis is that the analogy between interpretation in the arts and the social sciences is not as strong as it is often thought to be. Works of art can be subjected to several distinct kinds of interpretation. Not all of these different kinds have analogues in the social sciences. In particular, conceptions of interpretation which allow for multiple incompatible interpretations of a single artwork have no corollary in the social sciences.

By questioning the analogy between interpretation in the two fields, I seek to develop a limited version of naturalism in the philosophy of social science. That is, I argue that there are similarities and points of contact between the social sciences and the natural sciences. This position is strengthened by a further argument: that those who have opposed naturalism have tended to rely on an outdated and overly-rigid view of the what the natural sciences are like.

The naturalism I defend is limited because it accepts that there are differences between the natural and social sciences, including the fact that there is a role (but not a dominating role) for interpretation in the social sciences.

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Introduction

Two broad traditions of thought dominate the philosophy of social science. These traditions are associated with different answers to the much-debated question about the relationship between the social sciences and the natural sciences. Naturalists believe that the social sciences can and should be modelled on the natural sciences; that the most significant difference between the two is just the difference in subject matter. Humanists argue that the social sciences are profoundly dissimilar from the natural sciences; that the methods and principles of the natural sciences have little or no role to play in the study of the social world.¹

At different times, one or other of these traditions has been dominant. Over the last thirty years the humanist approach has been in the ascendancy.² The social sciences have undergone what Rabinow and Sullivan called ‘The Interpretive Turn’. Writing 25 years ago, they thought that the time was ripe to “announce” that the social sciences would never develop in a way that would provide truly scientific knowledge of the social world. They argued that the gap between what has been achieved in the natural and social sciences is not just a product of the relative immaturity of the latter. Rather, there is a fundamental difference between the nature of investigation in the two areas.³

¹ I use the terms ‘naturalist’ and ‘humanist’ throughout this thesis solely to distinguish two views about the social sciences. Both terms have other implications in other areas of philosophy and in other disciplines. No such implications should be read into my use of the terms.

² Of course, the dominance of humanist approaches has not been complete during this time. In the last five or ten years, in particular, attempts to explain social behaviour within the framework provided by evolutionary theory have become popular. (See Chapter 5 for a discussion of these and other naturalist approaches.) However, among philosophers of social science, and within many social science faculties, there is a fairly broad consensus in support of the view that the positivism that dominated the middle of the twentieth century has been discredited.

³ Paul Rabinow and William M. Sullivan (eds.), *Interpretive Social Science: A Reader* (Berkeley: University of California Press, 1979), 4.

The case for humanism is based on a number of different arguments. The seeds of many of these can be traced to writers of earlier periods. What is distinctive about the modern version of humanism is the emphasis that is placed on interpretation as the defining characteristic of the social sciences.⁴ Social scientists, it is argued, are not in pursuit of detached theoretical knowledge of the kind sought in the natural sciences. The goal of the social sciences is to achieve better understanding of social meanings through interpretative inquiry.

The humanist account of interpretative social science, then, is tied up with the insight that human action is meaningful. In fact, human actions are meaningful in two ways, both of which are thought to have important implications for the social sciences. First, human actions are intentional or purposeful. People *mean* to perform their actions. Secondly, human actions are performed within a context of conventional meanings. The meaning of an action depends upon its context and might vary between one social context and another.

In both of these ways, human action is distinct from the phenomena studied in the natural sciences.⁵ Natural objects – atoms, tectonic plates, *etc.* – do not purposefully move or interact with one another. And, as Grice pointed out, though we do talk about meaning in relation to natural phenomena, for example when we say that the opening of a pine cone means that the weather will be good, it is a totally different concept of meaning from that which pertains to human actions and utterances.⁶

Humanists insist that the meaningfulness of human action has dramatic consequences for the social sciences. They argue that the type of understanding that we can achieve of meaningful actions is fundamentally different from the understanding that the natural sciences provide us of the natural world. In the natural sciences, understanding comes with

⁴ The contemporary focus on interpretation is not without precedent. Wilhelm Dilthey, and his successors, argued for a similar view at the beginning of the twentieth century. It is for this reason that Dilthey is deemed by many to be the most significant forefather of modern humanism.

⁵ Animal behaviour is a possible exception to this claim. To what extent it is right to say that animal behaviour is meaningful, in both the outlined senses, is a contentious question which I will not address.

the ability to explain and predict phenomena. In the social sciences, though we often talk about explaining events or outcomes, it is a mistake to think that we achieve understanding through explanations that are similar to those of the natural sciences. And, though we do speak about scientists interpreting evidence or data, those processes are not at all like the process of interpreting human actions.

Of course, social scientists do not just study individual human actions. They also study customs and rituals, legal statutes, economic trends and a wide variety of other types of object.⁷ But according to humanists these social objects are the products of human action, or are inextricably linked to human action in other ways, such that they are subject to the same kinds of consideration as individual actions. Interpretation, they conclude, is the appropriate method for all areas of social inquiry.

* * *

It is helpful to clarify the differences between versions of the humanist claim of different strengths, and between different ways in which elements of the humanist position are thought to be related. We can describe four positions on the naturalist/humanist axis.

- (1) The social sciences are, with the exception of their subject matter, indistinct from the natural sciences. Their methods are the same.
- (2) The social sciences do involve a type of interpretative inquiry that does not feature in the natural sciences but, by and large, their methods are similar.
- (3) Some of the methods of the natural sciences are relevant to the social sciences but the interpretative approach is more important.
- (4) The social sciences are completely distinct from the natural sciences. They are exhausted by interpretative inquiry.

⁶ Paul Grice, 'Meaning', *Philosophical Review*, 66 (1957), 377-388.

Clearly, (2) and (3) describe a range of positions in which the relative significance of the interpretative approach could be thought to vary from almost nothing in a strong version of (2) to almost everything in a strong version of (3).⁸ (3) and (4) both describe humanist positions. Each has some advocates. These positions are the main target of my arguments. However, I also criticize (1), which has unfortunately been espoused by many philosophers in the naturalist tradition. I defend a version of (2).

* * *

As well as being variable according to the strength of the position, it is also possible to distinguish between different accounts of why it is that the meaningfulness of human action has the implications for the social sciences that it is said to have. There are two main types of argument.

(A) The subject matter of the social sciences is inextricably political and ideological. Social scientists cannot escape their ideological commitments and, hence, they cannot reach objective scientific conclusions. Instead they are limited to providing subjective interpretations of social phenomena.

(B) The method of interpretation that is applicable to the social sciences is analogous to the method of interpretation that is employed in the fields of art and literature. The understanding that we can achieve of a social object is much like the understanding that we can achieve of a work of art. Hence it is more appropriate to group the social sciences together with the arts than it is to group them with the natural sciences.⁹

⁷ See 2.1 for a fuller discussion of the objects of study in the social sciences.

⁸ For completeness, one ought to say that it would also be possible to defend a position in between (2) and (3) according to which both types of method were considered to be of equal importance.

⁹ It might seem as though these two types of argument derive straightforwardly from the two types of meaning that human actions have. (A) is obviously linked to insight that human action is purposeful. The thought is that

I am chiefly concerned with arguments of the second type. My aim is to defend a (limited) version of naturalism against the charges of those who endorse (B). That is not to say that arguments of type (A) are unimportant or uninteresting. But restrictions of space necessitate being selective. Consequently, my conclusions must be recognized as being provisional in that they remain (here) untested against arguments of type (A).

As it stands, the argument summarized by (B) is relatively innocuous. The limited naturalism that I want to defend is not incompatible with the assertion that the social sciences involve interpretation in a way that the natural sciences do not. And a naturalist can agree that there are some similarities between the interpretation of social objects and artistic ones. It might seem, then, as though the debate about how we should classify the social sciences is rather superficial. One's position will depend just on the relative importance one attaches to the interpretative method compared to others.

But that is not the whole story. Many humanists believe that, by appealing to the analogy between interpretation in the arts and the social sciences, they can show that the social sciences must be dominated, or even exhausted, by interpretative inquiry. They see in (B) a much stronger argument:

(B') The interpretation of artworks and literary texts is not an objective process. It is more of an imaginative than an intellectual skill. The interpretation of social objects is the same. Therefore, admitting a role for interpretation in the social sciences precludes any account of them as objective disciplines akin to the natural sciences.

social actors, and the social scientists who study them, each have their own interests and purposes. And that it is impossible ever fully to remove oneself from one's own concerns. By this reckoning, (B) would be conceived as an argument based on the importance in both the artistic and social worlds of conventional contexts. This simplistic rendering, though, is unhelpful. Proponents of (A) are not limited to an argument based upon the intentionality of action. They also insist that ideology infects the very conventions that give meaning to words and actions. Also, some advocates of (B) think that it is crucial to conceive of artworks and social objects as the products of intentional action.

What humanists are keen to rule out is the thought that interpretation has a merely propaedeutic role in the social sciences. They argue that interpretation is not just a necessary first stage, before the real work of explaining social phenomena can get underway. Instead, it dominates the social sciences. It is a genuine alternative to the method of the natural sciences.

* * *

Versions of (B') can be found throughout the works of humanist philosophers and social scientists. Rabinow and Sullivan declare that "understanding any action is analogous to textual interpretation".¹⁰ This recalls Taylor's assertion, at the beginning of his influential essay *Interpretation and the Sciences of Man*, that the objects of study in the social sciences are "texts or text analogues".¹¹ Gadamer is even more explicit: "Just as in the experience of art we are concerned with truths that go essentially beyond the range of methodological knowledge, so the same thing is true of the whole of the human sciences...."¹² Similar claims can be found in the seminal works of the anthropologist Clifford Geertz.¹³ White's theory of history involves the claim that historical narratives "have more in common with their counterparts in literature than they have with those in the sciences".¹⁴ Potter, Stringer and Wetherell argue that "literature and social psychology are not the exclusive categories which they may appear to be. In certain important respects they share their concerns, methods and theoretical perspectives."¹⁵ And Dworkin has developed an interpretative

¹⁰ Rabinow & Sullivan, *Interpretive Social Science: A Reader*, 12.

¹¹ Charles Taylor, 'Interpretation and the Sciences of Man', in *Philosophical Papers II*, (Cambridge: CUP, 1985), 15.

¹² Hans-Georg Gadamer, *Truth and Method* (1st pub. German 1960), trans. ed. G. Barden & J. Cumming, (London: Sheed & Ward, 1975), xiii.

¹³ See, for example, 'Deep Play: Notes on the Balinese Cockfight', in *The Interpretation of Culture*, (New York: Basic Books, 1973), 412-453.

¹⁴ Hayden White, 'The Historical Text as Literary Artifact', in *Tropics of Discourse* (Baltimore: John Hopkins University Press, 1978), 82.

¹⁵ Jonathan Potter, Peter Stringer and Margaret Wetherell, *Social Texts and Contexts: Literature and Social Psychology*, (London: Routledge & Kegan Paul), 1.

theory of law which, he says, capitalizes on “that similarity between artistic interpretation and the interpretation of social practice”.¹⁶

In some recent philosophical accounts, the link between human actions and literary texts has developed into more than just one of analogy. In 1980, Margolis argued that the disciplines concerned with the meaning of texts, and those concerned with the meaning of human behaviour and expressions, should be grouped together and separated from the natural sciences.¹⁷ By 2001 his view was that selves, utterances and human actions are just different kinds of text.¹⁸

* * *

Irrespective of the precise status of the connection, suffice it to say that the analogy between works of art and literature and social objects plays an important role in modern humanist thought. Yet surprisingly little is written in defence of the analogy. At least, there is little discussion about whether the analogy is really strong enough to support the conclusions that rest upon it.

My claim is that the analogy cannot do the work that it is supposed to do; that there are significant differences between interpretation in the social sciences and interpretation in the arts.

I begin by considering theories of interpretation relating to artworks (Chapter 1) and social objects (Chapter 2). In fact, there is no universal consensus about precisely what interpretation involves in either field. I suggest, though, that the types of artistic interpretation that humanists require, for an argument along the lines of (B') to run successfully, do not have obvious analogues in the social sciences. There is a *prima facie* case for saying that the types of interpretation involved in the social sciences are compatible

¹⁶ Ronald Dworkin, *Laws Empire*, (London: Fontana, 1986), 50.

¹⁷ Joseph Margolis, *Art and Philosophy*, (Brighton: The Harvester Press, 1980), 156.

¹⁸ Margolis, *Selves and Other Texts: The Case for Cultural Realism*, (University Park: Pennsylvania State University Press, 2001), 155-163. See also *Science without Unity: Reconciling the Human and Natural*

with a broadly naturalistic approach to the social sciences. Hence, it is incumbent upon humanists to provide more support for their claim that the study of a social practice, or action, is closer to the study of an artwork than it is to the study of a natural phenomenon.

I consider humanist attempts to provide that support in Chapter 3.¹⁹ However, whilst I accept that there is a strong case for the claim that the social sciences do involve a type of interpretative inquiry that distinguishes them from the natural sciences, and that there are some similarities between interpretation in the arts and the social sciences, I argue that the case for the analogy has not been made strongly enough to warrant drawing the anti-scientific conclusions that humanists defend. There is no general impediment to the application of scientific methods and principles in the social sciences.

In the last two chapters my aim is to develop a broadly naturalistic account of the social sciences in which interpretative inquiry plays a (non-dominating) part. I begin this process in Chapter 4 by looking at the natural sciences. The debate about the relationship between the natural and social sciences has, for the most part, been informed by an over-simplified and outdated conception of the natural sciences. I argue that humanist philosophers of social science have erroneously defended a strong demarcation between the natural and social sciences because they have accepted over-simplified theories of scientific explanation, scientific method and the role of truth in science. I make no attempt to settle disputes about these matters that are still ongoing in the philosophy of science. But I do attempt to show that current thinking about the natural sciences makes them appear less remote from the social sciences than is often supposed.

Finally, in Chapter 5, I turn to the final obstacle to an acceptable form of naturalism: naturalists themselves. Regrettably, many attempts to demonstrate the continuity of the social and the natural sciences have failed because their advocates have been guided by the

Sciences, (Oxford: Basil Blackwell, 1987) and *Texts without Referents: Reconciling Science and Narrative*, (Oxford: Basil Blackwell, 1989) for the development of Margolis's views.

¹⁹ In particular, I focus on arguments put forward by Dilthey, Wittgenstein and Taylor.

desire to demonstrate that there is nothing distinctive at all about human social behaviour.²⁰

Many naturalists, armed with their favourite explanatory model, have attempted to show that the totality of human behaviour can be accounted for by a single approach.²¹ They have attempted to exclude interpretation. Inevitably, humanists have been able to pick holes in these accounts, and naturalism has been brought into disrepute.

What we need is a more limited version of naturalism.

²⁰ That is, they argue for (1) from the naturalist/humanist axis described above.

²¹ The naturalist approaches I consider include behaviourism, evolutionary psychology and rational choice theory.

Chapter One: Interpretation in the Arts

There is more than one type of interpretation that is pertinent to the arts. This is not difficult to see. The type of interpretation that a musician provides of a particular piece is clearly different from the type of interpretation provided by an art historian who identifies a figure in a painting as a representation of a particular individual from history or mythology. In the former case, the interpretation involves a performance of the work. In the latter case, no performance is involved. No one would argue that there is anything amiss about the fact that we are able to distinguish between two types of interpretative project here. However, in philosophical accounts, the scope for different types of interpretation, and the relationships between them, have not always been clearly expressed.

Most contributors to debates about interpretation in the arts would probably be happy to accept the description of interpretation as a process whose aim is to express the meaning of a work. However, there are numerous disagreements about what such a process involves. Few people would deny that artworks are the products of intentional acts of creation but there is no general consensus about what link there is, if any, between the artist's intentions and the meaning of a work. Philosophers and theorists have also argued about whether or not the meaning of a work of art remains stable through time. And about whether it is correct to say that a work has a single meaning (at any particular moment in time) or whether there are sometimes, or always, competing interpretations of a work that are equally acceptable.

According to many theorists, what is found to be in a work depends upon the interpreter at least as much as it depends upon the artist. From this perspective, it is natural to conclude that the goal of interpretation could not be a fixed meaning. Instead, one is likely

to defend the pluralist claim that there can be incompatible, but equally acceptable, interpretations of a single work.

Rather than trying to arbitrate between the competing schools of thought, I will argue that none of the common approaches, including the pluralist approach, is pluralist enough at the meta-critical level. Although defenders of the pluralist conception maintain that different interpreters approach a work from different points of view, they often fail to appreciate the variety of interpretative projects that might be undertaken. That is, they accept different interpretations but not different *types* of interpretation.

1.1 Defining works of art

If we want to understand the nature of the interpretation of works of art, it is important to know something about the objects of interpretation themselves. Before discussing the concept of interpretation in relation to works of art, then, it will be helpful to say something about what a work of art is. Attempting to provide a full definition would be almost an impossible undertaking. But we can make some useful observations.

Objects of Aesthetic Experience

Many philosophers who have sought to capture the essence of what makes something a work of art have concentrated on the nature of aesthetic experience, in general, and, in particular, the experience of art. Certainly, such an account must be an important aspect of any complete definition. Aesthetic experience is different from other types of experience and works of art are aesthetic objects.

Budd makes a helpful distinction between the *intrinsic* value of the experience of works of art and the *instrumental* value of other experiences.¹ This harks back to Kant's

¹ Malcolm Budd, *Values of Art* (London: Penguin, 1995), 4 ff.

view that aesthetic experience is disinterested. Works of art are not appreciated for their functional or practical value. They are appreciated for their own sake.

Strawson makes a slightly different but related point. He contrasts aesthetic *evaluation* from the evaluation of other types of object.² The former, but not the latter, he suggests, involves drawing attention to features and qualities that are unique to the individual work. A quality that makes one hairbrush good would also be valued in other hairbrushes.³ With works of art, some of the qualities that we value are not shared by other works. One might point to the *particular* use of harmony in explaining why one values a piece of music, or the *specific* wording of a poem.

That we value the unique characteristics of artworks reinforces the view that our experiences of them are intrinsically, rather than instrumentally, valuable. If an object has a specific function, then the qualities that make it good would also be beneficial in other objects of the same type. The same is not necessarily true in the case of artworks. Indeed, we might criticize a work that shares a lot of features in common with others for being unoriginal.

Scruton identifies a number of different aspects to the experience of art.⁴ It involves the experience of expression and representation. It also involves understanding. On this account, then, the experience of art is a complex matter involving a rich conceptual apparatus. To experience art, for Scruton, is to interpret it.

Intentional Objects

Accounts of aesthetic experience and aesthetic evaluation are vital for a complete understanding of the concept of a work of art. However, it is also important to make some

² Peter Strawson, 'Aesthetic Appraisal and Works of Art', in *Freedom and Resentment: and other essays* (London: Methuen, 1974), 186.

³ There might be different types of hairbrush that are evaluated according to different criteria but the basic point, that the qualities that we value in one object of a particular type would also be valued in other objects of the same type, should be clear.

relatively straightforward points about the intentions of those who create them. Works of art are intentional objects. That is, they are produced through the intentional actions of people.⁵ This fact provides the foundation for a distinction between works of art and what might be called 'natural aesthetic objects'. A Hokusai print of Mount Fuji and the mountain itself can both be considered as aesthetic objects. The experience of both might be intrinsically valuable and with both objects we might point to unique features when describing what it is that we particularly value about them. But only the print is a work of art. The mountain is ruled out because it is not intentionally produced.

Of course, not all intentionally produced objects are works of art. Many objects are produced for their functional value. Hairbrushes are made to help with grooming. Shopping lists are written to help people remember what they need to buy. It is here that an account of the special nature of the experience of artworks is helpful for picking out which intentional objects should be classified as works of art and which should not.⁶ But we can also say something more about the particular intentions that motivate the producer of a work of art. For the most part, works of art are intentionally created *as* works of art. Poets, composers, sculptors, *etc.* produce the works that they do with the intention that they are to be considered and evaluated as aesthetic objects. They do not, in the main, produce objects for their instrumental value.

Indeed, there are at least some cases where it seems reasonable to say that the artist's intentions override the way that people in fact respond to their works. We do not cease to

⁴ Roger Scruton, *Art and Imagination: A Study in the Philosophy of Mind* (London: Routledge & Kegan Paul, 1982, 2nd edition), 166-8.

⁵ We need to be liberal about how we understand the concept of production in relation to works of art. For the autographic arts – sculpture, painting, *etc.* – the production of the work is, in most cases, straightforwardly the production of a physical object. For the allographic arts such as poetry and music, production does not necessarily involve physical objects at all. One could compose a piano sonata without ever writing it down. Physical transcriptions are secondary. See Nelson Goodman, *Languages of Art* (Indianapolis: Hackett Publishing Company, 1976, 2nd edition), 113-116.

⁶ Some objects are clearly produced for both their instrumental *and* their aesthetic value. A hairbrush that has been elaborately crafted from high quality wood and inlaid with precious stones is almost certainly intended to be admired for its aesthetic qualities as well as being a useful grooming aid. In such cases we can separate our response to the object as an aesthetic object from our response to it as a functional one. It would be perfectly natural to say that a particular hairbrush was extremely beautiful but lousy as a hairbrush.

classify a painting as a work of art just because many people appreciate its monetary value more than its artistic value. And we are cautious about categorizing as art decorative goods that are mass-produced with the intention of making a quick profit.

Genres and Institutions

There are problematic cases for definitions of artworks that focus on the intentions of artists. One such type of case arises from drawings, inscriptions and artefacts that were produced in ancient cultures (and possibly those that are created now in cultures that are remote from our own). It has been argued that our concept of art has only been in use since the eighteenth century.⁷ Before then, the distinction between artistic skill and other types of skill was not so clearly drawn. And the further back in history one goes, the greater the differences become.

It would not be controversial to describe the works of Monteverdi and Milton as works of art in the sense outlined above. Whatever else they were intended to achieve – the esteem of a wealthy patron, the defence of a political regime, *etc.* – they were certainly intended to be experienced and engaged with as aesthetic objects. But things are less straightforward with objects from earlier cultures. To take an extreme case, consider the human figures and other artefacts produced by the early Cycladic civilization.⁸ We have no conclusive evidence as to what the intentions were of those who produced these objects. There is a suggestion that some figures were made solely to be destroyed as part of a funerary ritual. If that was the case, and if it is the intentions of the producer that determine whether an object is to be counted as an artwork, then we should not classify such figures as works of art. And, yet, we are tempted to do so. For us, they possess great aesthetic value. They have a purity of form that is reminiscent of the sculpture of Moore and Hepworth. It seems that because they conform to our conception of the genre of sculpture, we are inclined

⁷ Paul Oskar Kristeller, 'The Modern System of the Arts', *Journal of the History of Ideas*, 12 (1951), 496-527 & 13 (1952), 17-46; Władysław Tatarkiewicz, *History of Aesthetics*, (1st pub. Polish 1960), trans. C. A. Kisiel and J. F. Besemer, (The Hague: Mouton, 1974).

to describe the Cycladic figures as works of art. To a lesser extent there may be a similar imposition of our modern concepts of genre involved in the way that we characterize Greek drama and Latin poetry.

Turning from the ancient to the modern, the development of conceptual art also leads to questions about the definition of artworks. Certainly, works like André's notorious *Equivalent VIII* and, more recently, Creed's *Lights Going On and Off* suggest that the notion of what it is to *produce* a work of art must be taken very liberally indeed. Some critics have consistently denigrated works of this kind. It is suggested that a pile of bricks could not be a work of art because it requires no technical skill to produce. This reactionary view has, thankfully, been discredited, at least in some part by the popularity of much modern art.⁹

Of course, it should be recognized that defending the status of conceptual art does not preclude one from criticizing much of it as lazy and insubstantial. The fact that much conceptual art is of little value does not mean that it is not art at all. An object can become a work of art simply by being placed in a gallery with the intention that people engage with it as an aesthetic object even if the experience that people have is almost valueless.¹⁰

What such works seem to point to is that there is an institutional element to the classification of objects as works of art. The role of institutions is emphasized by Dickie.¹¹ He argues that artworks are just those artefacts which are determined to qualify as works of art by relevant critics. What qualifies as a work of art can vary over time as the relevant critics, and their opinions, change.

⁸ See Colin Renfrew, *The Cycladic Spirit* (London: Thames and Hudson, 1991) for an account of these remarkable pieces.

⁹ It is interesting that the conception of art apparently favoured by the detractors of conceptual art is not dissimilar from that which Kristeller and Tatarkiewicz identified as the predominant conception before the eighteenth century.

¹⁰ In the furore over Ivan Massow's derogatory comments about contemporary conceptual art, as a result of which he was forced to resign as Chairman of the Institute of Contemporary Arts, it was apparent that many commentators (though not Massow himself) were unable to distinguish between the criticism of art and a claim about whether something qualifies as a work of art.

¹¹ George Dickie, *Art and the Aesthetic: An Institutional Analysis*, (Ithaca: Cornell University Press, 1974), esp. 34.

Autonomous Objects

Works of art are produced, experienced and classified. But they can also be thought of as objects in their own right. In the case of paintings, sculptures and the like, artworks are physical objects that exist in space and time like any other. Poems and pieces of music are more complex but can still be thought of as types of object. But artworks do not just exist in physical space. They also exist in a social context.

As autonomous social objects, artworks are subject to all manner of human interference. They can be bought and sold, given as presents, shown in public, damaged, copied, *etc.* They can also influence human thoughts and feelings in many different ways. They can engender emotional responses, spark memories, distract attention and even inspire revolutions. In *The World, The Text and the Critic* Said emphasizes the importance of this interaction between artworks and the social world. “My position is that texts¹² are worldly, to some degree they are events and, even when they appear to deny it, they are nevertheless a part of the social world, human life, and of course the historical moments in which they are located and interpreted.”¹³

1.2 Conceptions of Meaning and Interpretation

The question that emerges in the theory of interpretation is this: how do these different aspects of works of art affect how they are to be interpreted? Does the fact that they are intentionally created mean that interpreters should concentrate on facts about their creators? Or is it primarily as autonomous entities that works of art should be studied? And what about the response of those who experience them?

Different answers to these questions are related to different views about the nature of the meaning of works of art. Most philosophers would agree that to interpret a work of art is to say something about its meaning, but there are numerous conceptions of what the meaning

¹² See note 26.

¹³ Edward Said, *The World, the Text and the Critic* (London: Faber, 1984), 4.

of a work of art is and how it is produced. According to some conceptions, it is a mistake to speak of *the* meaning of a work. Works of art, it is said, are *polysemous*; they have multiple meanings. On other accounts, there is a single meaning, the elaboration of which is the goal of interpretation. Consequently there are a variety of views about the nature of interpretation.

In this section, I will describe a number of conceptions of the meaning and interpretation of works of art. In the next section I shall discuss how the different conceptions relate to one another.

* * *

The first conception emphasizes the importance of the artist's intentions.

- (1) The meaning of a work of art is the message that the artist intended to convey.

To interpret a work is to uncover the artist's intended message.

According to (1), the artist has a lot of power in determining the meaning of a work. The work is thought of as a medium of communication. Its purpose is to express the thoughts and feelings of its creator. The task for the interpreter, though not necessarily easy to achieve, is at least relatively straightforward to describe: she must establish what the message is that the artist intended to communicate.

There are similarities between (1) and Grice's theory of the meaning of linguistic utterances.¹⁴ Grice distinguishes between different forms of meaning specification. We can specify, for example, the *timeless meaning* of an utterance-type or the *applied timeless meaning* of an utterance-type. But the basic concept of meaning (with which other types can be analysed) is, for Grice, the *utterer's occasion meaning*: what an utterer intended to convey by a particular utterance on a particular occasion. Understanding an utterance,

¹⁴ Paul Grice, 'Utterer's Meaning and Intentions', *The Philosophical Review*, 78 (1969), 147-177.

according to Grice, is a matter of recognizing what it was that the utterer intended to convey.¹⁵

Some of the ideas and concepts of speech act theory also have resonance for the theory of artistic meaning and interpretation, particularly in the field of literature, when taken along the lines indicated by (1). Austin's distinction between the locutionary, illocutionary and perlocutionary effects of utterances is of relevance to the study of literature as well as to the study of speech acts.¹⁶ A writer, like a speaker, can inculcate a belief or an emotional response in her audience in more than one way.

The conception of interpretation described by (1) suggests answers to some contentious issues in the theory of interpretation. For example, it suggests a position in the debate about the relative merit to the interpreter of internal and external evidence. Wimsatt and Beardsley, who rejected (1), argued that only evidence that is *internal* to a work is relevant for interpretation.¹⁷ That is, we should ignore biographical facts about artists' lives and other *external* evidence, when engaged in interpretation, and concentrate on the works themselves.¹⁸ An advocate of (1) would reject this limitation on the types of evidence that

¹⁵ The detail of Grice's analysis of utterer's occasion meaning involves attempts to specify precisely the nature of the intentions involved, and the way in which the intended message is conveyed, in cases of meaning. One stipulation is that the audience must recognize that it is the utterer's intention that they (the audience) should form a particular belief, or respond in a particular way. And that this recognition should be involved in the production of the response. This rules out cases in which the utterer intentionally tricks the audience into a particular response. Advocates of (1) have to consider similar limitations on the ways in which an artist's intentions can be conveyed by her work in cases of artistic meaning.

¹⁶ J. L. Austin, *How to Do Things with Words* (Oxford: Clarendon Press, 1962).

¹⁷ W. K. Wimsatt and M. Beardsley, 'The Intentional Fallacy' in Wimsatt, *The Verbal Icon*, (Lexington: University of Kentucky Press, 1954).

¹⁸ The distinction between internal and external evidence has been called into question. Cioffi argues that the distinction collapses when we consider some works of art: Frank Cioffi, 'Intention and Interpretation in Criticism', *Proceedings of the Aristotelian Society*, 64 (1964), 85-106. For example, Eliot's *The Love Song of J. Alfred Prufrock* was published with copious notes, provided by Eliot himself, that have an important bearing on the reader's understanding of the poem. Cioffi thinks that the lack of any strict criteria for deciding whether such notes should be counted as internal or external to the work indicates that the distinction should be abandoned. In general, the distinction collapses, he thinks, into a distinction between what the reader can and cannot be expected to know.

However, whilst it is certainly difficult to pinpoint strict criteria for discriminating between internal and external evidence, the lack of a clear boundary does not render the distinction useless. It is of course true that any attempt at interpretation will require some knowledge of the world beyond the work of art under scrutiny. Wimsatt and Beardsley, who advocated concentrating on internal evidence, accepted that any interpreter of a poem requires habitual knowledge of the language and culture in which the poem was produced. But we can still distinguish between interpretations that focus on specific facts about the artist's life and those that ignore such information.

are admissible. Any evidence that can shed light on artists' intentions will help us to understand their works. A major part of the interpretative enterprise, then, would consist of biographical accounts of artists' lives.

It is easy to find examples of interpretations of works of art that conform to this model. For example, Carey thinks that it is vital to recognize the importance of Donne's upbringing as a Catholic during a period of extreme religious intolerance, and his betrayal of his faith, when attempting to interpret his poetry. The poems written throughout his life "bear the marks of a religious crisis".¹⁹ Even the love poems are "a veil for religious perturbations".²⁰ In order to understand the poems we must know what was going on in Donne's mind.

A complication emerges when we consider the possibility that a work of art might convey the artist's subconscious feelings and thoughts as well as her conscious ones. There is an equivocation in (1) that can be made clearer by separating it into two distinct conceptions of artistic meaning and interpretation.

(1a) The meaning of a work of art is the message that the artist *consciously* intended convey. To interpret a work is to uncover the intended message.

(1b) The meaning of a work of art is the message that the artist *consciously or unconsciously* intended to convey. To interpret a work is to uncover the intended message.

The distinction between what an interpreter can and cannot be expected to know is different from that between internal and external evidence. Some, but not all, external evidence is widely known. Any interpreter of Gertler's paintings, for example, would be expected to know about his Judaism but not necessarily be expected to know about the contents of a private letter written to him by one of his acquaintances.

¹⁹ John Carey, *John Donne: Life, Mind and Art* (London: Faber and Faber, 1990, 2nd edition), 31.

²⁰ *Ibid.* 25.

Accepting (1a) over (1b), or *vice versa*, will have implications for the value that the interpreter places on particular types of evidence. Proponents of (1a) will take very seriously any recorded statements by the artist herself about her intentions.²¹ Proponents of (1b) will be more interested in the personal life of an artist and her position in the society in which she lived.

It might be objected that it is a mistake to talk about unconscious intentions. Some might consider it an essential fact about intentions and intentional actions that they are conscious. Hence, the conception of meaning and interpretation specified in (1b) might be rejected on the grounds that it contains a contradiction. This is not the place to discuss this issue. We can amend (1b) in a way that removes any mention of unconscious intentions whilst retaining the underlying insight.

(1c) The meaning of a work of art is a product of the mind of its creator. To interpret a work is to uncover the meaning.

By eliminating any reference to the intentions of the artist, we have moved a substantial distance from the original formulation of (1) to get to (1c). However, despite their differences, the conceptions of artistic meaning and interpretation specified by (1) to (1c) all share the basic thought that meaning is fixed by the artist. A work of art is an expression of the artist's thoughts and feelings, or a particular subset of them. To interpret a work is to identify how it manifests those thoughts.

* * *

Such a conception has intuitive appeal. But it has been the subject of a good deal of criticism. Among theorists, the notion that the intentions or mental state of the artist is of prime importance for those involved in interpretative projects has been unfashionable for

²¹ Of course, it is possible that the artist might lie or forget about her intentions so such statements are not incontrovertible even for advocates of (1a).

many years.²² Even if we accept that works of art are intentionally created, and that (in most cases) they are intentionally created *as* works of art, we are not forced to the conclusion that the discovery of the artists' intentions, or other facts about an artist's psychology, is the goal of interpretation.

Other specifications of artistic meaning and interpretation suggest a much smaller role for the artist.

- (2) The meaning of a work of art is a function of the rules and conventions of the culture in which it was produced. To interpret a work is to identify and express the conventional meaning.

The thought behind (2) is that it is not just up to individual artists to choose how they want to express themselves. They do not work in a vacuum. They are, rather, located in a cultural context which provides a framework of concepts and conventions that give meaning to their works.

The context in which an artwork is created is, in part, a product of earlier works. Even the works of those who are attributed with developing radically new styles and techniques must be understood, to some extent, as a response to works that came before them. There are myriad artistic conventions that circumscribe all areas of the arts from the iconography of religious art to the use of different musical keys to evoke different moods.

(2) allows for a gap between what an artist intends to express and what in fact she does express. A composer might unintentionally write a piece that incorporates a number of melodies also used by a previous composer. A painter might accidentally choose a subject with conventional symbolic significance. The emphasis on the role of conventions suggested

²² Some theorists have defended a conception of interpretation according to which the central goal is the discovery of the artist's intentions. See E. D. Hirsch, *Validity in Interpretation* (New Haven: Yale University Press, 1967); *The Aims of Interpretation* (Chicago: University of Chicago Press, 1976); John Reicht, *Making*

by (2) implies that in such cases the meaning of the work can be entirely different from what the artist had intended, either consciously or unconsciously.

Again, we can see a link between the debate about the nature of artistic meaning and the debate about linguistic meaning. For many philosophers, linguistic meaning is fundamentally a function of linguistic conventions rather than the intentions of individual speakers. Wittgenstein argued that it is impossible to say 'It's cold here' and mean 'It's warm here'.²³ The meaning of a speaker's utterance is constrained by the conventions of the language in which it is uttered. Proponents of (2) argue that similar constraints surround the meaning of works of art.²⁴

Interpretation, according to (2), is a matter of identifying the conventions of the culture in which a work was produced that are responsible for imbuing it with meaning. However, agreement on this underlying conception does not imply agreement about the details of the proper method of interpretation. Different interpreters concentrate on different types of convention. Consequently, their approaches to a single work of art can vary dramatically.

There is a schism between those who concentrate on the formal properties of artworks and those who also consider their content in relation to a social and historical context. For formalists, the content of an artwork is unimportant. For example, the subject matter of a painting is of little or no interest. Instead, the interpreter should focus on conventions and techniques that are manifest in the work.

(2a) The meaning of a work of art is a function of the conventions that govern artistic form in the culture in which it was produced. To interpret a work is to identify and express the conventional meaning.

Sense of Literature (Chicago: University of Chicago Press, 1977), 62-67. Also, despite theoretical opposition, the psychological approach is still common in practice.

²³ Ludwig Wittgenstein, *Philosophical Investigations* (Oxford: Basil Blackwell, 1958, 2nd ed.), I, §510.

Formalism is not a new approach. Sturrock suggests that the formal method has been around at least since Aristotle's attempt to analyse and codify the literary genre of tragedy as it was practised in Ancient Greece.²⁵ In the twentieth century, though, formalism became more extreme in its rejection of content, particularly in the field of literary criticism.²⁶ The Russian Formalists wanted to establish a science of literature that would focus on the technical aspects of literary writing and ignore the social and political issues that dominated nineteenth century criticism.²⁷ This approach was developed further by advocates of literary structuralism for whom it was crucial that the elements of a work be understood principally in terms of their relations with other elements within the work rather than anything external to it.

Despite being keen to reject labels like 'structuralist', some of Foucault's writing suggest that he thought that the rejection of intentionalism went hand in hand with a formalist or structuralist approach to literature.

It has been understood that the task of criticism is not to re-establish the ties between an author and his work or to reconstitute an author's thought and experience through his works and, further, that criticism should concern itself with the structures of a work, and its architectonic forms, which are studied for their intrinsic and internal relationships²⁸

In the early part of his career Barthes was also a keen advocate of the structuralist programme. He attempted to develop a structural method for analysing literary works based on Saussure's structural approach to linguistics. Narratives, he thought, could be broken

²⁴ Indeed, in the cases of poetry, drama and literature, linguistic conventions are clearly of direct relevance to the meaning of works of art in addition to other artistic conventions.

²⁵ John Sturrock, *Structuralism* (London: Paladin, 1986), 104.

²⁶ Many theories about the nature of artistic meaning and interpretation have been primarily elaborated in the field of literature. Obviously there are differences between the interpretation of literary works and the interpretation of other types of artwork. However, much of what is said about the interpretation of literature is pertinent to other areas as well. Literary theorists frequently allude to other areas of the arts. Debates about the relevance of artists' intentions, whether the interpreter should concentrate on form or content, whether the meaning of a work changes through time and whether or not the audience has a role in the production of meaning can all be applied to non-literary as well as literary works.

²⁷ See, for example, Boris Eikhenbaum, 'The Theory of the Formal Method', in Lee T. Lemon and Marion J. Reis (trans.), *Russian Formalist Criticism: Four Essays* (Lincoln: University of Nebraska Press, 1965), 99-139.

down into basic units. A full analysis of a narrative would remove practically all reference to its content. It would be reduced to a systematic network of basic elements.²⁹

Formalism has always been opposed by those who are interested in the social and ideological context of artistic creation. (2) does not entail concentrating purely on the conventions that govern form. Artworks can be regarded as sociological objects. Their meaning is a product of the conventions of the wider social context. On such a view, the content of an artwork can be a crucial factor.

This was Bakhtin's view. He opposed the work of the Russian Formalists who were his contemporaries. By concentrating on the formal properties of literature, they had failed to see the unique relation that it has to the society in which it is produced.

Literature is one of the independent parts of the surrounding ideological reality, occupying a special place in it in the form of definite, organized philological works which have their own specific structures. The literary structure, like every ideological structure, refracts the generating socio-economic reality, and does so in its own way. But, at the same time, in its 'content', literature reflects and refracts the reflections and refractions of other ideological spheres (ethics, epistemology, political doctrines, religion, etc.). That is, in its 'content' literature reflects the whole of the ideological horizon of which it is itself a part.³⁰

Bakhtin's thesis combines the Marxist view that artworks, like the rest of the superstructure, are a refraction of the basic structure of economic relations with the additional claim that literature acts as a mirror, reflecting every aspect of the society in which it is produced. By studying literature, Bakhtin thought, we can gain a comprehensive understanding of the societies in which works are produced.

A similar thought motivates 'new historicism'. Interpretative practice does involve consideration of the formal conventions of artworks produced in different societies. But it should also involve consideration of the content of artworks and the wider social context of

²⁸ Michel Foucault, 'What is an Author?', *Screen*, 20 (1979), 16.

²⁹ Roland Barthes, 'Introduction to the Structural Analysis of Narratives', in S. Heath trans. *Image, Music, Text* (London, Fontana Press, 1977), 79-124.

³⁰ M. M. Bakhtin and P. N. Medvedev, *The Formal Method in Literary Scholarship*, (first pub. Russian 1928), trans. A. Wehrle, (Cambridge, MA: Harvard University Press, 1985), 16-17.

their production.³¹ We can achieve a better understanding of artworks, and the cultures in which they were produced, by thinking about them as multifaceted cultural artefacts rather than just as objects with a conventional form.

In general, anti-formalists do not accept restrictions placed on the range of cultural conventions that may be considered by interpreters of an artwork. They prefer (2) to (2a).

* * *

All of the conceptions of meaning and interpretation discussed so far have an important feature in common. They all suggest that the meaning of a work of art is fixed at the time of its production and, as a result, they all suggest that interpretation is a process of uncovering or retrieving the fixed meaning. This holds whether one thinks of the meaning of a work as a product of the artist's intentions or as a product of the conventional context in which it was produced. Other conceptions dispute the idea that meaning is fixed. Consequently, they imply different accounts of what it is to interpret a work of art.

Eliot argued that "what happens when a new work of art is created is something that happens simultaneously to all the works of art which preceded it... The existing order is complete before the new work arrives; for order to persist after the supervention of novelty, the *whole* existing order must be, if ever so slightly, altered...."³² This suggests something like:

- (3) The meaning of a work of art is a product of its relations to other works, earlier and later, and the total order of works to which each contributes. To interpret a work of art is to locate it in this total order.

³¹ See, e.g., Catherine Gallagher and Stephen Greenblatt, *Practicing New Historicism* (Chicago: University of Chicago Press, 2000), 78-82.

³² T. S. Eliot, 'Tradition and the Individual Talent', in *Selected Essays* (London: Faber and Faber, 1934, 2nd ed.), 15.

There are several questions, particularly about the notion of a ‘total order’, that need answering before we can fully assess this conception. Different versions could be elaborated according to which the meaning of a work is identified as a product of its relations only to other works in the same genre or other works produced in the same culture. However, the basic point is clear. Rather than thinking of an artwork as an object produced in a particular context, we are to think of it as an object that persists through time. Its meaning changes as time passes.

This conception is developed in the works of literary theorists who emphasize the importance of intertextuality. Bloom asserts that poets and novelists cannot avoid imitating previous works. At the same time, though, they must transform or rewrite those works to satisfy the drive for originality.³³ This leads to the conclusion that meaning is not located within a single work. “A single text has only part of a meaning; it is itself a synecdoche for a larger whole including other texts. A text is a relational event, and not a substance to be analysed.”³⁴

For Eliot and Bloom, the most significant aspect of contextual development is the production of new works of art. We might also be interested, though, in how the meaning of a work changes as other features of society and culture change. An artwork might develop a more complex meaning after a particular historical event. Shakespeare’s plays, for example, are frequently interpreted as having something to say about events that occurred long after Shakespeare’s death. This suggests a more general version of (3).

(3b) The meaning of a work of art is a product of its relations to the (current) social and cultural context. To interpret a work is to locate it as an object of significance within the social context.

³³ Harold Bloom, *The Anxiety of Influence* (New York: Oxford University Press, 1973).

³⁴ Harold Bloom, *Kabbalah and Criticism* (New York: Seabury Press, 1975), 106.

The difference between (3) and (3b) is rather like the difference between (2b) and (2). According to (3) and (2b) interpreters should concentrate on the formal properties and the relations between one work and another. (3b) and (2) suggest that interpreters should consider a much wider range of types of evidence.

* * *

We can begin to see that the different ways of thinking about artworks, discussed in Section 1.1, can lead to different answers to questions about the nature of artistic meaning and artistic interpretation. Conception (1) was most closely connected with the fact that works of art are intentionally created. (2) and (3) draw on the idea that they are independent cultural objects. I turn now to a further conception which relates to the idea that the *experience* of art is of central importance.

- (4) The meaning of a work of art is a product of the audience response. To interpret a work is to identify how the audience responds to it.

This conception introduces the idea that the audience of a work of art can have a significant part to play in the production of its meaning. In most cases the audience response will be guided by their understanding of artistic conventions. It might also be guided by what they think the artist intended to achieve. This suggests a complex relation between (4) and the other conceptions already outlined. I will discuss the nature of this relation in the next section. Here, I want to consider some of the consequences of emphasizing the role of the audience.

In fact, the consequences for our understanding of meaning and interpretation of focusing on audience response depend dramatically on what or who one takes the audience to be. Clearly, different audiences can respond differently to the same artwork. Some philosophers and theorists have suggested that the range of different responses that there can

be to a single work indicates that it is a mistake to think of a work as having a single meaning. They offer a radical account of the production of meaning which overthrows a lot of traditional assumptions about the nature of meaning and interpretation.

I shall discuss this radical version of (4) below. Before that, though, I shall consider some other versions of the audience response conception with less dramatic consequences. Some versions of (4) privilege a particular audience over others.

(4a) The meaning of a work of art is a product of the response of the *original* audience. To interpret a work is to identify the original audience response.³⁵

(4b) The meaning of a work of art is a product of the response of the *contemporary* audience. To interpret a work is to identify the contemporary audience response.

There are similarities between (4a) and (2). In general, the original audience of a work consists of members of the artist's own society or, in some cases, a particular subsection of it. Since it is they whom the artist expected to be the primary audience, it is their response that is of interest to the interpreter.

(4b) has more in common with (3). The thought behind it is that it is the meaning of the work *now* that interests us, not the meaning of the work at the time of its creation. What is important, then, is how a contemporary audience responds to it, not how the audience at the time of its production did.

It is clear then, that (4a) and (4b) suggest different answers to the question as to whether the meaning of a work changes over time. An advocate of (4a) would think that the

³⁵ A good example of this conception informing critical practice can be found in studies of Chaucer. See, for example, Edmund Reiss, 'Chaucer and His Audience', *Chaucer Review*, 14 (1980), 390-402.

meaning is fixed. An interpreter from any age must consider the response of the original audience. (4b) implies that the meaning changes as the audience does.

But what about the fact that different audiences respond to artworks in different ways? (4a) and (4b) suggest that this is of little importance to the interpreter since it is a specific audience that is of interest. A problem only emerges if different members of a single audience respond differently from one another. It is an assumption of (4a) and (4b) that individuals from the same society, or those with similar cultural backgrounds, will respond to an artwork in a similar way. Individual differences are to be ignored.

Other versions of (4) embrace the variation between different responses.

(4c) The meaning of a work of art is a product of the responses of different audiences. To interpret a work is to identify the responses of its different audiences.

This position was defended by Welleck and Warren. “The total meaning of a work of art cannot be defined merely in terms of its meaning for the author and his contemporaries. It is rather the result of a process of accretion, i.e. the history of its criticism by its many readers in many ages.”³⁶

(4c) contains the seeds of the theory that artworks do not have a single meaning. Meaning is seen as an aggregate of different responses. It also suggests a more subtle relation between meaning and interpretation than the earlier conceptions. The meaning of a work depends upon how different audiences respond to it. That is, it depends on how people understand the work. But the goal of interpretation is greater understanding of the work. In other words, the way that an interpreter approaches artworks is not altogether different from

³⁶ René Welleck and Austin Warren, *Theory of Literature* (Harmondsworth: Penguin, 1963, 3rd ed.), 42.

how people ordinarily engage with them. So the interpreter herself might affect the meaning of a work.

These ideas are developed by proponents of the more radical version of (4):

(4d) The meaning of a work of art depends upon the audience. Meaning is produced in the act of reading/interpreting

This position is suggested by post-structuralist theorists. The scientific spirit of Barthes's structuralist programme gives way to a more complex and challenging account of meaning production and interpretation in his later writing. The idea that artworks contain meanings that can be discovered by analysis and interpretation is rejected. A text, Barthes suggests, is not like a fruit with a kernel; a secret meaning waiting to be discovered. It is more like an onion, a construction of almost infinite layers with nothing inside.³⁷ Interpretation is an endless process of peeling off the layers. Different readers will produce different interpretations but none will ever uncover *the* meaning. For Barthes, the 'death of the author' is accompanied by the birth of the reader.³⁸

Fish argues for a similar conclusion by suggesting that the meaning a work has for a person depends upon the 'interpretive community' to which she belongs. Interpreters from different communities cannot demonstrate to one another the superiority of their own interpretations by referring to the work because the standards and rules for interpreting are community specific.³⁹

In some places, this thesis is described in even more radical terms. It is suggested that not only is the meaning of a work produced in the act of interpreting it, but that the text itself

³⁷ Roland Barthes, 'Style and Its Image', in S. Chatman (ed.), *Literary Style: A Symposium* (London: Oxford University Press, 1971), 10.

³⁸ Roland Barthes, 'The Death of the Author', *Image, Music, Text*, 48. See also Umberto Eco, *The Role of the Reader* (Bloomington: Indiana University Press, 1979), esp. Introduction for an account of the transformation of the structuralist programme.

³⁹ Stanley Fish, *Is There a Text in this Class?* (Cambridge, Mass.: Harvard University Press, 1980), 339-342.

is a product of interpretation. Fish suggests that interpretive communities are not just responsible for specifying the rules for interpreting texts but that the texts themselves are the product of the intervention of interpretive communities. “Interpretive communities are made up of those who share interpretive strategies not for reading but for writing texts, for constituting their properties.”⁴⁰ Kraus also insists that “an interpretation may constitute or impute features of its object-of-interpretation”.⁴¹

It is not only post-structuralist thinkers who advocate versions of (4d). Raz suggests a similar conception of interpretation for cultural objects but rejects the view that the actual objects of interpretation are changed in the process. There can be innovative interpretations of artworks – indeed in some cases Raz thinks that innovation is inevitable – but it is only the meaning of the works that is changed.⁴²

The pluralism suggested by (4d) is also a feature of the conception of meaning and interpretation developed by Margolis.⁴³ But now the plurality of interpretations isn’t just a consequence of the different approaches of different interpreters. Even a single interpreter can recognize a plurality of interpretations.

Margolis emphasizes the point that the interpretation of a work of art requires that the interpreter should apply some cognitive or conceptual apparatus that she possesses independently of anything she might learn from scrutiny of the work in question. Margolis’s claim is simply that different interpretations of a single work can be formulated by applying different classificatory schemes or ‘myths’ as he calls them. And that it is impossible to defend one myth or scheme over another.⁴⁴

⁴⁰ *Ibid.* 14.

⁴¹ Michael Krausz, *Rightness and Reasons: Interpretation in Cultural Practices* (Ithaca: Cornell University Press, 1993), 67.

⁴² Joseph Raz, ‘Interpretation Without Retrieval’ in Andrei Marmor (ed.), *Law and Interpretation* (Oxford: Clarendon Press, 1995), 155-176. Raz has elaborated his position in a recent paper, ‘Interpretation in the Humanities’. See Chapter 2 for further discussion of Raz’s argument.

⁴³ Joseph Margolis, *Art and Philosophy* (Brighton: Harvester, 1980), Chs. 7-8. In more recent work, Margolis has identified his position more closely with those of Barthes and other post-structuralists.

⁴⁴ The examples of different myths that Margolis suggests include Marxism, Catholicism and Freudianism. Even if we reject Freudian psychoanalysis as a scientific theory of the subconscious, we can defend a Freudian

- (5) The meaning of a work of art is a product of the relation between the work and the conceptual apparatus or ‘myth’ that is brought to bear on it. To interpret a work is to ascribe a meaning to it through the application of a particular myth.

An important consequence of this conception is the possibility that there can be mutually incompatible interpretations of an artwork that are simultaneously admissible. For Margolis, this possibility indicates an important difference between the study of artistic works and the study of the natural world. In the sciences, contradictory theories are unacceptable. A scientist must endeavour to remove contradictions from her account of the world. In the study of art, an interpreter is not subject to a similar injunction.⁴⁵

* * *

It does not take too much imagination to see how conceptions of interpretation like (4d) and (5) might be used to develop an argument against naturalism in the social sciences. If the social sciences involve an analogous type of interpretative method, then it seems as if we might have to abandon any attempt to bring our idea of scientific objectivity to bear on them. I will have a lot more to say about this in Chapter 2, where I will consider, in detail, the role of interpretation in the social sciences. For now, I return to the consideration of the different conceptions of artistic interpretation and how they relate to one another.

1.3 Pluralism about Interpretative Strategies

Given the range of conceptions of meaning and interpretation outlined in the previous section, it is hard to avoid the conclusion that it would be difficult to say anything definitive about the nature of interpretation in the arts. However, as I have already indicated at several

interpretation of a work of art because the concepts and images that constitute the Freudian ‘myth’ have become a part of our cultural heritage.

points, the relationship between the different conceptions is not just that of straightforward alternatives. Historically, it has been a fault in much of the literature about interpretation that the proponents of one conception have tended to defend their own position by attempting to discredit other conceptions. Thus, advocates of (4d) and (5) are accused of suggesting that *all* interpretations are equally acceptable, i.e. that there can be no criteria for rejecting any interpretation. On the other hand, some critics of (1) have argued that artists' intentions are not just unimportant for interpretation but that it is impossible ever to discover what an artist intended or, even more radically, that the notion of an artist's intentions is incoherent.⁴⁶

My aim is not to adjudicate between the different conceptions. Attempting to pick out one would be foolish. Instead, I will try to bring some clarity to the situation by doing two things. First, I will say more about the similarities and connections that exist between some of the conceptions. Ultimately, though, I will argue that is a mistake to try to describe a single theory of artistic meaning and interpretation. In recent years, philosophers have come to realize that the concept of interpretation is essentially a pluralistic one. That is, as well as there being the possibility that an artwork can have more than one acceptable interpretation, there are also irreducibly different *types* of interpretation that can be applied to a single work.

Connections

Although there are significant differences between the various conceptions of meaning and interpretation, it is possible to exaggerate them. (4d) and (5) do not entail the extreme relativism that the proponents of other conceptions often suggest. Margolis is emphatic about this point.⁴⁷ Eco and Fish are also adamant that it is possible to misinterpret and over-

⁴⁵ Margolis, *Art and Philosophy*, 138-9.

⁴⁶ See, e.g., Laurie Calhoun, 'The Intentional Fallacy', *Philosophy and Literature*, 18 (1994), 337-8.

⁴⁷ Margolis, *Art and Philosophy*, 149. See also his *Interpretation Radical but Not Unruly: The New Puzzle of the Arts and History* (Berkeley: University of California Press, 1995).

interpret a work of art.⁴⁸ Even Derrida, who often wrote in a deliberately disorientating style, made it clear that he did not advocate a policy of ‘anything goes’ in the field of interpretation.⁴⁹ The argument that artworks are subject to multiple interpretations must be distinguished from the claim that all interpretations of them are equally acceptable. Practically nobody would dispute the view that some interpretations are better than others.

We can identify stronger points of contact between some of the conceptions. Accepting one conception does not necessarily entail rejecting the others. Schleiermacher argued that the interpretation of written discourse must combine (1) and (2). Language is used to express mental content but meaning is also circumscribed by rules and conventions. The interpreter must simultaneously understand the writer’s individual psychology *and* the totality of the language that she uses.⁵⁰ These two sides of interpretative inquiry – what Schleiermacher calls grammatical interpretation and psychological interpretation – are, he thought, equally important.⁵¹

We can extend this point to show that there are also connections between (1) and (2) and some versions of (4). It is obvious that the way that an audience responds to an artwork is influenced by cultural conventions. If one wants to establish the response of the original audience to a renaissance painting, for example, one has to understand the conventions of painting at that time. But it is also true that at least some audiences consider what it was that artists intend to convey in their works. Understanding the original audience response might also involve understanding what they took the artist to be communicating.

Saville suggests a rather complex account of how the artist, the conventional context and the audience all contribute to the meaning of a work along these lines. On the one hand, he suggests, “the artist will have to acknowledge that his work cannot properly be taken to

⁴⁸ Umberto Eco, ‘Interpretation and Overinterpretation: World History, Texts’, *The Tanner Lectures on Human Values*, 12 (1991), 141-202; Fish, *Is There a Text in this Class?*, 307-8, 341-2.

⁴⁹ See, for example, the quotation taken from an interview with Derrida in Herman Rapaport, *The Theory Mess* (New York: Columbia University Press, 2001), xiii.

⁵⁰ Friedrich Schleiermacher, *Hermeneutics and Criticism*, (1st pub. German 1838), trans. Andrew Bowie (Cambridge: Cambridge University Press, 1998), 8-9.

have (and therefore have) the particular character he wants it to, unless the signs he lays down are interpretable as giving the work that character by a system of rules and conventions that both he and his audience can know him to be using”.⁵² But, on the other hand, the original audience must “recognize that they understand [the artist’s] work by retrieving his intentions from it. They know that they must use a method that makes those intentions extractable for the canvas or text. And to do this they must make the best sense they can of the canvas or text by a system they take the artist to have been using.”⁵³

There are also links between (3) and (4d). The theory that artistic meaning is a product of relations between works is related to the post-structuralist view that meaning is not present in the text; that it is produced in the act of reading or interpreting. This is clear in some of Barthes’s writings. “We know now that a text is not a line of words releasing a single ‘theological’ meaning (the ‘message’ of the Author-God) but a multi-dimensional space in which a variety of writings, none of them original, blend and clash.”⁵⁴ Derrida’s position is similar. He develops Saussure’s theory of language according to which meaning is a product of relations of difference. Words (signifiers) and concepts (signifieds) are embedded in a language system. Knowledge of the system and the differences between the elements of it is required for understanding a particular word or sentence. Applied to literature, this theory suggests that to understand the meaning of one text involves knowledge of the network of relations between texts. Meaning is located at the intersections between texts, not inside individual works.

Pluralism about interpretative projects

Despite these connections and similarities, though, there is no getting away from the fact that there are important differences between the various conceptions of meaning and

⁵¹ *Ibid.* 10.

⁵² Anthony Savile, *The Test of Time* (Oxford: Clarendon Press, 1982), 63.

⁵³ *Ibid.* 63-4.

⁵⁴ Barthes, ‘The Death of the Author’, 146.

interpretation that suggest different accounts of what it is that an interpreter should do. Some accounts recommend concentrating purely on a work's internal structure. Others indicate that the interpreter should cast her net more widely. For some theorists, a good interpretation must be one that recognizes its own power to reshape the object of study. Others deny that the interpreter has this kind of power.

However, it does not automatically follow that we must try to determine which of the many conceptions is the correct one. We have seen that, according to some accounts, there can be more than one interpretation of an artwork. We should also consider the possibility that artworks are subject to more than one *type* of interpretation. It is not obviously inconsistent to think that it would be interesting to uncover an artist's intentions, when producing a work, and to see how the same work relates to those that were produced both before and after it. Similarly, the debate between formalists and anti-formalists might be seen less as a dispute between competing alternatives, and more as a matter of different emphasis.

I want to suggest that in the arts we should accept a form of pluralism at the meta-critical level. That is, we should happily embrace the fact that interpreters from different traditions, and with different theoretical perspectives, will engage with artworks in fundamentally different ways. Not only might they bring myriad 'myths' to bear on an individual work, as Margolis describes them; they will also adopt a variety of interpretative strategies, using different kinds of information to produce different kinds of interpretation.

A similar point is made by Annette Barnes:

[I]nterpreting critics need not choose... between always attending to artistic intention and never attending to it, between discovering properties in artworks and imputing properties to them, between regarding all interpretive remarks as taking the values 'true' and 'false' and regarding none as taking these values.⁵⁵

Different interpreters are simply engaged in different kinds of project.

To take an example, let us return to the interpretation of Donne's poetry. We saw above that according to Carey it is essential to interpret the poems as the creations of an apostate. This feature of Donne's life, Carey argued, subconsciously influenced all of his work. (In other words, Cary employs conception (1b))

Wimsatt and Beardsley prefer a different approach. They consider interpretations of the following quatrain from Donne's *A Valediction: Forbidding Mourning*

Moving of th'earth brings harmes and feares,
Men reckon what it did and meant
But trepidation of the spheres
Though greater farre, is innocent

According to one interpretation, this verse describes the cognitive repercussions caused by the shift, in the history of science, from the old geocentric astronomy to the new heliocentric system. Evidence for this interpretation is found in Donne's letters which reveal a fascination with the new astronomy. Here, then, we have an example of (1a).

Wimsatt and Beardsly, as advocates of (2), favour a different interpretation. They argue that the interpretation which makes most sense of the words in the poem (rather than external evidence about Donne's interests) is that the poem is about an earthquake. They also argue that this is the right interpretation according to conception (4a)

Further interpretations of Donne's poetry are suggested by the categorization of him as one of the Metaphysical poets. By this reckoning, Donne should be thought of as part of a larger movement in poetry, along with Marvell, Traherne and others. Interpreting his poems requires consideration of other works as well. This is an example of conception (3).⁵⁶ Other critics approach Donne's poetry from a particular theoretical perspective, along the lines suggested by conception (5). For example, Meakin considers his work in the light of ideas drawn from feminist philosophy.⁵⁷

⁵⁵ Annette Barnes, *On Interpretation* (Oxford: Basil Blackwell, 1988), 45.

⁵⁶ See T.S. Eliot, 'The Metaphysical Poets', in *Selected Essays*, 214-50.

⁵⁷ Heather Lynn Meakin, *John Donne's Articulations of the Feminine* (Oxford: OUP, 1998).

These different approaches should not be regarded as straightforward alternatives. Of course, any particular interpretation can be wrong. But there is not a single type of interpretation of artworks which should be favoured over and above all others. All of the conceptions of meaning and interpretation suggest ways of increasing our understanding and appreciation of artworks. The fact that different interpreters adopt different approaches is not a matter of philosophical concern.

* * *

It should be clear that this complex picture of interpretation will have implications for the debate about the nature and role of interpretation in the social sciences. Those who seek to draw on an analogy between interpretation in the social sciences and interpretation in the arts need to specify what conception of interpretation they think is relevant. We may find that we are happy to accept an analogy between the interpretation of social objects and some of the conceptions outlined in this chapter, but not others. We need to think carefully about what interpretation in the social sciences involves before we draw any strong conclusions about the status of the social sciences.

Chapter Two: Interpretation in the Social Sciences

The view that the social sciences are interpretative has a long history. Since at least the time of Vico, philosophers and those involved with the study of man and society have argued that the principles and methods of the natural sciences should not simply be copied in the social sciences. Human actions and social practices are meaningful in a way that natural events are not. And so they are subject to a different type of understanding. In order to achieve such understanding they need to be interpreted.

However, as is the case with works of art, there is no general agreement about the conception of interpretation that is pertinent to the social sciences. Different thinkers have suggested quite different accounts of what interpretation involves and the nature of the understanding that can be achieved. Yet it is crucial to be clear about these issues if we want to draw conclusions about the status of the social sciences.

Many advocates of interpretative social science endorse the view that the importance of interpretation implies not only a significant distinction between the natural and social sciences, but also that the principles of natural science are *irrelevant* to the social sciences. It is suggested that admitting a role for interpretation in the social sciences entails rejecting attempts to explain social phenomena in ways that are similar to the explanations of natural science. For many, this stronger conclusion is justified by a proposed analogy between the interpretation of social objects and the interpretation of works of art.¹ It is thought that if the social sciences involve a type of interpretative activity that is like the interpretation of artworks, then the ideas of naturalist philosophers of social science, who seek to demonstrate the similarities between the natural and social sciences, can be rejected once and for all. In

¹ There are other arguments put forward in support of this conclusion. Here, though, I shall restrict my attention to the argument based on the interpretation analogy. See Introduction.

the old debate between the two cultures of art and science, the social sciences would be placed firmly on the side of the arts.

In Chapter 1, I suggested that different types of interpretative project in the arts are guided by different conceptions of meaning and interpretation. In this chapter, I will consider whether there is a similar variety of types of interpretation in the social sciences. In particular, I will be keen to question whether conceptions (4d) and (5) from Chapter 1 have parallels in the social sciences. If there were a possibility, as there is in the arts, of mutually incompatible yet simultaneously acceptable interpretations of a single object, then the strong humanist conclusion would be difficult to resist. It is a general principle of the natural sciences that incompatible results, or incompatible theories, cannot be accepted. The social sciences would, therefore, not meet the standards of science. If, on the other hand, interpretation in the social sciences is limited to corollaries of conceptions (1) and (2) from Chapter 1, or a different conception altogether where there is no obvious threat of multiplism, then we might conclude that there are at least *prima facie* grounds for rejecting any strong analogy between interpretation in the arts and the social sciences; and for rejecting the strong humanist position according to which the importance of interpretation forces us to abandon attempts to apply the principles of natural science to the study of the social world.

2.1 The Objects of Interpretation in the Social Sciences

As with Chapter 1, I shall begin by saying something about the objects of interpretation before going on to a fuller discussion of what interpretation involves. In the case of artworks, I noted that it is difficult to draw strict criteria for determining whether something is a work of art or not. However, it was possible to make general points about the differences between the experience of artworks and other types of object; and about the intentions of those who produce them. Most of the time we do not find it difficult to decide whether something is a

work of art or not. With regard to the objects of interpretation in the social sciences, the situation is far more confused.

In much of the literature on interpretative social science there is little direct discussion about what the relevant objects of interpretation are. This is regrettable because different writers choose to concentrate on different types of object, and that affects how they conceive the nature of interpretation. As Lamarque warns, it is dangerous to assume that different types of human artefact are all subject to the same methods of interpretation.² We need to consider the different kinds of thing that social scientists might try to interpret.

Written Documents

Those who want to defend an analogy between interpretation in the social sciences and the interpretation of artworks, especially literary texts, gain support for their position from the importance to some of the social sciences on written documents as sources of evidence and as objects of study. Historians rely primarily on written archival material to find out about the past. They are also interested in historical documents such as the Magna Carta as objects worthy of study in their own right. A lot has also been made of the importance in legal studies of the interpretation of written texts.³ Statutes and constitutions, in the form of written documents, must be interpreted. In other areas of the social sciences, too, documents can be both resources and the focus of study. Think, for example, about how the McPherson Report has become an important object for sociologists studying issues to do with race relations in the United Kingdom. Whether the claim can be sustained, that the interpretation of historical, legal and social documents is genuinely analogous to the interpretation of

² Peter Lamarque, 'Objects of Interpretation', in J. Margolis and T. Rockmore (eds.), *The Philosophy of Interpretation* (Oxford: Blackwell, 1999), 97.

³ See, e.g., Ronald Dworkin, *Law's Empire* (London: Fontana, 1986), 313-399; Joseph Raz, 'Interpretation without Retrieval' in Andrei Marmor (ed.), *Law and Interpretation* (Oxford: Clarendon Press, 1995); Joseph Margolis, *Selves and Other Texts: The Case for Cultural Realism* (University Park: Pennsylvania State University Press, 2001), 117-123.

literary texts, remains to be seen. But it is evident that there is at least some kind of similarity.

Speech

Related to the interpretation of written texts is the interpretation of speech. For many philosophers, language use is the critical feature about humans that marks us off from the rest of nature. Certainly, speech plays an important part in human life and social scientists need to be able to understand what people say. Anthropologists engaged in fieldwork in particular have to interpret the utterances of their interlocutors. Speaking to members of another society is the fastest way of finding out about it. Interviews also play an important role in a lot of research in political sociology. And surveys and questionnaires are widely used in many areas of social science to find out peoples' attitudes.

Actions

Of course, speech acts – utterances – are just one sort of action. For many, it is the wider class of social actions that is the principal object of study in the social sciences. In addition to verbal performances we should also consider other types of action: exchanging goods, voting, rioting, *etc.* Of course, the performance of many social actions involves the use of language. In some cases, though not all, voting involves a linguistic utterance. As can the action of buying or selling a good. An important element of many humanist accounts of social science is the claim that *all* social actions are dependent on, or circumscribed by, language and, consequently, that linguistic interpretation is always involved in social inquiry.⁴ However, not all versions of interpretivism rest on such a conception of what interpretation involves. It is not immediately obvious that the interpretation of action and the interpretation of linguistic utterances are the same.

⁴ See below and Chapter 3.

People

In some of the literature on interpretative social science, particularly in the historical literature, it sometimes appears as if the main objects of interpretation are not actions but the people who are responsible for those actions. In other words, it is the agents themselves that the social scientist must try to interpret.

It is not immediately clear, though, what is involved in the interpretation of people beyond attempts to interpret their actions and what they say. It is probably best not to think of the emphasis on people as evidence for another alternative account of the objects of interpretation. Rather, it is evidence of a particular view about the *goal* of interpretation. Many early proponents of interpretative social science saw the aim of social inquiry to be the complete understanding of individual people. As I shall discuss in the next section, the focus was on attempts to ‘get inside the mind’ of another person. This was to be achieved precisely by interpreting the outward manifestations of other minds, *i.e.*, actions and utterances.

Rules and Practices

For holists, the proper objects of study in the social sciences are not individual actions but larger-scale objects. Individual agents are constrained not only by physical limitations but also by the complex network of rules and conventions of the societies in which they live. A person cannot choose to fly but nor can she choose, in our society at least, to form an independent state. Conventions are not just constraining though. They also enable types of action. It would be impossible for two people to get married but for the existence of the conventional practices and procedures that define marriage. Many philosophers of social science regard this conventional element of social life to be crucial. They think that social scientists should primarily be engaged in attempts to interpret and explicate the rules and practices involved in different aspects of social life.

Facts

There are further candidates still that must be considered in any discussion about the objects of interpretation in the social sciences. Durkheim's view that there are objective social facts that are analogous to the facts with which the natural sciences deal has repeatedly been called into question. Social facts, it is claimed, do not have the same status as facts about the natural world. But that does not mean that there are no social facts at all. It is a fact that the Bank of England's base interest rate is 4.75% and that Prince Charles is first in line to the British throne. There are also more complex social facts that can be described by statistical data. For example, there are facts about correlations between place of domicile and average income, and between educational background and marital status. These facts are sometimes called 'trends'. Of course, data can be inaccurate. But inaccuracy does not entail that there are no facts of the matter. Quite the opposite: only if there are facts is it possible to have inaccurate data.

Events

Finally, we might also apply a theory of interpretation to social events. The tendency to focus on events, as the principal objects of study, is particularly prevalent in history. But we can also talk about economic events, sociological events, political events, *etc.* Concentrating on events raises the possibility of bringing the natural and social sciences closer together. The dominant model of scientific explanation, at least for most of the twentieth century, was one that linked events of particular types.⁵ But there is also scope for a humanist account that draws a distinction between natural and social events. Social events, it is argued, need to be interpreted in a way that natural events do not.

⁵ See Chapter 4 for a fuller discussion of scientific explanation

2.2 Interpretation as Empathy

The thesis that the social sciences are principally interpretative, and that the type of interpretation involved in the social sciences is the same as that involved in the interpretation of works of art, was clearly and fully expressed for the first time in the works of Dilthey. Throughout his life, Dilthey was concerned with illuminating the status of what he referred to as the *Geisteswissenschaften*⁶ and the nature and role of interpretation pertinent to them. In his early career, including the period during which he published his influential *Introduction to the Human Sciences*, the conception of interpretation that he described was that of the empathetic understanding of other people.

The idea that empathy had an important role in history had been suggested by Herder. To understand another person's mind, he wrote, you must "plunge yourself into it all and feel it all inside yourself".⁷ Dilthey developed this idea into a fully articulated theory about the status of the human sciences. At the very beginning of the *Introduction*, the humanist argument that groups together the social sciences with the arts is flagged as Dilthey contrasts "those concerned with history, political theory, jurisprudence and economics, theology, literature and art" (GS, I, 3)⁸ with those engaged in the natural sciences. And throughout the first volume⁹, Dilthey's project is to describe what he considers to be the unique status of the human sciences. "[W]e must provide an epistemological grounding of the human sciences, justify and support their independent formation, and once and for all put

⁶ There is some dispute about what is the best translation of the German term '*Geisteswissenschaften*'. Originally it was itself a translation of the now outdated English term 'moral sciences' as used by Mill. 'Human sciences' or 'human studies' are generally preferred by contemporary translators to 'social sciences' because the *Geisteswissenschaften* include both the social sciences (and history) and the study of art, literature, architecture, etc. It is also felt that the full significance of the German concept of *Geist* is not satisfactorily captured by 'social sciences'. In the context of this debate it is what Dilthey has to say about the status of the social sciences that is of prime importance. The very point in question is whether it is correct to group together the social sciences with the study of art and literature.

⁷ Johann Herder, 'Yet Another Philosophy of History' (1st pub. German 1774), trans. and ed. F. M. Barnard in *J. G. Herder on Social and Political Culture* (Cambridge: Cambridge University Press, 1969), 179-223.

⁸ Page references are from the standard German edition of the *Gesammelte Schriften* (Leibniz: Tuebner, 1921-1982) and indicate the volume and page number.

⁹ Dilthey only completed the first of two proposed volumes of the *Introduction*. He did, however, leave drafts of some sections of Volume II but these were written much later in his life by which time his thought had developed quite considerably.

an end to the idea that their principles and their methods should be subordinated to those of the natural sciences.” (GS, I, 109)

The basic units of study for all of the human sciences, according to Dilthey, are individual people. We are, of course, interested in human works, as well as what Dilthey calls cultural systems and the external organization of society, but their study is secondary to the task of understanding individuals.¹⁰ Consequently, Dilthey conceives of what he calls a descriptive psychology, or anthropology, as the foundation of the human sciences. This descriptive psychology is contrasted with explanatory, experimental psychology. It does not seek to determine hypothetical laws of behaviour; descriptive psychology must attempt to understand different individuals in their specificity. To understand larger-scale objects, such as social classes or institutions, one must link together one’s understanding of individual lives. (GS, I, 34)

Dilthey was emphatic on this point. In the 1862 essay ‘History and Science’, he decried Buckle’s attempt to transform history into an exact science by rejecting accounts of individuals and concentrating instead on larger-scale facts relating to the behaviour of the masses. Dilthey castigated Buckle’s position as “the most desperate hypothesis that any scholar has ever postulated”. By excluding consideration of the actions of individuals, whom Dilthey described as “the mighty ones of this world”, Buckle was guilty of having made “the most paradoxical claim ever uttered by a historian”. (GS, XVI, 103)

Dilthey argued that the understanding that we can achieve of other people (and from which we can go on to develop an understanding of their works and the social institutions they construct) is unlike anything that can be achieved in the natural sciences. Like Vico, Dilthey attributed importance to the idea that we understand people and the social world from *within*. I can understand others because I share with them the property of being a purposive agent and a constituent of the social body. (GS, I, 36-7) I achieve understanding

¹⁰ Dilthey uses the term ‘cultural system’ to denote systems of social cooperation and interaction without prescribed rules. The ‘external organization of society’ refers to the legal and political institutions of a society.

by “reliving” the state of the other in myself. “[A]ll understanding involves a re-creation in my psyche.” (GS, XX, 100)

Dilthey’s conception of interpretation as empathy gained support among many of his contemporaries and from some later philosophers. Simmel’s early work shared Dilthey’s concern with finding a method for uncovering the psychological foundations of human actions and expressions.¹¹ Dray thought that attempts to understand, through empathy, why individuals act as they do, are the mainstay of historical analysis.¹² And, for Rickman, success in the social sciences requires a “sympathetic insight into the mental life of other people”.¹³ “This understanding of minds can be legitimately described in terms of re-thinking, re-experiencing, empathy, or imaginative insight.”¹⁴

* * *

On this conception of interpretation, it is certainly possible to defend an analogy between interpretation in the social sciences and interpretation in the arts. But not with all of the conceptions of interpretation discussed in Chapter 1. Specifically, the conception of interpretation as empathy is closest to (1c), insofar as we are interested in interpreting the actions and utterances of individuals; and (4a) to the extent that we are interested in re-living the feelings of other people about their social and historical context. That is to say that, if there is an analogy to be drawn, it is an analogy with conceptions of interpretation in the arts according to which there is a single fixed meaning for interpreters to uncover. There is no obvious analogy with conceptions according to which multiple interpretations are possible.

There is evidence to suggest that neither Dilthey nor Simmel would have dissented from this assessment. Dilthey was keen to continue Schleiermacher’s project of establishing rules for hermeneutic inquiry. The task was to show how objective interpretation was possible despite the obstacles; not to show that objective interpretation is impossible. Even

¹¹ Georg Simmel, *The Problems of the Philosophy of History: An Epistemological Essay* (1st pub. German, 1892-3), trans. and ed. Guy Oakes, (New York: Free Press, 1977).

¹² William Dray, *Laws and Explanation in History* (Oxford: Oxford University Press, 1957), 130.

¹³ H.P. Rickman, *Understanding and the Human Sciences* (London: Heinemann, 1967), 25.

in his later works, Simmel maintained that there could only be one correct 'historical interpretation' of a human action.¹⁵

The picture that emerges in these accounts, then, is that interpretation plays a vital role in the social sciences in a way that it does not in the natural sciences. However, the importance of interpretation does not obviously rule out scientific explanations or the use of data in the social sciences. Our immediate knowledge (*Wissen*) of other people is not incompatible with theoretical or conceptual knowledge (*Erkennen*). Moderate naturalists can happily allow a role for empathetic interpretation whilst maintaining that scientific principles and methods have applications in the social sciences.

Dilthey himself thought that, though they are less numerous and less precise than the laws of the natural sciences, it is both possible and desirable to discover social laws.¹⁶ (*GS*, I, 37) Rickman asserts that scientific methods are indeed used in the social sciences, despite his insistence that the interpretative method affects all areas of social inquiry.¹⁷ Stronger humanist positions – those which assert a clearer gap between the natural and social sciences – require a different conception of interpretation.

2.3 Understanding Reasons

If we concentrate on human actions as objects of study for the social sciences then our conception of what interpretation involves will be different.

Philosophers have debated the link between peoples' actions and their reasons for action for a long time. One argument for humanism focuses on the differences between explaining physical events by citing their causes and explaining human actions by citing

¹⁴ *Ibid.* 29.

¹⁵ G. Simmel, 'The Nature of Historical Understanding', (First pub. German, 1918), in Guy Oakes (trans. and ed.), *Essays on Interpretation in Social Science*, (Manchester: Manchester University Press, 1980), 110. Simmel distinguishes between different types of interpretation. Historical interpretations are those that seek to uncover the psychological genesis of an action or expression. Simmel did defend a version of multiplism with respect to other kinds of interpretation in his later philosophy.

¹⁶ For Dilthey, like most of his contemporaries, the discovery of laws was an essential part of science. In Chapter 4 I will discuss arguments which cast doubt on the importance of laws. Here I am just keen to point out that Dilthey did not categorically rule out scientific explanations of social phenomena.

actors' reasons for action. The humanist claim is that the explanation of action is not a form of scientific explanation at all; it is an interpretative enterprise which results in a unique type of understanding unlike our understanding of the natural world.

Of course, the philosophers who conceived interpretation as empathy were also interested in attempts to uncover peoples' reasons for action. By re-living someone else's experiences, the interpreter would have a complete understanding of another individual and her actions. However, humanists do not need to rely on the role of empathy to make a case for the difference between reason explanations and causal explanations. That argument can proceed more directly.

Wittgenstein on reasons and causes

For many humanist philosophers of social science, Wittgenstein's later philosophy provides a rich resource of arguments which reveal the futility of attempts to bring the social sciences into line with the natural sciences. In Section 2.4, I will consider Wittgenstein's views about the importance of language in shaping human life. And in 3.2 I will look at his discussion of ritual action and the relative value of different types of understanding. Here, I want to consider what Wittgenstein says specifically about reasons and causes.¹⁸

Wittgenstein's rejection of attempts to categorize reason explanations as a species of causal explanation was set against the positivist view, dominant at the time, that all knowledge could be rationally reconstructed using a unified model. In some ways, it seems natural to think that the relationship between reasons and actions is the same as that between causes and events. I explain why I acted in a particular way by saying that it was *because* I had such and such a reason. And we talk about actions being *necessary* to achieve our ends.

¹⁷ Rickman, *Understanding and the Human Studies*, 63-5.

¹⁸ Of course, Wittgenstein's views about reasons and causes are related to other aspects of his philosophy, including his philosophy of language. And, as we shall see, the debate about reasons and causes has become entwined with theories about meaning and interpretation in more recent philosophy.

In these cases, the language we use in talking about reasons is very similar to the language we use in talking about causes.

Wittgenstein insisted, however, that the grammar of reasons is different from that of causes.

The proposition that your action has such and such a cause, is a hypothesis. The hypothesis is well-founded if one has had a number of experiences which, roughly speaking, agree in showing that your action is the regular sequel of certain conditions which we then call causes of the action. In order to know the reason which you had for making a certain statement, for acting in a particular way, etc., no number of agreeing experiences is necessary, and the statement of your reason is not a hypothesis.¹⁹

Philosophers working in the Wittgensteinian tradition have developed the argument further.

Von Wright asserts that the connection between reasons and actions is *internal* and *normative*. Our actions are guided by our reasons, not caused by them. To identify someone's reasons is to rationalize her actions (and possibly to justify them as well).

Hacker elaborates further:

We attribute reasons, but not causes, to people, as when we say that A *had* a reason for Ving or that A's reason for Ving was that R. Reasons, but not causes, may be good or poor, defensible or indefensible, persuasive or slight. There may be a reason, and A may have a reason, for Ving, yet not V, and his failure to V does not intimate that there was no reason or that he had no reason for Ving. Causes make things happen, reasons guide and justify agents' acting. Accordingly, reasons, unlike causes, provide grounds for the evaluation of action as reasonable or foolish, right or wrong. An agent can do something for a reason only if he has the power to refrain from doing it. But if an agent is caused to do something in the sense in which the ice on the path may cause one to slip, he or it does not have the power to refrain from doing it.²⁰

The differences between reasons and causes, on this account, are sufficient to rule out counting reason explanations as a species of causal explanation.

Davidson on reasons and causes

¹⁹ Ludwig Wittgenstein, *The Blue Book* (Oxford: Basil Blackwell Ltd., 1969, 2nd edition), 15.

²⁰ P.M.S. Hacker, 'Wittgenstein and the Autonomy of Humanistic Understanding', *Wittgenstein: Connections and Controversies* (Oxford: Clarendon Press, 2001), 65.

However, not all philosophers have shared this view. A central tenet of Davidson's philosophical programme insists that reasons can be identified with causes. He agrees that we need to rationalize human behaviour by identifying reasons for action. But he sees this as a process of discovering what he calls the actor's pro-attitude and related beliefs which together form the 'primary reason' for an action. And this, he says, is equivalent to the cause of the action.

This type of causal explanation of action is possible, Davidson argues, because we can identify reasons with mental events. "Those who have argued that there are no mental events to qualify as causes of actions have missed the obvious because they have insisted that a mental event be observed or noticed (rather than an observing or a noticing)."²¹ That is to say that, although desires and beliefs are not, in general, mental events which can be causally linked to action events, the onset of a desire or the formation of a belief can be.

Some naturalists have sought to capitalize on this approach. They see it as the best way to defend their position against the humanist charge that causal, scientific explanation is not possible in the social sciences. Writing in 1977, Fay and Moon were confident that this line of argument could be run successfully.

One of the principal tenets of humanism over the last twenty years has been that beliefs, purposes, values, desires, and so forth – reasons for short – cannot be causes, and that therefore there is no "explanation" in social science but only a further form of interpretation in which the scientist tries to uncover the rationale or warrant for the actions in question. But such arguments are now generally recognized to be inadequate because, while reasons cannot be causes (they are utterly different sorts of things), the having of reasons, the believing in reasons, the giving of reasons, *etc.*, are all psychological events and, as such, nothing prevents them from figuring in causal explanations.²²

The same argument can be found in a more recent work by Trout: "In action theory, Davidson's and Goldman's explanations of the rationalizing power of reasons in terms of

²¹ Donald Davidson, 'Actions, Reasons and Causes', *Essays on Actions and Events* (Oxford: Clarendon Press, 1980), 12.

²² Brian Fay and J. Donald Moon, 'What Would an Adequate Philosophy of Social Science Look Like?', *Philosophy of the Social Sciences*, 7 (1977), 209-227.

their causal efficacy paved the way for the routine adoption of causal explanation as a model for psychological explanation generally.”²³

However, this defence of naturalism is based on an illegitimate reading of Davidson’s position. At least, Davidson’s identification of reasons with causes does not entail that reason explanations are like scientific causal explanations.

According to Davidson, reasons are indeed causes but “generalizations connecting reasons and actions are not – and cannot be sharpened into – the kind of law on the basis of which accurate predictions can be reliably be made”.²⁴ For Davidson, there is a clear distinction to be drawn between saying that events are causally related and saying that they are connected by a law. “Causality and identity are relations between individual events no matter how described. But laws are only linguistic; and so events can instantiate laws, and hence be explained or predicted in the light of laws only as those events are described in one way or another.”²⁵

As Stoutland has elaborated, there is a further complication because Davidson makes a subtle but important distinction between ‘causal explanations’ and ‘causal relations’.²⁶ For Davidson, two events cannot have causal relations unless there is a *strict law* instantiated by some true descriptions of both events. Strict laws, in this sense, are those that can be formulated without recourse to *ceteris paribus* conditions and are, Davidson thinks, restricted to physics. The laws that we have connecting mental events with actions, such as they are, are not strict enough to fulfil the conditions for saying that the events are causally related in this particular sense (although they do entail the occurrence of some physical event associated with the cause which is ‘causally related’ to the effect). And, hence, explanations

²³ J.D. Trout, *Measuring the Intentional World: Realism, Naturalism, and Quantitative Methods in the Behavioural Sciences* (Oxford: Oxford University Press, 1998), 18.

²⁴ Davidson, ‘Actions, Reasons and Causes’, 15.

²⁵ Davidson, ‘Mental Events’, *Essays On Actions and Events*, 215.

²⁶ Frederick Stoutland, ‘Intentionalists and Davidson on Rational Explanations’ in G. Meggle and A. Wojcik (eds.), *Actions, Norms, Values – Discussions with Georg Henrik von Wright* (Berlin: W. de Gruyter, 1999), 191-208.

of actions in terms of reasons are not causal explanations in the same way that our best scientific explanations are.

Indeed, Davidson goes further in distinguishing between explanations of behaviour and other types of causal explanation. The generalizations on which reason explanations are based are not just different in kind from the strict generalizations of physics. They are distinct from all scientific generalizations because they “concern only individuals – they are the generalizations embedded in attributions of attitudes, beliefs, and traits”.²⁷ Causal explanations of action, then, depend on knowledge of the individual concerned, what type of person she is, how she reacts in similar situations, *etc.*

This conclusion is not so very far away from the interpretivist claim that studies of human action are best conceived as attempts to *understand*. It seems that the humanist argument which emphasizes the importance of understanding specific individuals and their actions will work after all.

Reason explanations and methodological individualism

Naturalists can take some solace. There is at least a plausible theory of action according to which reason explanations are a kind of causal explanation. But the case against general causal laws linking reasons and actions seems irrefutable. Humanists take this result to be decisive. It shows, they think, that the social sciences are radically discontinuous from the natural sciences.

However, this strong conclusion relies on two further premises, both of which can be challenged:

²⁷ Davidson, ‘Hempel on Explaining Action’, *Essays on Actions and Events*, 274.

(P1) The social sciences are exhausted or dominated by attempts to explain individual action.²⁸

(P2) Universal causal laws are a criterion for a discipline to be considered a science.

In Chapter 4 I will argue that the truth of (P2) is far from clear. Some recent accounts of the natural sciences do not privilege universal laws in the way that many traditional accounts do. Here, I want to begin to make a case against (P1). At least, I want to suggest that the strong version of methodological individualism implied by (P1) is unattractive. I will return to this issue in Chapter 5.²⁹

At first sight, it seems that few social scientists are directly concerned with the actions of specific individuals. Some historians are. But the objects of study in a lot of social science are larger scale: groups of people, their customs and the objects and institutions that they create.

The basic principle of methodological individualism is that this apparent interest in macroscopic social objects belies the fact that, fundamentally, social scientists are just interested in individuals and their actions. All social objects, it is argued, are created through individual action or are just a summation of many actions. So the best explanations are those that focus on individuals.³⁰

My objection to methodological individualism is simply that it is dogmatic to rule out or devalue explanations that are not cast in terms of individual actions and reasons solely on the grounds that society is made up of individuals. The composition of society should not necessarily dictate how social phenomena are to be explained. An economist might be interested in charting and explaining inflation trends without giving any consideration to

²⁸ (P1) is required to reach the strong humanist conclusion directly from the argument about reasons and causes because, without it, there is still a possibility of causal laws relating other kinds of social object – see 2.1.

²⁹ It is interesting that humanism is linked here with methodological individualism. Many humanist philosophers reject individualism.

³⁰ This description of methodological individualism is by no means an accurate account of all versions of it. Different proponents of individualism have suggested a range of formulations that vary in a number of

specific individuals and the reasons for their personal economic decisions. Some historians do study the individual actions of historical figures. But others concentrate on larger social trends. It is not at all clear that one type of history is better simply because it involves trying to understand the motives of individuals.

Even if we accept, then, that reason explanations – whether or not we are happy to describe them as a species of causal explanation – are unlike scientific explanations because of their limited scope, it does not immediately follow that all explanations in the social sciences are of this type. We can admit that the explanation of individual actions can involve a kind of interpretative investigation, in which the specific features of the actor's personality are of prime importance, without accepting that the social sciences are dominated by this kind of inquiry.³¹

2.4 Linguistic Interpretation

The interpretative turn in the philosophy of social science, which was thought ripe for announcement by Rabinow and Sullivan in the late 1970s, was, to a large extent, an offshoot of the more general linguistic turn in twentieth century philosophy. Accounts that emphasized the importance of interpretation in the social sciences were connected to the view that language circumscribes the totality of human life.

Again, Wittgenstein was an influential figure in the development of this approach. His philosophical ideas were central to Winch's account of interpretative social science.³² Winch sought to extend the application of Wittgenstein's account of what is involved in following a rule, which had been developed principally with regard to the rules of language,

significant respects. However, the general point that I want to make here does not pertain to any specific version of the thesis.

³¹ In Chapter 5 I try to elaborate the ways in which the social sciences can go beyond interpretation.

³² Peter Winch, *The idea of a social science and its relation to philosophy* (London: Routledge, 2nd edition, 1990). In fact, Winch's version of interpretative social science is much more closely linked with Wittgensteinian philosophy in particular, and linguistic philosophy in general, than other accounts. Winch agrees with other humanists that the social sciences should be demarcated from the natural sciences. But he is not principally interested in attempting to show the similarity between the social sciences and the arts. Rather, he sees the social sciences as a branch of philosophy.

to cover all specifically human behaviour. Von Wright and Hacker have also drawn on Wittgensteinian ideas about the role of language in human life to strengthen the humanist position.

Dilthey's later works have also been crucial to the way that interpretivism has developed. We saw, above, that in the early part of his working life Dilthey advocated a theory of interpretation as empathy. In his later works, he focused on the hermeneutic dimension of interpretation. That is, he no longer saw interpretation as an attempt to gain direct access to other peoples' inner lives. Instead, he argued that interpretation must focus on the outward signs that people make. These are taken to include literary texts and other artworks, on the one hand, and utterances and social actions on the other. I will discuss the details of some of Dilthey's particular arguments in Chapter 3. Here, I am more concerned with how the hermeneutic conception of interpretation has affected the development of humanism more generally.

First, concentrating on language, signs and texts, as the objects of interpretation, has led to the humanist case being reformulated in a more robust way (about which more below). Secondly, the broad popularity that the hermeneutic approach has achieved has led to something of a rapprochement, in this area of philosophy at least, between the often-opposed traditions of Anglo-Saxon and Continental philosophy. Dilthey's philosophical roots lie in nineteenth century German idealism. Yet he and other figures who have made significant contributions to the development of hermeneutics – notably Heidegger and Gadamer – are quoted approvingly by their British and American counterparts. And the influence is not all in one direction. The French philosopher, Ricoeur, draws on elements of work by Hart, Austin, Anscombe, Searle and Kenny in his account of why human actions should be treated as literary texts.³³

³³ Paul Ricoeur, *Hermeneutics and the Human Sciences* (Cambridge: Cambridge University Press, 1981).

A stronger argument for humanism?

I have said that Von Wright and Hacker draw on the linguistic conception of interpretation to strengthen the humanist position. In fact, they both think that recognizing the central role of language is the most crucial step in developing a satisfactory case for humanism.

“Understanding,” in terms of hermeneutic philosophy, should be distinguished from empathy or *Einfühlung*. It is a semantic rather than a psychological category. The charge that is so often made by positivist philosophers that understanding is only a heuristic device, which may be useful for finding an explanation but which is not constitutive of the conceptual nature of the explanation model itself, may be valid against some earlier and outmoded versions of the methodology of empathy. But it is not a fair objection against the methodology of understanding as such.³⁴

The phenomena that are the subject of humanistic studies are infused with language, intelligible only as properties and relations, actions and passions, practices and products, institutions and histories of language-using creatures. The understanding of such phenomena therefore demands forms of understanding and explanation appropriate to and dependent upon the understanding of language and its uses in the stream of human life.³⁵

The older accounts of interpretation in the social sciences were, according to Hacker and Von Wright, an obstacle to recognizing quite how important interpretation is.³⁶ They argue that we should not think of interpretation as just one among many methods that social scientists can or must employ. Instead, the interpretative method should be seen as the basic approach for all investigations of social phenomena.

In terms of the analogy with interpretation in the arts, the linguistic conception has significant apparent advantages over other conceptions. It was noted in Chapter 1 that few

³⁴ George Von Wright, *Explanation and Understanding* (London: Routledge and Kegan Paul, 1971), 30-1.

³⁵ Hacker, ‘Wittgenstein and the Autonomy of Humanistic Understanding’, 57.

³⁶ Their concern about the treatment by naturalists of earlier versions of interpretivism is certainly justified. Weber wrote: “Sociology is a science which attempts the interpretive understanding of social action in order thereby to arrive at a causal explanation of its course and effects.” (Max Weber, *The Theory of Social and Economic Organization*, (1st pub. German 1907) trans. A.M. Henderson & T. Parsons, (New York: Free Press, 1964), 88.) Although this suggests an important role for interpretation, it leaves the way open for scientific style explanations. Naturalist philosophers have capitalized on this thought. In an atypically naturalist article, MacIntyre argues that “what Winch characterizes as the whole task of the social sciences is in fact their true starting point... [F]rom the fact that explanation in terms of reason ought not to be excluded by any initial decision of the social scientist, it does not follow that such explanation is incompatible with causal explanation.” (‘The Idea of a Social Science’, in Alan Ryan (ed.), *The Philosophy of Social Explanation* (Oxford: Oxford University Press, 1973), 26-7.) This is precisely the position that Hacker, Von Wright and others reject.

theorists believe that the principal aim of interpretation in the arts is the retrieval of artists' intentions. If the only conception of interpretation available in the social sciences was one of empathy, or the method of establishing individuals' reasons for action, then it would be difficult to support the view that the wide range of interpretative strategies pertinent to artworks is mirrored by a similar diversity of strategies in the social sciences. And, in particular, there would not be much of a case for saying that, in the social sciences, it is possible for there to be simultaneously acceptable, yet incompatible interpretations of a single object.

As soon as we start to think that the model of interpretation that is pertinent to the social sciences is a kind of linguistic interpretation, it begins to seem plausible that we could extend the analogy with interpretation in the arts to conceptions other than (1) from Chapter 1. Our ideas about what is involved in the interpretation of language go beyond those that concentrate just on attempts to discover what it is that a speaker was attempting to communicate. A speaker cannot normally choose for her utterances to mean just what she wants them to. Their meaning depends upon the context in which they are uttered. We are also comfortable with the idea that different people might understand a single utterance in different ways.

In addition, the analogy is strengthened by the thought that linguistic behaviour relies on a network of shared linguistic conventions that are non-natural (that is to say, invented by people), variable between cultures and variable through time. The social world – what our actions and utterances mean, how we relate socially to others, and so on – is delineated by arbitrary linguistic rules. This contrasts with the psychological world where, it might be supposed, there are at least some aspects of the human psyche that can be thought of as universal or, at any rate, not subject to the same degree of variation as the rules of language.

Geertz's conception of anthropology is guided by a similar principle. The anthropologist should not, he thinks, try to uncover the mental algorithm that underlies the

actions of those people that she is studying. She must focus on the details of their culture so that she can reach an understanding of its specific institutions and practices.³⁷

According to this view, there is very little difference between social objects and other cultural objects, including artistic ones. Actions, statutes, institutions, historical documents, *etc.* are all just particular types of cultural artefact along with poems, paintings and pieces of music. All cultural objects are created and experienced within a community of language speakers; and are, consequently, subject to the same types of interpretative inquiry. It is suggested, or at least intimated, that this includes the possibility that all cultural objects might be subject to multiple and incompatible interpretations along the lines described by conceptions (4c) and (5) in Chapter 1. Different interpreters will 'read' cultural objects in different ways.

Interpretation dominant?

Despite the similarities, though, there is still work to be done by those who seek to draw conclusions about the status of the social sciences based on the analogy between interpretation in the social sciences and interpretation in the arts. It is one thing to state that interpretation in the social sciences is a semantic or linguistic category, or that our understanding of social phenomena is dependent upon our understanding of language and its uses in the stream of human life. But it is quite another to show how this actually affects what social scientists should do.

For some social objects, this is relatively straightforward. It is not difficult to see that understanding a legal statute, or a marriage ceremony, relies on the understanding of language. But with others, the importance of language is less clear. It is not immediately obvious, for example, as to why we need to understand language in order to understand a group dance.

³⁷ Clifford Geertz, 'Thick Description: Toward an Interpretive Theory of Culture', *The Interpretation of Cultures* (New York: Basic Books, 1973), 1-16.

In some cases, it might even be the case that concentrating specifically on the meaning of language deflects social scientists from their task of trying to understand a practice. Descola's account of an *aujmatin* – a formulaic conversation that takes place when an Achuar man visits a neighbour – suggests that the real meaning is missed if one focuses on linguistic meaning. "The fact is that the *aujmatin* is a form of verbal exchange in which semantics plays an extremely minor role."³⁸

Such examples, though, do not deflect those who emphasize the importance of linguistic interpretation from their course. Their position is not that the social sciences are dominated by the interpretation of language narrowly defined. It is, rather, that all social actions and social practices are akin to language in the way that they depend upon shared rules and conventions. And that, consequently, understanding *any* social practice is analogous to linguistic understanding.³⁹ In the example of the Achuar *aujmatin*, it may be that the sense of the particular words and sentences that are uttered is of little importance, but the meaning of the practice and the actions of the participants are like linguistic meaning in that they are guided by shared norms and conventions.

* * *

Having sorted out the basis for the claim that interpretation in the social sciences is like linguistic interpretation, humanists still need to demonstrate why this conception implies that the social sciences are dominated, or exhausted, by interpretative inquiry. And why attempts to apply scientific models of explanation to social phenomena are misplaced.

One argument is based on the idea that all knowledge of the social world requires participation rather than observation. On this view, a social scientist needs to interpret a practice from within rather than trying to explain it from some external position. According to Winch, understanding a social practice requires being immersed in it. A social scientist

³⁸ Philippe Descola, *The Spears of Twilight: Life and Death in the Amazon Jungle*, (1st pub. French 1993) trans. Janet Lloyd (London: Harper Collins, 1996), 172.

³⁹ This is not the same as saying that it is analogous with artistic interpretation. That claim requires a further step.

needs to participate in an activity in order fully to understand it. Von Wright says something similar. The meaning of human actions, like linguistic meanings, depend upon socially accepted rules and standards. "In order to understand the meaning of actions and words, one must therefore either be another member of the same community or otherwise become familiar with, i.e. learn to participate in, its 'culture' or ways of life."⁴⁰

This participatory theory of what is involved in interpretation suffers from its implication that social scientists who are not participants are incapable of properly understanding a social practice. Anthropologists who immerse themselves in the societies that they study are able to achieve understanding of another culture. But otherwise, it seems as though we are largely trapped within the societies in which we happen to live. Particularly worrying, is the implication that almost all historical understanding would be practically impossible. We cannot choose to participate in societies that no longer exist. So, if participation were essential for understanding, we would have to conclude that we could not understand them. Or, at least, that we could not understand those elements of historical societies that differ from our own.

We should reject this participatory account. It is unnecessarily restrictive. Accepting that social actors are guided by internal rules does not entail that the only route to knowledge about their actions is through coming to share the actors' own self-understandings. Humanists need a different argument if they want to justify their view that the social sciences are dominated by interpretative inquiry.

This is where the argument based on the analogy between interpretation in the social sciences and interpretation in the arts comes to the fore. The theory is that social objects, like artworks, are subject to multiple incompatible interpretations. Hence, there are no objective starting points from which naturalists can launch their proposed scientific analyses.

⁴⁰ G. Von Wright, 'Humanism and the Humanities', *The Tree of Knowledge and Other Essays* (E.J. Brill: Leiden, 1993), 166.

The conception of interpretation as linguistic interpretation strengthens the analogy. All cultural objects, it seems, are enmeshed in a web of linguistic conventions. They can all be considered as linguistic objects. We might also be impressed by the fact that there appear to be different types of interpretation in the social sciences as there are in the arts. Typically, advocates of one conception tend to dismiss other accounts. But we might think that just as there are different types of interpretative project in the arts, so there are in the social sciences.⁴¹

However, although humanists might be able to show that there is some variation between different types of interpretation in the social sciences, there is little more than a suggestion, at least in the accounts I have considered so far, that the range of interpretative strategies described in Chapter 1 is genuinely matched in the social sciences. In particular, we have seen no conclusive evidence for the possibility of incompatible, yet simultaneously acceptable interpretations in the social sciences. In Chapter 3, I will consider, in detail, attempts to plug this gap. Humanists need to find some way of doing this; otherwise there is no compelling reason to accept their conclusions.

If it could be shown that multiplism is actually a consequence of some feature which is unique to works of art, then the humanist argument based on the analogy between interpretation in the arts and interpretation in the social sciences would be under threat. It would no longer seem safe to assume that social objects were subject to the same types of interpretation. And, consequently, we might be more confident about attempts to show similarities between the natural and social sciences.

⁴¹ The relationship between different types of interpretation in the social sciences is complicated. In Davidsonian philosophy, the task of interpreting utterances must be tackled simultaneously with the task of attributing beliefs and that of identifying preferences. In other words, interpreting reasons and linguistic interpretation are part of unified enterprise. See Davidson, 'Toward a Unified Theory of Meaning and Action', *Grazer Philosophische Studien*, 11 (1980), 1-12. Whether Davidson's programme is instructive for philosophers interested in the philosophy of social science is a debatable issue. As we saw above, his theory of action, in which reasons are identified with causes, does not provide a genuine foundation for the naturalist position that reason explanations are just like other causal explanations in science. In general, Davidson is not really concerned with issues relating to the meaning of specifically social actions.

Even without a complete argument of this kind, it is still incumbent upon humanists to defend their claim that multiplism can be a feature of interpretations in both the arts and the social sciences. It will not suffice simply to state dogmatically that the study of artworks and social objects can be treated as one and the same because both involve interpretation. In particular, it is incumbent upon humanists to explain why the apparent differences between artworks and social objects are not a significant factor in determining the types of interpretation that are pertinent to them.

If we compare the tasks of interpreting the events of a novel and interpreting the events of a particular historical incident, what appears immediately obvious is that in one case, the events are fictional whereas in the other case, they are supposed really to have happened. The point can be made more generally. Characters in plays, novels, films, *etc.* are fictional. They do not really exist and their actions and utterances are performed in an invented world. Social scientists, on the other hand, are concerned with real people (alive or dead), and their actions, utterances, customs and institutions.⁴²

Some humanists suggest that the contrast between factual and fictional events does not have any significant bearing on the nature and role of interpretation.⁴³ Often, though, theories of interpretation are first elaborated in respect of artworks and then simply asserted to be applicable to social objects as well.

For example, Raz has presented a detailed account of the reasons for innovative interpretations of artworks.⁴⁴ He considers the position of an actor playing a role in a play. There may be some instances, he suggests, where the text of the play does not provide fully comprehensive directions. The actor must choose to deliver a speech in a particular way, or stand in a particular position. By doing so, she cannot avoid giving the play a particular

⁴² There are some exceptions to this general principle. Some plays and novels do portray real people. And many paintings represent real people. In addition, many social scientists are concerned to understand the myths of the societies they study. These facts, though, do not traduce the basic point. We are able to separate the fictional from the real elements of plays in which real historical figures appear. We know, for example, that Julius Caesar's murder did occur, but not in the precise way that it is portrayed in Shakespeare's play.

⁴³ Some even deny the distinction between fact and fiction.

meaning; a meaning that was not previously inherent to the text of the play. In other words, she is bound to produce an innovative interpretation of the play. As there is not necessarily a fact of the matter about the intentions of the actor's character, it might be impossible to justify claims about whether one interpretation is better than another, even where two interpretations are incompatible with each other. In some instances, then, multiplism is inevitable.

Whether or not we think that this account illuminates the situation with regard to the source of incompatible interpretations of artworks, there is surely a question about whether a similar point can be made about social objects. That is, are social objects sufficiently like plays and other artworks such that innovative interpretation is inevitable?⁴⁵ Raz asserts that they are: "While my illustrations, such as they were, referred to works of art, if the argument is good about them it holds good for social relations, institutions, ceremonies, and of course for the law as well."⁴⁶

There is surely room for doubt here though. It is not at all clear that the actions of real people with real purposes are just like the actions of fictional characters in plays. Intuitively, it seems as though the scope for different interpretations of real actions is more limited. We are inclined to say that there are facts of the matter about the reasons for our actions and the meanings of social objects. Humanists need to provide stronger reasons for thinking that the apparent differences between social objects and artworks are less significant than they seem.

⁴⁴ This is a version of (4d) from Chapter 1.

⁴⁵ Raz emphatically does not suggest that innovative interpretation is inevitable whenever the meaning of an object is unclear or not fully determined. So it is not obvious that his theory about artworks should apply to social objects.

⁴⁶ Raz, 'Interpretation in the Humanities', 15.

Chapter Three: Arguments for the Analogy

In Chapters 1 and 2, I suggested that there are a number of different conceptions of interpretation, connected with different conceptions of meaning, at work in the arts and the social sciences. I also suggested that, though there are some similarities between the types of interpretation that are thought relevant to social objects and the types of interpretation that are relevant to artworks, there are also apparent differences. It is by no means obvious that all of the conceptions described in Chapter 1 have analogues in the social sciences. In this chapter, I will consider arguments that have been presented by those who hope to strengthen the analogy between interpretation in the arts and the social sciences.

My response to these arguments is largely negative. They do not provide adequate support for the conclusions about the status of the social sciences that humanists want to make. However, all of the accounts that I will consider cast further light on the important role that interpretation does play in the social sciences. They are valuable insofar as they advance our understanding of this role.

3.1 Dilthey and the *Geisteswissenschaften*

In Chapter 2, I briefly described the development of Dilthey's conception of interpretation. In his early works, particularly in the first volume of his *Introduction to the Human Sciences*, published in 1883, interpretation was conceived as a kind of empathy; a process of re-living the experiences of other people. In the later works, this psychological account was replaced by a more sophisticated hermeneutic, or linguistic, conception of interpretation. It is claimed, by those who favour it, that this hermeneutic conception cannot be dismissed by naturalists

simply as a starting point for further non-interpretative work in the social sciences. Hermeneutic inquiry, it is argued, is the dominant method.

In fact, though it is not incorrect, this description of the development of Dilthey's views is somewhat misleading. It glosses over the rich array of arguments about the status of the social sciences that Dilthey presented, including those from a distinctive middle period in his career. And, more importantly, it conceals the continuities that can be found in works from throughout his life. Dilthey's writings repay close attention. And not just because of his position as the forefather of humanism in the twentieth century. They contain myriad thoughtful and interesting insights about the social sciences.

In Dilthey's philosophy we can find versions, at least in germinal form, of many of the arguments employed by later humanist writers. Dilthey argues explicitly in favour of grouping the social sciences with the study of art and literature. It is likely that many of those humanists who simply state that there is a strong analogy between interpretation in the social sciences and interpretation in the arts, without justifying their assertion, have in mind some version of an argument that was suggested or developed by Dilthey. On the other hand, there are also significant differences between Dilthey's position and those of many of his intellectual descendants. In what follows, I try to draw out Dilthey's particular conception of what interpretative social science would be like, in addition to looking at the arguments for humanism that are common to Dilthey and other philosophers.

A realm within a realm

As I suggested in Chapter 2, Dilthey's conception of interpretation as empathy can be brought within a broadly naturalist position that emphasizes similarities between the natural and social sciences as well as differences. Dilthey did not think that an interpretative approach precluded the discovery of social laws. Indeed, in at least one place, Dilthey

suggested that all of the *Geisteswissenschaften*, including the study of art and literature, require a foundation of knowledge of the laws of human nature. (GS, I, 88)

Underlying the particular account of the *Introduction*, though, are important ideas about the social world, and our relation to it, that survived later developments in Dilthey's account of interpretation, and which suggest significant differences between the objects of study in the *Geisteswissenschaften* and natural objects. Dilthey considered humans to have a unique status in the universe. Humans are self-conscious and capable of complex, abstract thought. They also have free will and responsibility. As Dilthey put it, man "exists in nature as a realm within a realm". (GS, I, 6)

Normativity and value judgments

One consequence of this special status is that the social sciences involve a normative element that is not present in the natural sciences. Dilthey approaches this subject through a discussion of the classes of statement that are used in the human sciences and the goals that relate to them. There are three classes of statement: "facts, theorems, value judgments and rules".¹ (GS, I, 26) And to each class corresponds a different aim: "to apprehend what is singular and individual in socio-historical reality, to recognize the uniformities operative in its formation, and to establish goals and rules for its further development". (GS, I, 27) Later in the *Introduction*, Dilthey reduces this to a twofold classification in which he contrasts "judgments, which describe reality" with "imperatives and ideals which are aimed at directing society". (GS, I, 378) Dilthey adds, rather cryptically, that "[t]he most important task of social thought is to connect these two classes of assertions".

Unusually, Dilthey does not explicate his argument here particularly fully. However, since the statement classification scheme is presented as a way of describing the uniqueness of the human studies, we must suppose that it says more than that knowledge of the social

¹ Value judgments and rules constitute one class of statement.

world is required to help us achieve our goals. That, after all, is true of our knowledge of the natural world as well. It is also interesting to note that here, again, Dilthey does not deny the importance of generalizations for the human sciences, or the occurrence of regularities in the social world. That too points to similarities rather than differences between the social and natural sciences.

What Dilthey has in mind, here, is a claim about the importance of political and ideological interests in shaping what we have to say about the social world. That we make value judgments when considering individuals' actions, or social institutions, indicates that there is an aspect to the human sciences that has no obvious parallel in the natural sciences. However, as I have indicated elsewhere, arguments based on the ineliminability of ideological bias are beyond the scope of this investigation.² I am interested in arguments that seek to demonstrate that the very nature of our knowledge about the social world is inescapably different from our knowledge of the natural world, irrespective of whether that knowledge is coloured or shaped by our particular value systems.

Knowledge from within

In fact, Dilthey does not place much emphasis on his argument about the role of value judgments. His most important line of thought centres around what he conceives to be the particular way in which we derive knowledge of the human world. The human 'realm within a realm' creates a unique relationship between the object of study and the person who studies it: that is, they are one and the same. At least, the social scientist is a member of the same social-historical world as the people whose actions and practices she studies.

In the *Introduction*, Dilthey links this internal relationship between knower and known with his account of interpretation as empathy. "Social states are intelligible to us from within; we can, up to a certain point reproduce them in ourselves on the basis of the

² See Introduction.

perception of our own states....” (GS, I, 36) And, though the complexity of the social world presents a considerable challenge to social scientists, this obstacle is “more than outweighed by the fact that I myself, who experience and know myself from within, am a constituent of this social body and that the other constituents are similar to me and thus for me likewise comprehensible in their inner being”. (GS, I, 37)

However, Dilthey’s conception of interpretation as empathy is not a necessary concomitant of the more general point about man’s special place in the world. It is an idea that can be found in the works of many other writers both earlier and later. For example, it underlies Vico’s assertion “that the world of civil society has certainly been made by men, and that its principles are therefore to be found within the modifications of our own human mind”.³ It is also a fundamental aspect of Foucault’s conception of the object of study in the human sciences.⁴ And it plays a crucial role in Taylor’s argument.⁵

The same point can also be found throughout Dilthey’s other works. In the draft for the second volume of the *Introduction* the claim is given a Kantian twist. “In nature we observe only signs for unknown properties of a reality independent of us. Human life, by contrast is given in inner experience as it is in itself.” (GS, XIX, 272) And it survives into his later works in which the original psychological conception of interpretation is decisively rejected: “The fact that the investigator of history is the same as the one who makes it, is the first condition which makes scientific history possible.” (GS, VII, 278)⁶

It is significant that, for Dilthey, the similarity between the historian, or social scientist, and her subject was regarded as a *condition* for knowledge. Indeed, as we have just seen, Dilthey thought that the similarity was what made ‘scientific history’ possible.⁷ It is

³ Giambattista Vico, *The New Science*, 3rd edition, (1st pub. Italian 1744), trans. T. Bergin and M. Fisch, (Ithaca: Cornell University Press, 1968), 85. Like Dilthey, Vico contrasted our knowledge of society with our knowledge of the system of nature “which, since God made it, He alone knows”, *Ibid.* 85.

⁴ Michel Foucault, *The Order of Things*, (1st pub. French 1966), (London: Routledge, 1970), esp. Ch.10.

⁵ See below.

⁶ This comes from an essay published in 1910, just a year before Dilthey’s death. In the same work, he repeatedly distances himself from his earlier view of interpretation.

⁷ Dilthey does not mean that history can be brought within the scope of the natural sciences. Throughout his career he sought to establish an independent foundation for the human sciences.

important to understand why he thought this was so critical. It clarifies his reason for drawing the analogy between the study of social objects and the study artworks. It also brings into focus the way in which later philosophers have developed Dilthey's ideas in ways that lead them to draw more radical conclusions.

We have already seen that, in Dilthey's early work, it is because similarity permits empathy that it is significant. A social scientist, like the people she studies, is a purposive agent capable of thinking about the world around her and her place in it. Likewise, a literary critic or an art critic can empathize with the person who created the work she is studying. She can re-live the thoughts and feelings that the artist had.

In the later works, the importance of similarity is less obvious. Interpretation is no longer considered as a process of re-living another's experiences. Instead, it involves unravelling the meaning of signs. So it might seem as though any similarity between the interpreter and the person who created the signs is of limited interest. Crucially, though, Dilthey does not abandon the idea that the goal of interpretation is better to understand the thoughts and feelings of other individuals. He is still concerned with attempts to understand what he calls psychic reality or inner life. And for this, it is still important that the social scientist, or art critic, should be similar to the person who created the signs that she is trying to interpret.

Dilthey draws on Schleiermacher's view that validity in hermeneutics is possible because interpreters share a general human nature with those whose works they interpret. People are not fundamentally different from one another in ways that makes valid interpretation impossible. "All individual differences are not in the last analysis determined by qualitative differences among persons, but rather through graduated differences in their psychic processes." (*GS*, V, 329-30)

It might seem that Dilthey's position here is self-contradictory. On the one hand, he rejects his earlier psychological account of interpretation: for example, though he continues

to assert that the human sciences seek knowledge of the inner world, he now claims that “[i]t is a mistake to identify our knowledge of this inner side with the course of mental life, that is with psychology”; understanding a legal system “is not a psychological insight”; and “literary history and criticism are only concerned with what the pattern of words refers to, not – and this is decisive – with the process in the poet’s mind but with a structure created by these processes yet separable from them”. (GS, VII, 84-5) On the other hand, he maintains that interpretation is “that process by which we recognize, behind signs given to our senses, that psychic reality of which they are an expression”. (GS, V, 318)

However, this contradiction is more apparent than real. Dilthey’s position as one of the founding fathers of the hermeneutic approach in the social sciences means that he is often cited by humanists who are keen to emphasize the long historical tradition in which their accounts are produced. Unfortunately, this has meant that the differences between Dilthey’s views and those of later philosophers in the hermeneutic tradition have not always been clearly expressed. This can cause problems in explaining Dilthey’s position because the differences are of paramount importance.

For Dilthey, even in the later works, the aim of hermeneutics *is* to uncover the psychic reality behind signs, although not, as he had previously thought, by re-living the experience of the creator. Instead, he talks about applying a “rule-guided procedure” to the study of the objectifications of the mind. (GS, V, 319) His suggestion is for a system of rules like those described by Schleiermacher for the interpretation of written texts. Only, for Dilthey, the rules are to be applied to all manner of social objects.

For later philosophers, the hermeneutic approach goes hand in hand with the rejection of attempts to go beyond signs. We will see below that one of Taylor’s arguments against naturalism relies on the claim that the objects of interpretation in the social sciences are themselves interpretations. Social scientists can only add another layer to a pre-existing web of interpretations. Derrida’s famous aphorism that “there is nothing outside the text”

captures a similar thought: interpretation does not allow us to go behind signs; it merely leads to a further link in an infinite chain. And Gadamer's Heideggerian account of hermeneutics, and the human sciences, has the same conclusion: understanding is not just a basis for our knowledge of the human world; it is, rather, "the original character of the being of human life itself";⁸ the conception of a human reality behind meanings is a chimera.

* * *

There is no doubt that Dilthey was convinced by the thought that interpretation was an important mode of inquiry for all of the *Geisteswissenschaften*. And he believed emphatically that the understanding that we gain through the interpretation of social actions is analogous to the understanding we obtain through the interpretation of artworks:

Such understanding ranges from grasping the babblings of children to *Hamlet* or the *Critique of Pure Reason*. Through stone and marble, musical notes, gestures, words, and texts, actions, economic regulations and constitutions, the same spirit addresses us and demands interpretation. Indeed, the process of understanding, insofar as it is determined by common conditions and epistemological means, must everywhere have the same characteristics. It is thus the same in its essential features. If, for instance, I wish to understand Leonardo, my interpretation of his actions, paintings, sketches, and writings coheres as a single homogenous and unified process. (GS, V, 318-9)

However, the analogy that Dilthey draws is not one that readily lends support to anti-naturalist conclusions about the social sciences. His position stands in opposition to that of later advocates of hermeneutics who see little or nothing to the social sciences other than interpretation. And to that of theorists who argue for the possibility of multiplism in the interpretation of art.

Validity in interpretation, according to Dilthey, is possible and desirable. He argues that in the event of competing interpretations of a single work, attempts must be made to resolve the controversy between experts "by means of universally valid rules". (GS, V, 332)

For Dilthey, the fact that the social sciences involve the interpretation of signs produced by people, who share a social-historical world with those who study them, is

⁸ Hans-Georg Gadamer, *Truth and Method* (1st pub. German 1960), trans. ed. G. Barden & J. Cumming,

beneficial, rather than obstructive, for the pursuit of knowledge. There is no reason in principle why the interpretative aspect of the social sciences shouldn't be combined with other approaches, similar to those of the natural sciences.

Other arguments

Dilthey does present a number of subsidiary arguments that are designed to show that there are significant obstacles to scientific knowledge of the social world. For Dilthey, these strengthen the analogy between the arts and the social sciences and broaden the gulf between the natural and social sciences. Against the general background of his theory, which allows for objective interpretation, at least in principle, the tenor of these arguments is that the situation facing the social scientist is problematic.

Quantifying the Social World

Like many philosophers of the social sciences, Dilthey points out that the scope for quantification in the human world is smaller than in the natural world. And, so the argument goes, since it is the possibility of quantification that is responsible for the explanatory successes of the natural sciences, the notion that the human sciences should seek to emulate natural science is mistaken. "Strictly speaking, explanations of human affairs can be expected only to the extent that a reduction to exactly definable (and preferably quantitatively determinable) external facts is possible." (GS, XIX, 277)

However, this argument is insufficient as a basis for the radical conclusion that all knowledge of the human world is of a unique type. As we have seen, in some places Dilthey accepts that the distinction between the natural and human sciences is not so sharp. He suggests that some scientific explanations of human affairs are possible after all. But even

(London: Sheed & Ward, 1975), 230.

the weaker assertion, that the human sciences are largely characterized by understanding because quantification is problematic, can be criticized on two fronts.

First, Dilthey probably underestimated the scope for quantification of the social world. Advances in sociological techniques in the last hundred years suggest a different picture from that available to Dilthey writing in the late nineteenth and early twentieth century. In Chapter 5, I will look in detail at studies in the social sciences in which quantification assists in the formulation of powerful explanations. These are not limited to economics.

Secondly, the notion that all scientific explanation requires quantification is a dogma that needs to be overthrown. In Chapter 4, I will argue that the conception of scientific explanation that has traditionally dominated discussions about the relationship between the natural and social sciences is outdated and simplistic. If we were to rule out explanations in the social sciences, as unscientific, on the grounds that they do not involve quantification, we would also have to rule out a lot of what is commonly accepted as part of the natural sciences as well, on pain of inconsistency.

The Psychic Nexus

Between the early account of interpretation as empathy in Dilthey's philosophy and the later emphasis on the importance of hermeneutics, his conception of psychology developed. This development paved the way for a new argument about the differences between the type of knowledge possible in the natural and human sciences.

In the *Introduction*, Dilthey suggested that the elementary units of the human world – individuals – are given in experience. That is, we are immediately aware of individual people. They were thus contrasted with the elementary units of the natural world which were said to be hypothesized from our experience of the external world. In the *Ideas Concerning a Descriptive and Analytic Psychology*, published in 1894, Dilthey presented a different view

according to which our immediate inner experience is of a continuous psychic nexus rather than of discreet individual components.

In one way, this brings the social and natural sciences closer together. In both domains, our experiences must be organized using concepts that we bring to bear on them. However, for Dilthey, hypothetical explanations are problematic in the social sciences because we cannot describe the psychic world in terms of a few simple elements. The psychic nexus, like the physical one, is infinitely divisible. But whereas the physical world can be broken down into many tiny but uniform units, the psychic nexus is characterized by variation and complexity. Hence, a different type of knowledge is required. “We explain nature, but we understand (*verstehen*) psychic life.” (GS,V,144)

This line of thought provides a more powerful argument for distinguishing the natural and human sciences than problems associated with quantification. By going back a step, Dilthey can argue that not only is it difficult to quantify the elements of the human world, but that it is difficult even to define what they are, except insofar as we can achieve a limited and subjective understanding of the infinitely divisible psychic nexus.

Again, though, the suggested contrast with the situation in the natural sciences is probably overstated. Dilthey accepts that the elements of the physical world that we employ in scientific modelling and explanation are hypothetical. That is, it is we who are responsible for dividing the world up into atoms, molecules, etc. They are not given in experience. But he seems to assume that the scheme we use (or at least the scheme that was used when he was writing) is stable. The force of his argument depends upon the concepts of natural science being less prone to change than those of the human sciences.

It is perhaps unfair to criticize Dilthey on this point but, for the modern reader, the idea that the concepts of natural science are fixed is not credible. In the twentieth century it became clear that the success of science did not depend on there being a fixed view of the elements that constitute reality. I shall argue in Chapter 4 that, regardless of what stance we

take in the debate between realists and anti-realists – whether we accept that our current scientific theories are approximately true or not – the history of science provides copious evidence of successful theories that employed an ontology that was later rejected. And the entities hypothesized by such theories were by no means always simple.

That there is not a fixed schema of concepts for describing the social world does not mark them out as different from other sciences.

Mutual Dependence

Another argument, that can be found in Dilthey's works from throughout his career, aims to show that the relationship *between* the *Geisteswissenschaften* is different from the relationship between the natural sciences. The clearest statement of this argument can be found in one of the later works:

Knowledge of inorganic nature proceeds through a hierarchy of sciences in which the lower stratum is always independent of the one for which it lays the foundations; in the human studies everything from the process of understanding onwards is determined by the relationship of mutual dependence. (GS, VII, 143)

But the same basic point can be traced back to the *Introduction* where Dilthey contrasted the constructionist system (*Konstruktion*) of the natural sciences from the developmental or formative system (*Aufbau*) of the human sciences. (GS, I, 30)⁹

The consequences of this claim are now clearer though. We cannot achieve the same kind of focus in our knowledge of the human world as is possible of the natural world because we cannot separate a small portion from the totality. Thus, our accounts of a social phenomenon are inevitably complicated by endless external influences.

This point is different from the observation, accepted by naturalists, that social systems are more complicated than the controlled systems produced in laboratories. There is

⁹ The same point is made by Foucault. He writes that “all the human sciences interlock and can always be used to interpret one another: their frontiers become blurred, intermediary and composite disciplines multiply endlessly”. (Foucault, *The Order of Things*, 358.)

no doubt that the possibility of experiments, carried out in a carefully controlled environment, distinguishes some of the natural sciences from most social science. But experiments are not an essential feature of all of the natural sciences. And the possibility of experimentation does not provide a clear boundary for categorizing different disciplines.¹⁰

Dilthey's point is about the relationship *between* the human sciences. They are said to be mutually dependent in the sense that knowledge in one area is inextricably linked with knowledge in other areas. So, for example, knowledge of the political institutions in a society requires knowledge of that society's history. But Dilthey's claim also extends to knowledge of art and literature. To understand social institutions, he thought, requires understanding of the art and literature of that society, and *vice versa*.

Dilthey's position here can be seen as a response to Comte's account of the relationship between the natural and social sciences.¹¹ According to Comte, the sciences are characterized by a hierarchy of disciplines each of which relies on those beneath it. Thus, chemistry uses the findings of physics and biology uses those of chemistry. This hierarchy enables progress because scientists working in one field are able to avoid protracted debates about principles drawn from more fundamental sciences. Comte's view was that what he called social physics, or '*sociologie*'¹², should take its place at the top of the hierarchy.¹³ It would advance by drawing on the findings of the natural sciences and by applying the same rigorous methods to the study of the social world.

What Comte did not discuss in detail is the relationship between disciplines within the social sciences; what he would have thought of as the different branches of sociology.

¹⁰ Experiments are used in some areas of economics and social psychology. See 4.3

¹¹ Dilthey appears to have been consciously responding to Comte's views in many places. His reaction was not entirely negative. He agreed with Comte that the human sciences must escape the influence of theology and metaphysics. (The rise and fall of metaphysics is the subject of Book Two of the *Introduction*). But he thought that Comte's positivism merely replaced traditional metaphysics with another inappropriate epistemological foundation in attempting to treat the human realm as analogous to the world of nature.

¹² Comte's conception of sociology included the study of political economy, history and the law as well as what we would call sociology. See below.

¹³ In fact, late in his life, Comte suggested that a science of ethics should be placed at the top of the hierarchy, above sociology. Many critics have suggested that this proposal was incompatible with the thrust of his general theory.

Nor did he consider the relationship between the social sciences and the study of art and literature. This is hardly surprising. The Course on Positive Philosophy was published between 1830 and 1842 when the social sciences were in their infancy.¹⁴

For Dilthey, this is a crucial lacuna in Comte's system. The quotation printed above indicates that Dilthey had some sympathy for Comte's account of the relationship between different areas of the natural sciences. But his contention that all of the human sciences are dependent on one another implies that the social sciences are quite different. Any positivist assumption that, in time, the social sciences will develop areas of specialization, like those of the natural sciences, in a way that promotes focused and accurate knowledge of the social world, is roundly rejected by Dilthey.

One way of responding to Dilthey's argument here is to point, again, to the record of the social sciences since the beginning of the twentieth century. Specialization has developed to a far greater degree than perhaps he would have expected. However, a defender of Dilthey might reasonably argue that it is this very system of specialization, particularly as it developed in the middle of the twentieth century, when positivism was dominant, that is responsible for the failures of the social sciences. It is argued that a more interdisciplinary approach to the study of the human world would be far more rewarding than attempts to mirror the specificity of scientific investigations.

It is not difficult to see how the different human sciences can interrelate. One can enhance one's understanding of a particular period in history by looking at the literature of the period. Or *vice versa*, just as Dilthey suggests. What is less clear, though, is why it should be thought that the human sciences can achieve nothing without mutual support from one another. For Dilthey's argument to work fully, he needs to show that, for example, an historian could not understand a period of history without knowing about the literature (or other cultural artefacts) produced at the time. Or, at the very least, that attempts to isolate

¹⁴ Comte did discriminate between two areas of study: 'social statics' and 'social dynamics'. In the former, social institutions are studied as an ordered system in which different elements interrelate. The latter focuses on

aspects of the social world, as objects for study, only lead to impoverished or anodyne findings, lacking any real worth.

As I will argue further in Chapter 5, though, this picture simply does not stand up to comparison with the record of genuine advances in the social sciences. We are capable of studying aspects of the human world in isolation. At least, it is not always essential to consider the totality of the social and cultural context in which a social object is produced. Just as an ethologist can explain animal behaviour without having to consider the animals' brain chemistry, so a social scientist can make advances in knowledge about a particular social practice, or social institution, without having to consider every other aspect of the cultural context in which the practice takes place.

The Hermeneutic Circle

Dilthey's conception of hermeneutics as a method for achieving understanding in the social sciences, as well as a method for understanding written texts, was a significant development. With the new emphasis on hermeneutics came stronger arguments about the obstacles to scientific knowledge in the human sciences. Dilthey suggests that the most significant of these is what he calls, following Schleiermacher, the problem of the hermeneutic circle.¹⁵

It is at this point that the central difficulty of all interpretative practice makes itself felt. The whole of a work is to be understood from the individual words and their connections with each other, and yet the full understanding of the individual part already presupposes that of the whole. ...[A]ll understanding always remains partial and can never be completed. (GS, V, 330)

social and historical change. This distinction, though, does not address Dilthey's point.

¹⁵ Different philosophers have different ideas about exactly what the hermeneutic circle is. There are two main conceptions: Dilthey's part/whole circle and the circle implied by the idea of an endless chain of interpretations with nothing more substantial beneath. This second type of 'hermeneutic circle', suggested by Taylor and others, will be discussed below. It is unfortunate that confusion reigns in this matter. The use of the same term to refer to what are actually two radically different arguments adds to the misunderstanding of Dilthey's philosophy and gives undue credence to the view that the position of recent humanist philosophers is simply an extension of his. Dilthey emphatically believed that there was an objective meaning behind symbolic expressions, the discovery of which was the goal of hermeneutics. The second hermeneutic circle is supposed to show that no such objective meaning exists.

This problem affects all attempts to understand artistic and social objects, from understanding a single line in a poem to understanding a whole political system.

Dilthey refers to Schleiermacher's method for dealing with this problem. Roughly, we must try to achieve a tentative understanding of the whole, and only then look at the individual components of whatever it is we are studying. Our understanding of the parts will lead us to revise our interpretation of the whole; which in turn might lead us to a better interpretation of the parts, and so on. The key question is: how far can this method help us to overcome the initial problem?

Other passages suggest further reasons for doubting the possibility of objective knowledge of the human world. Dilthey talks about a "divinatory aspect" to the task of interpretation. "Interpretation is a product of personal skill and its most perfect application is dependent on a certain kind of genius" (GS, V, 332) And what is more, this genius is sometimes compared to that of the poet. Thus, the apparent differences between the aims of social scientists and artists is cast into doubt.

Contemporary philosophers have taken up this argument. Roger Hausheer, for example, argues that interpretation "aims at a kind of artistic act of creative production or reproduction, in some sense a new creation".¹⁶

The problem of the hermeneutic circle and the suggestion that, somehow, interpretation involves a divinatory or artistic process are related. If we must understand the parts of a work, or social context, in order to understand the whole, and *vice versa*, it is difficult to see how this can properly be achieved by any straightforward logical process. Dilthey's recapitulation of Schleiermacher's rules is not intended as a complete solution to the problem. Since we are able to interpret, there must be some method by which we do so. But questions remain about the status of our interpretations.

¹⁶ R. Hausheer, 'Three Major Originators of the Concept of Verstehen: Vico, Herder, Schleiermacher' in Anthony O'Hear, ed., *Verstehen and Humane Understanding* (Supplement to Philosophy (41)), 64.

Once again, though, Dilthey's position is equivocal. Although much of what he says suggests that no interpretations could be truly objective, there are several passages where he indicates that there are exceptions to the rule. And, rather surprisingly, he suggests that it is with the interpretation of written texts, including literary texts, that real objectivity is possible. In the clearest statement of this feature of his position, he begins by singling out language as a special case. "[O]nly in language does human inner life find its complete, and objectively understandable expression." (GS, V, 319) He continues:

We can always make mistakes about the motivation of the agents of history; they themselves can spread misconceptions about their own motives. But the work of a great poet or discoverer, a religious genius or an authentic philosopher can never be anything but a true expression of his psychic life; in a human society filled with lies, such a work is always true, and unlike every other objectification registered in signs, it is capable of complete and objective interpretation; indeed it is only in the light of such works that we begin to understand other artistic monuments of an age and the historical action of contemporaries. (GS, V, 319-20)

This passage paints Dilthey's position in a rather different light from that which we might expect. In addition to a restatement of the argument about the way in which the *Geisteswissenschaften* are mutually dependent, it also contains evidence that Dilthey conceived of the analogy between interpretation in the arts and social sciences as having quite different consequences from those that modern philosophers suggest.

For us, poetry is considered to be one of the most difficult arts, in terms of the ease with which we are able to interpret meanings.¹⁷ The point of the analogy for modern humanists is to provide support for the claim that social scientists are in the same boat as those who study works of art. That is, the work of the social scientist is to interpret objects that, like poems, are densely packed with symbolic significance and (for some) subject to

¹⁷ This claim is difficult to justify. It is surely a matter of judgment as to what types of artwork are more difficult than others. Interestingly, though, nearly all philosophers (and non-philosophers) seem to agree on this issue. Most humanists who invoke an analogy between interpretation in the arts and interpretation in the social sciences to support their case would be satisfied if they could show that social interpretation was like the interpretation of poetry; and less satisfied if the analogy could only be backed up in relation to, say, a straightforward narrative novel. See, for example, the discussion that appears below of Fish's article 'With the Compliments of the Author: Reflections on Austin and Derrida'. Other areas of the arts that are widely considered to be 'difficult' include conceptual art and *avant garde* music.

multiple, incompatible interpretations. For Dilthey to suggest that, actually, in the case of poetry, objective interpretation is possible after all, goes against the direction of the main argument.

So, what are we to make of this? Principally, we must accept that Dilthey's reasons for categorizing the social sciences with the study of art are not the same as those of modern humanists. Though he was certainly adamant that the social sciences could not develop properly if they continued to be shaped by attempts to apply to them principles slavishly copied by the natural sciences, he did not intend to imply that objectivity was impossible throughout the *Geisteswissenschaften*.

But we also need to consider his view that it is only through studying the works of poetic, religious or philosophical geniuses that we can begin to establish a bridgehead that will allow us to break out of the hermeneutic circle. Dilthey's particular reasons for claiming that "[u]nderstanding can attain the universal validity of interpretation only in relation to written documents" (GS, V, 331) seem highly questionable. Writers, just as much as social actors, can mislead deliberately. And, though great poets and philosophers are able to help us understand what it is to be human, and to be a member of a particular society, they do not have a monopoly over that ability. It is the residue of Romanticism in Dilthey's philosophy that leads him to think otherwise.

Perhaps, humanists might argue, Dilthey's detour into discussions about the nature of genius, and the possibility of escaping the hermeneutic circle, was an aberration. His position would have been stronger had he stuck to the original claim: that the hermeneutic circle demonstrates that interpretation is an endless activity; that the process of interpreting social meanings is not a just a prelude to further work in the social sciences, a task that can be neatly tied up before social scientists get on with the more serious work of comparing, quantifying and explaining social phenomena.

Such a view has some merit. But surely Dilthey's conception of the kind of challenge that the hermeneutic circle presents is closer to the truth than any claim that it stands as an obstacle to all attempts to introduce non-interpretative approaches to the social sciences. The hermeneutic circle shows us that we can never finish interpreting once and for all. It will always be possible to refine our understanding of a social practice, to improve it ever so slightly. But it does not provide the kind of argument that is needed to support the strong humanist claim that the social sciences are dominated or exhausted by interpretation. It does not show that contradictory interpretations might be equally valid. Or that all attempts to explain social phenomena are really just cases of interpretation in disguise.

That it is possible to keep interpreting does not mean that it is always necessary or desirable to do so. Radical misunderstanding of a social practice will almost certainly lead to errors in attempts to theorize about it. But it would be perverse to rule out all attempts to theorize just on the grounds that understanding is never truly complete or because there is always a risk of (partial) misunderstanding.

Dilthey was right in saying that there are significant differences between the natural and social sciences and right to emphasize the importance of interpretation in the latter. He was also justified in claiming that the development in the conception of what interpretation involves – from empathy to hermeneutics – makes the challenge of social interpretation more demanding. Against the stronger versions of humanism, on the other hand, Dilthey was also right in thinking that the importance of interpretation does not imply that all other approaches to the study of the social world are either misguided or expendable, even if his reasons for holding this belief were not entirely justified.

3.2 Wittgenstein on the value of understanding and explanation

It is well known that Wittgenstein shared Dilthey's antagonism towards scientism and the encroachment of scientific principles into areas where their application is unwarranted. In

Chapter 2, we saw that he argued against the conception of reasons as causes. We also saw that he was a key figure in the development of the linguistic conception of interpretation. However, I argued that further arguments were needed for drawing a strong analogy between interpretation in the arts and interpretation in the social sciences. Emphasizing the importance of language to human culture does not provide a sufficient reason for prioritizing the interpretative aspect of the social sciences to the exclusion of other approaches.

Wittgenstein did put forward such an argument. He suggested that when we consider all cultural objects, be they poems and paintings or customs and institutions, our thirst for knowledge is satisfied by the kind of understanding we achieve through the interpretation of meanings; not by the kind of understanding we achieve through attempts to explain them scientifically (whatever that is taken to involve).

If he is right, we would have a strong reason for changing the way that social science is done. Attempts to identify the causes of social events would be replaced by greater efforts to understand what they meant to those involved. Quantification, taxonomization, experimentation, *etc.* – in short, all the methods that are borrowed from the natural sciences and applied to the social world – would be rejected as obstructive to the kind of understanding that is genuinely valuable. In the great ‘Two Cultures’ debate, the social sciences would be placed firmly on the side of the arts.

Understanding magic

Wittgenstein’s argument is developed in his writings on ritual and religion. In the *Remarks on Frazer’s Golden Bough*, he takes Frazer to task for the way in which he attempts to explain ritual actions. There are two main thrusts to his challenge and it is helpful to disambiguate them, something which Wittgenstein doesn’t always do. The first is a claim about the status of magical belief and how we should understand the actions of people engaged in magic rituals. The second is a broader claim about how social anthropologists

should approach the study of human action more generally, what questions are interesting and important, and what kind of knowledge they should prize.

Wittgenstein's rejection of Frazer's account of magic is primarily a contribution to a debate that falls within the field of social anthropology, rather than one about the status of anthropology and the other social sciences.¹⁸ He argues that Frazer's characterization of magic, as a kind of proto-science based on inaccurate beliefs about the natural world, is mistaken. "We should distinguish", he argues, "between magical operations and those operations which rest on a false, over-simplified notion of things and processes."¹⁹

The alternative account of magic that Wittgenstein has in mind is a form of expressivism. That is, ritual actions, including those that are part of rituals involving magic, are expressive of the participants' world-views. So, for example, when an Achuar sings an *anent* to the *amana* of the species he is hunting, the performance is not a genuine attempt to affect the outcome of the hunt. It is, rather, an expression of the meaning that the activity of hunting has in Achuar culture.²⁰

Actually, Wittgenstein was not a straightforward expressivist. As Clack points out, the force of Wittgenstein's position is not undermined by the fact that there is evidence to suggest that at least some magic is performed with efficacious intent.²¹ His underlying point, which survives such evidence, is that not all beliefs are of the same type. It is wrong to think about magical beliefs as though they are just the same as scientific beliefs. And it is wrong to think of ritual action just as a sub-category of intentional, goal-directed action.

This point is similar to the claims made by Winch and others in the debate about whether we should attribute irrationality to members of other cultures in cases of apparently

¹⁸ There are, however, clear resonances between his position in this debate and his more general doctrine about the social sciences. This explains why the two strands of argument against Frazer are so closely intertwined.

¹⁹ Ludwig Wittgenstein, *Remarks on Frazer's Golden Bough*, (1st pub. German, 1967), trans. A.C. Miles (Retford, Notts: Brynmill, 1979), 5.

²⁰ See Descola, *The Spears of Twilight: Life and Death in the Amazon Jungle*, esp. 125-133.

²¹ Brian Clack, *Wittgenstein, Frazer and Religion* (Basingstoke: MacMillan, 1999), 34.

contradictory religious and spiritual beliefs.²² Again, the warning is that it is an error to think about all beliefs along the lines of a model taken from the natural sciences.

What these arguments show is that the world of society and culture is a lot richer than an imagined world in which people just talk about physical objects, and only have beliefs about objects and processes in the world that are instrumentally valuable to them. Social scientists – especially those concerned with other cultures – must be wary of assuming that all beliefs and actions fit a narrowly-defined definition.

They do not prove, though, that attempts to explain social phenomena, in ways that go beyond interpretation, are misguided or otiose. The fact that those who employ magic are not, in general, trying to affect the world around them, or explain (scientifically) what they observe, does not mean that social scientists should not try to do so. Wittgenstein's stronger conclusion about the status of the social sciences requires a stronger argument.

The idea of a perspicuous representation

Wittgenstein suggests that attempts to explain ritual action do not satisfy us. In anthropology, and, by extension, in the other social sciences as well, we are satisfied when we have a certain kind of view of the objects of study.

[O]ne reason why the attempt to find an explanation is wrong is that we have only to put together in the right way what we know, without adding anything, and the satisfaction we are trying to get from the explanation comes of itself.²³

Later in the text, Wittgenstein describes this type of project as that of providing a 'perspicuous representation'.

Attempting to pin down precisely what Wittgenstein means by this – what it is we are supposed to do in order to 'put together in the right way what we know' – is notoriously difficult. In the *Remarks* he does not elaborate directly on what he means.

²² See Peter Winch, 'Understanding a Primitive Society', *Ethics and Action* (London: Routledge & Kegan Paul), 1972.

Things are not made much clearer by what Wittgenstein has to say on the matter in *Philosophical Investigations*. It has been pointed out that the only concrete example he gives is the colour octahedron, which is supposed to give us a synoptic view of the relations between the colours of the spectrum. This example has led to the idea that a perspicuous representation of something is like a birds-eye view. It allows us to grasp everything at once and see the connections between the parts.²⁴

Baker has offered an alternative account which emphasizes the function rather than the features of a perspicuous representation.²⁵ For Baker, anything that helps us to gain a clearer view of a confusing philosophical matter counts as a perspicuous representation.

None of this makes it particularly clear, however, as to what it would be for an anthropologist, or any other social scientist, to provide a perspicuous representation. Hacker makes a valiant effort to bring the debate back to Wittgenstein's critique of Frazer's method. Wittgenstein does not argue that the details collected by Frazer are irrelevant or that we do not need to investigate ritual practices. But he is wrong to use those details to formulate historical hypotheses.

Rather, Frazer's collection of facts is relevant to an elucidatory enterprise – an arrangement of the data which will display the specific ceremonial ritual physiognomy of a given savage practice against the back-cloth of whole families of analogous rituals....[This arrangement] will make clear similarities and dissimilarities of modes of personification, of forms of symbolic reflection of the macrocosm in the microcosm of a ritual... and analogies and disanalogies in the ritualised response to that which primitive man everywhere finds impressive, awesome, or sacred.²⁶

²³ Wittgenstein, *Remarks on Frazer's Golden Bough*, 2.

²⁴ There are links between this version of Wittgenstein's position and what Dilthey says about the hermeneutic circle. If a perspicuous representation allows us to capture the connections between all the parts of an object at once, then it would serve as an aid to escaping from the circle of understanding the parts in terms of the whole and the whole in terms of the parts.

²⁵ Gordon Baker, 'Philosophical Investigations section 122: neglected aspects' in Robert Arrington and Hans-Johann Glock (eds.) *Wittgenstein's Philosophical Investigations* (London: Routledge, 1991)

²⁶ Hacker, P.M.S. 'Developmental Hypotheses and Perspicuous Representations: Wittgenstein on Frazer's *Golden Bough*', *Iyyun - The Jerusalem Philosophical Quarterly*, 41 (1992), 295.

Hacker emphasizes the difference between asking how it came about that a particular act should be performed at a particular moment in a ceremony and asking what such an act means.²⁷

The first question may be answered (with luck) by historical investigations into the origins of the rite... But the second question, which is a genuinely hermeneutical one, can be answered, if at all, only by reference to the course of the ceremony, the attitudes, beliefs, and justifying reasons of the participants.²⁸

Giving a perspicuous representation, then, is supposed to make clear the meaning of a ritual. It provides the type of understanding that, according to Wittgenstein, we seek when we study a social practice; not a type of knowledge analogous to the knowledge we obtain from scientific explanations.

Beyond perspicuous representations?

Wittgenstein's account of anthropology can be challenged in two ways. One can question whether the two types of project – achieving understanding through the development of a perspicuous representation and formulating historical explanations – are really as separate as he suggests. And even if they are distinct projects, Wittgenstein still requires a reason for privileging one over the other.

Cioffi has criticized Wittgenstein on both of these accounts. He points out that the ritual action of making the sign of the cross, in the context of a Catholic mass, has the meaning that it has only in virtue of the history of Christ's crucifixion.²⁹ But whilst it is true that Catholics would not make the sign of the cross had Christ not been crucified, the notion

²⁷ Attempting to discover the historical causes of a ritual practice is the closest we get to an example of what Wittgenstein means by a 'scientific explanation' in the social sciences, at least in the *Remarks*. It is clear, though, that Wittgenstein also wants to target functional explanations, or indeed any explanations that do not focus on the self-understandings of participants. In order for his argument to be generalized, so that it can be applied to other areas of the social sciences as well, a richer account of the type of explanations that are to be rejected would have to be developed.

²⁸ *Ibid.* 287.

²⁹ See Cioffi, F. Wittgenstein on Freud and Frazer. Cioffi has a further argument against Wittgenstein. He suggests that the question that Wittgenstein is really interested in is not one that is strictly about the meaning of

that the present meaning of a practice is dependent on its aetiology is highly questionable. The situation is similar to that of the meaning of words. The present meaning of a word might be explained in terms of its etymology but it is not determined by it. I understand the meaning of many words. But only in a few cases do I know the etymology. Wittgenstein is justified in arguing that understanding the meaning of a practice, like understanding the meaning of a word, is distinct from knowing its historical causes.

What is less clear, though, is why Wittgenstein thinks that achieving such an understanding of a ritual practice would fully satisfy our desires for knowledge about it. Wittgenstein does not argue that it is *impossible* to discover the historical roots of ritual practices. We are left wondering, then, how it is that having a perspicuous representation makes knowledge of such roots valueless.

This question becomes even more critical when we consider how Wittgenstein's position is to be extended to cover the other social sciences. Social anthropology is evidently an area of the social sciences in which interpretation plays a particularly significant part. Though historical and functional explanations of rituals might be possible, it is at least plausible to suggest that they are of less interest than interpretations (or perspicuous representations) that allow us greater understanding. Especially, if the rituals include those that have not been practiced for thousands of years.³⁰ In other areas of the social sciences, though, Wittgenstein's position seems intuitively far less plausible.

Wittgenstein does not really address this problem and there is a suspicion that his reason for concentrating on questions about meaning is related more to his own temperament rather than to any philosophical idea. In the collection of remarks collected as *Culture and Value*, he writes: "I may find scientific questions interesting, but they never really grip me.

ritual actions but about what they mean to us. I shall not deal with this here. Even if there is this further confusion in Wittgenstein's writings, the central argument remains.

³⁰ Ancient rituals, and those practised by remote societies, are more likely to be considered as objects of curiosity in their own right because they are so exotic. The extraordinary differences between the experiences of people from those societies and our own make them fascinating, whether or not their rituals have interesting historical routes or are recognizably functional.

Only conceptual and aesthetic questions do that. At the bottom I am indifferent to the solution of scientific problems; but not to the other sort.”³¹

For those of us who are not indifferent to the solution of scientific problems, we need more of an argument to convince us that we are going about things wrongly when we try to explain a ritual practice historically. And the *Remarks* do not contain such an argument. The only fully valid criticism that Wittgenstein makes of Frazer’s approach is that it is a mistake to think of magical and religious practices as being purely instrumental. Ritual action is not usually performed in order to bring about some identifiable end. But that does not mean it cannot be explained.

The *Remarks on Frazer’s Golden Bough*, then, do not contain the material required by those who want to argue that the social sciences are dominated by attempts to understand phenomena. Wittgenstein is not able to show that rituals (or other social objects) are just like works of art. There are other questions, besides aesthetic and conceptual ones, that we can ask about them. And, except for those people like Wittgenstein who see no value in them, the answers to such questions can be informative and enlightening. At least, no argument that I have considered so far has been sufficient to sustain the claim that scientific approaches to social phenomena should be abandoned.

3.3 Taylor

Charles Taylor has probably been the most influential philosopher of social science in the Anglo-American tradition since the Second World War. He was at the forefront of the movement that has brought ideas from Continental philosophy, including those of Dilthey and Gadamer, to a wider audience. And he has been one of the most prolific contributors to the ongoing debate between humanists and naturalists.

³¹ Ludwig Wittgenstein, *Culture and Value*, ed. G.H. Von Wright & Heikki Nyman, trans. Peter Winch, 2nd edition, (Oxford: Blackwell, 1980).

In the opening passage of what is almost certainly his most influential article on the philosophy of social science, Taylor asserts that the social sciences are hermeneutical because the work of a social scientist is “an attempt to make clear, to make sense of an object of study”.³² He continues by explicitly drawing an analogy between the interpretation of such social objects and the interpretation of texts. The rest of the article, and a fair proportion of his collected works, is an attempt to make good these claims.

As with Dilthey, correlates of many of Taylor’s arguments can be found in the works of other philosophers and theorists. In what follows, I will try to draw out such links. I have chosen to concentrate on Taylor as the central figure because his work incorporates so many of the core ideas that have been influential in the development of modern humanism.

A Web of Meaning: Taylor and Structuralism

In the essay ‘Language and Human Nature’, Taylor develops an argument about linguistic meaning in an attempt to show that understanding social action is not as straightforward as naturalists suggest. The meaning of a single word, Taylor suggests, depends upon the linguistic web in which it is situated. “[A] word only has the meaning it does in our lexicon because of what it contrasts with.” (PP1, 230)³³ He elaborates:

Language is not an assemblage of separable instruments, which lie as it were transparently to hand, and which can be used to marshal ideas, this use being something we can fully control and oversee. Rather it is something in the nature of a web, and to complicate the image, is present as a whole in any one of its parts. To speak is to touch a bit of the web, and this is to make the whole resonate. Because the words we use now only have sense through their place in the whole web, we can never in principle have a clear oversight of the implications of what we say at any moment. (PP1, 231)

Tied to the view that human action is essentially linguistic action, this theory about meaning is intended to show that the notion of a straightforward objective interpretation of a social

³² Charles Taylor, ‘Interpretation and the Sciences of Man’, *Review of Metaphysics*, 25 (1971), 3.

³³ Page references in this form are from Taylor’s collected philosophical papers, *Human Agency and Language: Philosophical Papers 1*, and *Philosophy and the Human Sciences: Philosophical Papers 2* (Cambridge: CUP, 1985).

object is a fantasy. Faced with a human action or construct, the social scientist cannot simply identify its meaning before progressing to more scientific non-interpretative explanation. Understanding requires a much deeper immersion in the linguistic web.

Similarities between this argument and the ideas of other philosophers abound. To some extent, Taylor's position is a restatement of Dilthey's argument from the hermeneutic circle. Understanding a single part of social life requires a prior understanding of the whole. But Taylor goes further. The problem is not simply that the circle is an obstacle to objective interpretation. It is that individual words, and by extension all social objects, do not have a meaning of their own.

Put in these terms, Taylor's argument seems Quinean. As I will discuss in Chapter 4, Quine's philosophy of language, particularly his theory of the indeterminacy of translation, has been thought by many to have significant consequences specifically for the philosophy of social science. In this instance, it is a version of his holism thesis that is being put forward as an obstacle to objectivity in interpretation. However, as in other cases, invoking Quine as a philosopher whose theory here is corroborative of humanism in the social sciences would be misguided. Quine's meaning holism applies just as much in the natural sciences as it does in the social sciences. For all his talk of field linguists, his theories are not intended as an account of the situation facing social scientists, except insofar as their position is the same as that facing everybody else. Taylor's web of meaning is a feature specifically characteristic of the human world.

There are also clear links between Taylor's account of language and Wittgenstein's. And the consequences of his account for the way in which social scientists should approach their work is reminiscent of Winch's exhortation that it is necessary, for understanding, to participate as a member of a linguistic community. The meaning of an expression is not determined by the intentions of a speaker, or the contents of her mind. It depends upon the

rules for a shared language. Analogously, the meaning of a social action depends upon the cultural context in which it is performed.³⁴

Probably the strongest association, though, between Taylor's argument and other theories of language, is with the structuralist account of linguistic meaning developed by Saussure. His emphasis on the relations of difference between linguistic terms and the idea that the whole web of language resonates through each individual utterance are surely influenced by Saussure's theory.³⁵ This connection brings Taylor's position closer to that of post-structuralist thinkers like Derrida and Fish. And it is through this connection that his argument comes to be formulated in its strongest form.

Perhaps humanists will object that Taylor's argument here does not need strengthening. It is sufficient, they might argue, to point out the way in which the whole web of meaning encompasses any individual action or utterance. However, this will not convince naturalists. As I argued in Chapter 2, the development of a linguistic conception of interpretation, even one that incorporates the Wittgensteinian principle that it is the shared rules of language that govern meaning, does not automatically force naturalists to abandon the idea of social science beyond interpretation. Our experience is that we are able to interpret other people's utterances and actions, in some cases without having mastered their language. And, though we recognize that there is always a possibility of error, or of being deceived, we do not feel that the complexities of language make social actions and utterances opaque in the same way as, say, poetic language or symbolic art.

It is at this point in the argument that the analogy between interpretation in the arts and the social sciences comes to the fore, to defeat naturalism once and for all. And, in the case of the specific version of the argument under consideration here, it is in the works of post-structuralist theorists that the underlying thought is most clearly expressed.

³⁴ Taylor thinks, then, that the pertinent conception of meaning, when thinking about social objects, is not that of speaker meaning. The analogy that he sees between interpretation in the social sciences and interpretation in the arts, therefore, is not based on a conception of meaning like conception (1). (See 1.2)

In Fish's article 'With the Compliments of the Author: Reflections on Austin and Derrida', the assumption that some objects are more amenable to clear interpretation than others is repudiated. Fish's target is the picture of a spectrum of instances in which language is used to communicate meaning with, at one end, cases where meaning is transparent and, at the other end, cases where meaning is hidden. In particular, he wants to show that there is no significant difference between interpreting direct conversations between acquaintances and interpreting literary texts and poems.³⁶

His argument is based on Derrida's idea that all communication is mediated by a system of signs analogous to writing. According to Derrida, the priority given to speech over writing, a trend that he thinks is endemic to western philosophy, should be overturned. All processes for conveying meaning involve mediation through a system of differential signs – what Derrida calls *arche-writing* – that share the property, normally thought to be unique to writing, of distancing the communicator from her message; even those where meaning appears, at first sight, to be more immediate.

Derrida's position incorporates Saussure's theory that the meaning of a particular word depends upon relations of difference between it and other words in the web of meaning. But it also adds a further dimension: an utterance is also *temporally* removed from its meaning. In Derrida's terminology, meaning is always 'deferred'. That is to say, meaning is not (fully) available when an utterance is made.

Underlying this theory is a conception of meaning similar to (3) from Chapter 1 but applied to all linguistic performances, not just works of literature. The thought is that the meaning of all linguistic objects will continue to develop through time. So the interpretation of simple utterances is analogous to the interpretation of writing. Or, as Fish puts it: "[T]here

³⁵ See Ferdinand de Saussure, *Course in General Linguistics*, (1st pub. French 1916), trans. R. Harris, (London: Duckworth, 1983).

³⁶ Fish also identifies intermediate cases such as the interaction between a waiter and a diner and correspondence by letter.

is no epistemological difference between direct and mediated communication because, in a fundamental sense, all communications are mediated.”³⁷

For a naturalist trying to respond to this argument, there are a number of strategies available. One is to rubbish the whole tradition of structuralist and post-structuralist thought. Certainly, a lot of structuralist theory is so impenetrable that it is almost impossible to engage with it as a serious attempt to enter a philosophical dialogue. And things are made worse because of the overwhelmingly grandiose claims that are sometimes made in the name of structuralism: ‘the end of western philosophy’, *etc.* This is all rather unfortunate because, actually, some of the arguments developed by structuralists and post-structuralists are of genuine interest. Derrida’s argument described above is a case in point. Taylor’s version of the same argument is not fleshed out to such a great extent. He says little in defence of the analogy between the interpretation of art, utterances and social objects, though a lot rides on it. Derrida and Fish provide a much stronger defence.

At least, they provide a strong argument for a close analogy between the interpretation of speech (and meaningful action) and the interpretation of writing. Here, though, there is a clue about how we can respond. Naturalists can find a way out of the structuralist net through the gap between writing *per se*, and literature and art. Fish’s criticism of the imagined spectrum of communication instances is that all types of communication are mediated. What he does not discuss in detail is whether there are additional obstacles to interpreting some kinds of object that are not shared by all linguistic objects; and in particular, whether artistic writing is in any way more problematic than other cases of speech and writing.

Actually, Fish does say something about this. Neither he nor Derrida deny the obvious differences between fiction and real life. But, following Derrida, Fish asserts that “the differences, whatever they are (and they are not always the same), do not arrange

³⁷ Fish, ‘With the Compliments of the Author: Reflections of Austin and Derrida’, *Critical Enquiry* 8 (1982).

themselves around a basic or underlying difference between unmediated experience and experience that is the product of interpretive activity”.³⁸ Clearly, though, this does not answer the naturalist point. The possibility of additional complications in the case of works of art and literature (beyond the fact that they are ‘mediated’) is not ruled out. Unless we are already disposed to think that the interpretation of social objects is analogous to the interpretation of artworks, pointing to similarities between social objects and written objects will not convince us that there is no epistemological difference between the two fields.

Expressivism, constructionism and self-interpretation

Taylor has another argument, independent of structuralism, which is supposed to cast doubt on the intuitive distinction between normal uses of language and artistic uses. This argument is based on what he calls ‘expressive’ theories of language. It is developed in his articles ‘Self Interpreting Animals’ and ‘Language and Human Nature’.

Taylor draws a distinction between ‘expressive theories’ of meaning and ‘designative theories’. According to designative theories, words pick out things in the world. Meaning is relatively unmysterious in such accounts. According to expressive theories, words and sentences are like artworks: they express something. And meaning is much more mysterious.

Clearly, language is used in both of these ways: to refer to things in the world and to express sentiments. Taylor’s contention is that it is the expressive dimension that is dominant in the case of the language used to talk about people, their thoughts and feelings, their desires and beliefs.

Actually, this description sells Taylor’s argument short. And the term ‘expressive theory’ does not really capture the full spirit of the theory that he presents. For Taylor does not think that language is used just to *express* thoughts and feelings. Rather, he thinks that

³⁸ *Ibid.* 709.

language has the capacity to *transform* feelings. Language, he says, is “constitutive” of our emotions because it is the “medium in which... our emotions... are experienced”. (PP1, 74)

According to Taylor, we achieve a reflexive awareness of our feelings through our ability to express them in language. And the development of new modes of expression enables us to have new feelings. This facet of language, he thinks, implies that even everyday uses of language – what he calls ‘prose’ – need to be interpreted as complex multi-layered objects, analogous to works of art.

From this perspective, we cannot draw a boundary around the language of prose in the narrow sense, and divide it off from those other symbolic-expressive creations of man: poetry, music, art, dance, etc. If we think of language as essentially used to say something about something, then prose is indeed a category of its own. But once one takes language as being expressive in this way, that is, where the expression constitutes what it expresses, then talking about is just one of the provinces constituted by language; the constitution of human emotion is another, and in this some uses of prose are akin to some uses of poetry, music and art. (PP1, 233)

This is an example of the thesis of social constructionism: that the social world is constructed by humans. However, unlike earlier versions of the thesis (for example, those found in the works of Vico and Dilthey), the claim is not restricted to the observation that it is we who invent the customs and institutions of the societies in which we live. In the new version, language is given a crucial role. And it is not just institutions that are constructed; but also our feelings and emotions; how we understand ourselves.

These developments are extremely significant. As Frazer points out, the notion that social objects are constructed is, in one sense, commonplace in social science; and not without consequence.³⁹ The fact that objects like social classes and commodity markets are constructed by people implies that they could, in principle, be demolished and replaced. And this, in turn, entails that any knowledge that we have of the social world in which we live does not necessarily have any application outside our own society. But this is not sufficient for a wholesale rejection of naturalism. As I have suggested before, and as I will elaborate

further in Chapter 4, universal applicability is not an essential feature of scientific knowledge.

However, Taylor's version of constructionism is more threatening. He challenges the distinction between artworks, where it is accepted that the objects of study are linguistic or symbolic expressions, and agents and actions, where this is not accepted. Naturalists believe that, though humans obviously use language, they are not themselves linguistic constructions. By challenging this view, Taylor hopes to demonstrate that interpretation in the social sciences is subject to a new kind of circularity.

Taylor's claim is that the objects of study in the social sciences are themselves interpretations, albeit self-interpretations. This implies, he thinks, that when a social scientist is involved in interpreting another person, or her actions, she is just adding another layer of interpretation to something which already has a similar epistemological status. And where a social scientist does not have direct access to her object of study, the chain of interpretations can, in principle, be infinitely extended. I could give an interpretation of your interpretation of somebody else's self-interpretation. And so on and so on.

This claim provides support for the analogy between interpretation in the social sciences and interpretation in the arts. In both cases, the product of interpretation shares important features with the original object. Interpretation in the social sciences is not a matter of uncovering the real person, or her real actions, as though she were a non-linguistic object that was just hidden by layers of meaning. Language and interpretation are essential features of human existence.⁴⁰

As it stands, though, the conception of humans as self-interpreting animals is not sufficient to force naturalists to abandon their claims. There are two ways to respond to Taylor. One strategy is to question whether it really matters to social scientists that people interpret themselves. Alternatively, the strength of Taylor's analogy can be scrutinised.

³⁹ Elizabeth Frazer, *The Problems of Communitarian Politics* (Oxford: OUP, 1999), 16-17.

In the next section, I will consider the argument that Taylor puts forward in ‘Understanding and Ethnocentricity’. That is an attempt to demonstrate that attempts to explain social phenomena in ways that ignore self-interpretations are misguided. Here I will concentrate on the second strategy.

I described above how Taylor attempts to bridge the apparent gap between the objects of interpretation in the social sciences – people and their actions – and the objects of interpretation in the arts. In both cases, he argued, the objects are themselves the product of interpretation. And in both cases, there can be a chain of interpretations, with each particular interpretation merely adding another layer of meaning.

If we look more closely, though, the similarities are far from complete. For one thing, the conception of self-interpretation, which Taylor puts forward as a crucial feature of the human condition, cannot readily be applied to artworks. In Chapter 1, I described the variety of conceptions of meaning and interpretation that have been suggested in the fields of art and literature. Some conceptions concentrated on the role of the author, others on the role of the reader and others still on the relationship between one work and another. None of the conceptions implied that artworks interpret themselves. And nor is it clear whether we could make any sense of the claim that they did. All cases of interpretation require a person to do the interpreting, so people are the only things that can undergo self-interpretation.

We can also question whether the notion of a chain of interpretations, or different layers of interpretation, really applies to social objects and artworks in the same way. The image of an endless chain of interpretations is the basis of Taylor’s version of the hermeneutic circle. (PP2, 14)⁴¹ But it is not at all clear that this picture is accurate. Certainly, there are some classic works in the history of social science that are themselves the objects of study. In most cases, though, social scientists do not just attempt to add a further layer of

⁴⁰ This is effectively the same point as that made by Gadamer in *Truth and Method*. It is also very close to Geertz’s position in *The Interpretation of Cultures*.

⁴¹ See note 14.

meaning to interpretations which have already been suggested. What they interpret are the social objects (actions, practices, events, *etc.*) themselves.⁴²

Ignoring self-interpretations

In Part 1 of 'Understanding and Ethnocentricity', Taylor defends a specific claim: that attempts to explain social practices, and social actions, in ways that ignore agents' self-interpretations are futile. If successful, his argument provides a telling critique of the kind of naturalism that I have been trying to develop; that is, a version of naturalism that accepts a role for interpretation but denies that that role is dominant. Taylor thinks that the social sciences must be primarily interpretative and, hence, dissimilar from the natural sciences.⁴³

The argument of 'Understanding and Ethnocentricity' is complicated. It needs to be spelt out step by step. Taylor begins by pointing out that our theories about the social world have more than one function.

- (1) Theories do more than describe and explain; they also serve to define ourselves and such definition shapes practice.

He has already laid the foundations for this assertion elsewhere. In 'Social Theory as Practice', the different starting points for theorising in the natural and social sciences have been more fully discussed. A theory from the natural sciences can force us to revise, in some cases dramatically, our conception of the world but it cannot change the world. The situation

⁴² On many of the conceptions of interpretation described in Chapter 1, it also seems doubtful as to whether the picture of a chain of interpretations is accurate in relation to artworks either. Taylor probably had something like conception (5) in mind when he talked about chains of interpretation. The thought is that each new interpretation adds another layer of meaning to the work. But without an independent argument which demonstrates that this kind of interpretation is pertinent in the social sciences, as well as in the arts, there is little or nothing to Taylor's claim here beyond the basic insight that social actors interpret themselves.

⁴³ The argument in 'Understanding and Ethnocentricity' is not supposed to support the extreme claim that the social sciences are purely interpretative. Indeed, at several points it is apparent that Taylor thinks explanation does have some role. However, as we shall see, his argument suggests that it is a very limited one.

is different in the social sciences where there is always “a pre-theoretical understanding of what is going on among the members of a society”. (PP2, 93)

Crucially, such understandings are “constitutive” of practices. The practices would not exist without them. Without a general awareness of, say, norms of voting, such behaviour could not take place. This constructionist thesis – that the social world is constructed by the thoughts of those who inhabit it – leads Taylor to draw the conclusion that, in the social sciences, “the alteration in our understanding which theory brings about can alter... practices; so that, unlike with natural science, the theory is not about an independent object, but one that is partly constituted by self-understanding”.⁴⁴

However, what is missing from ‘Social Theory as Practice’ is an argument that links the claims about the constitution of the social world, and the possibility that accepting a theory might affect a practice, with the conclusion that interpreting agents’ self-interpretations is the principal task of the social sciences. Such an argument is required to prevent the naturalist from evading the humanist’s conclusions. The fact that an object is constructed by humans does not obviously entail that it is insusceptible to objective or scientific explanation. Robots are designed and constructed by people, yet their movements and processes can be explained without interpretation in the humanist sense. And the fact that self-interpretation shapes practice is not obviously a pressing problem for the naturalist who thinks that her theory explains and predicts actions and practices without recourse to such understandings. Her theoretical knowledge about the behaviour of others cannot, she might think, affect the practice under study. The argument of ‘Understanding and Ethnocentricity’ is designed to bridge precisely this gap.

Following on from (1), Taylor makes these further points:

⁴⁴ These self-interpretations do not have to be explicitly formulated. They are manifested, Taylor thinks, in our ability to apply the appropriate descriptions to particular situations and actions.

(2) Even if we, as social scientists, merely wish to use our theory as an implement of explanation, the agents whose behaviour we are trying to explain will be using a theory (either the same as ours or different) to define themselves.

(3) “[W]hether we are trying to validate a theory as self-definition, or establish it as an explanation, we have to be alive to the way that our understanding shapes practice, disrupts or facilitates it.” (PP2, 116)

What Taylor means by ‘trying to validate a theory as self-definition’ is also explained in ‘Social Theory as Practice’: “Put tersely, our social theories can be validated, because they can be tested in practice. If theory can transform practice, then it can be tested in the quality of the practice it informs. What makes a theory right is that it brings practice out in the clear; that its adoption makes possible what is in some sense a more effective practice.” (PP2, 104)

This aspect of Taylor’s account raises interesting questions itself, but I shall concentrate on attempts to ‘establish theories as explanations’, as Taylor puts it, since it is here that his argument is pertinent to the debate between naturalists and humanists.

From (3), Taylor hopes to reach the following conclusions:

(4) “[A]n adequate account of human action must make the agents more understandable.” (PP2, 116)

(5) “[I]t cannot be a sufficient objective of social theory that it just predict, or allow us to derive, the actual pattern of social or historical events, and the regularities which occur in it, described in whatever language admits of

unambiguous verification. A satisfactory explanation must also make sense of the agents.” (PP2, 116)

It might be tempting to gloss Taylor’s claims as an expression of the moderate view that interpretation plays an important, but not dominant or exhaustive, role in the social sciences. He does, after all, seem to leave room for explanation as well. However, during the passage from (1) to (5), the notion that there are two things that we can use theories for in the social sciences is eroded so that by (3) it is important, when trying to explain, to be “alive to” the role of agents’ self-interpretations. And by (4) and (5), the possibility of an explanatory project divorced from interpretation is practically abandoned. That this is Taylor’s view is confirmed by the assertion that:

- (6) The idea of a verifiable, predictive social science, on the model of the natural sciences, is a chimaera. (PP2, 117)

It is worth pointing out that Taylor explicitly distances himself from some of the coarser conceptions of what interpretation involves. That we must understand agents, he suggests, does not entail that we must interpret their actions as making sense. He points out that, of course, agents are frequently confused, malinformed or contradictory in their goals and actions. Secondly, he warns against identifying understanding with empathy. “Empathy may certainly be useful in coming to have the understanding we seek; but it is not what understanding consists in.” (PP2, 117) Finally, he rejects Winch’s idea that we have to adopt the agent’s point of view or provide our account in the agent’s language. “In the normal case, what is demanded of a theoretical account is that it make the agent’s doings clearer than they were to him. And this may easily involve challenging what he sees/saw as the normal language of self-description.” (PP2, 118)

None of this weakens Taylor's commitment to the theses set out in points (4), (5) and (6). His first attempt to provide an argument for (4) and (5) involves the suggestion that they are no more contentious than (2) and (3).

- (7) "[S]ocial theory has to take subjects as agents of self-definition, whose practice is shaped by their understanding. And this is just an alternative way of stating the thesis that we have to give an account of them as agents, and that we cannot do this unless we understand them, that is grasp their self-understanding." (PP2, 117)

In other words, Taylor wants us to think that accepting that we need to be aware of the role of self-interpretations is just the same as accepting that we are obliged, as social scientists, to provide interpretative accounts of the people whose actions and practices we study. Clearly, though, these two thoughts are not the same. There is a substantial gap between (2) and (3) on the one hand, and (4) and (5) on the other, that cannot be bridged merely by fiat.

A further line of thought is developed a couple of pages later. Taylor begins by going into more detail about what is involved in coming to understand another person.

- (8) Getting the kind of human understanding of someone which we can formulate involves coming to be able to apply the 'desirability characterizations' which define his world.

The term 'desirability characterization' is borrowed from Anscombe. It describes all the things that a person likes and dislikes, what she admires, what she aspires to, *etc.* Or, as Taylor puts it, it is what makes her tick.

Taylor thinks that the task of grasping other people's desirability characterizations is difficult. They cannot, he says, be intersubjectively validated in an unproblematic way. In particular, he identifies two obstacles: they are inextricably evaluative and culturally specific. These obstacles, Taylor suggests, have the potential to turn any attempt to grasp another person's desirability characterization into "a matter of potentially endless interpretive dispute". (PP2, 119)

Essentially, though, this line of thought is just a restatement of arguments that we have heard before. Interpretation is problematic, we are told, because of the prevalence of value-judgements in talk about the social world. And our understanding of one society cannot necessarily be assumed to hold true in other social contexts because of cultural variation. These points do not suffice as a manifestation of the type of argument we were promised; namely, one which reveals the futility of attempts to do social science whilst ignoring agents' self-interpretations.

Taylor does make another attempt to provide such an argument. Or rather, he provides an example of the approach to the study of social action that he deplores. And tries to draw out what is about it that is unsatisfactory. The example he chooses is a familiar one: the functional explanation of a religious practice.

In choosing to argue by example, Taylor does not mean to limit the scope of his claim. "I hope it will be clear", he writes, "... that the argument is meant to apply to any attempt to finesse understanding through a putatively 'scientific' identification of the action of the subjects under study, whether this be on the individual or social level." (PP2, 121)

However, when Taylor gets to the point of saying what is wrong with the functional explanation, his argument again becomes rather familiar. A functionalist explanation of a religious practice, he says, can only explain its presence. It cannot explain any of the details.

- (9) “[M]ost of what we want to explain in a given society may lie outside the scope of the [scientific] explanation.” (PP2, 122)

Or, as Taylor also puts it:

- (10) Scientific explanations of social practices are “banal”. (PP2, 122)

It now seems as though Taylor’s argument is almost exactly the same as that suggested by Wittgenstein in the *Remarks on Frazer’s Golden Bough*. The types of knowledge and understanding which Taylor finds interesting are not those provided by functional explanations or other attempts to analyse the social world in a scientific way. He finds interpretative accounts a lot more illuminating.

3.4 Principled and pragmatic objections to naturalism

Both Taylor and Wittgenstein’s arguments, then, seem to rely on the thought that the problem with naturalistic approaches in the social sciences is that they cannot substantially increase or improve our knowledge about the social world. Often, their conclusions are stated in a more emphatic way. They both, in places, seem to suggest that naturalistic approaches are utterly worthless.⁴⁵ But really, their point is more subtle. They both believe that the humanist approach, which focuses on attempts to interpret social objects, is just more rewarding. Their objection to naturalism is rather more pragmatic than based on any firm principle that it is impossible to explain social phenomena scientifically.

It remains an open question as to whether this pragmatic objection passes muster. So far, I have concentrated on trying to show that the analogy between interpretation in the arts and interpretation in the social sciences is not so strong as to warrant the immediate

⁴⁵ Compare the strength of (6) and (10) from Taylor’s argument outlined above.

conclusion that scientific approaches in the social sciences are misguided. I have argued that there is, at least *in principle*, scope for a naturalist approach. In the next two chapters, I turn to look at what a naturalist approach can achieve. Are attempts to apply scientific principles to the social world informative? Or do they, as Taylor and Wittgenstein think, just result in knowledge which is banal?

I begin by considering what it means to say that a discipline is 'scientific'.

Chapter Four: Scientific Understanding and the Aims of Science

No claims about the relation between the natural and social sciences can be satisfactorily defended without some prior account of the natural sciences. This places philosophers of social science in a difficult position. There is no widespread agreement about the nature of natural science. So there is no straightforward account of that against which we are to compare the social sciences. A complete survey of the philosophy of science is beyond the scope of this thesis. Nevertheless, some efforts must be made if our assertions about the social sciences are to have any justification. In what follows, I do not attempt to settle questions which fall within the philosophy of science. Rather, I report on controversies and debates about science, and consider what the implications are for the philosophy of social science.

In the past, the situation was simpler. There was an accepted version of the natural sciences – something close to what Philip Kitcher calls “Legend”¹ – according to which scientists strove through the generations to improve on an increasingly accurate account of the natural world. What was sought was objective knowledge about the universe; and the methods that were required for attaining such knowledge were themselves rational and objective.² This picture gave the debate between naturalists and humanists about the relationship between the natural and social sciences a secure base. Naturalists argued that the conception of objective science could be extended to include the social sciences; humanists argued the opposite.

¹ Philip Kitcher, *The Advancement of Science: science without legend, objectivity without illusions* (Oxford: OUP, 1993), Ch.1.

² Clearly, this description glosses over significant disagreements within the philosophy of science. There has never been a single comprehensive account of science that has won universal approval. But disagreement is now more widespread.

In the present context, where this consensus about the natural sciences has broken down, the situation is less clear. Our conception of what it is for a discipline to be scientific is more complicated. So claims about whether or not the social sciences are genuinely scientific do not have such straightforward implications.

In this chapter, and the next, I will argue that the rejection of old conceptions of the natural sciences, and the adoption of new ones, has brought about a philosophical context that is more favourable to naturalism than most philosophers of social science suggest. Once we abandon the outdated and inaccurate view of science, which previously dominated discussions about the relationship between different fields, we begin to see similarities between the natural and social sciences rather than just differences.

* * *

Such an argument has been suggested before, at least implicitly. For radical relativists, the notion that there is anything special about the natural sciences should be rejected. Woolgar and Latour suggest that scientific facts, like social facts, are ‘constructed’ or ‘fabricated’.³ According to the Strong Programme in the sociology of knowledge advocated by Barnes and Bloor, there is no genuine distinction between what is objectively true and what is accepted as such.⁴ Feyerabend’s radical philosophy of science implies that there are no good reasons for privileging science over, say, voodoo.⁵ And, on some readings, Kuhn’s account of scientific development is one in which personal authority and rhetorical ability have a greater part to play than truth and objectivity.⁶ In rejecting the traditional conception of science, such writers appear to reject the notion that there is anything distinctive about science at all.⁷

³ Steve Woolgar and Bruno Latour, *Laboratory Life: The Social Construction of Scientific Facts* (Princeton: Princeton University Press, 1986, 2nd edition).

⁴ Barry Barnes and David Bloor, ‘Rationality, Relativism and the Sociology of Knowledge’, in M. Hollis and S. Lukes (eds.), *Rationality and Relativism* (Oxford: Basil Blackwell, 1982), 21-47.

⁵ Feyerabend, P. *Against Method* (London: Verso, 1993, 3rd edition).

⁶ Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1970, 2nd edition).

⁷ Kuhn rejects any such reading. And, of course, there are weaker versions of relativism which do not denigrate science.

Rorty argues that his ‘antirepresentationalist’ account of the relation between science and the rest of culture implies that it is “unnecessary to draw Dilthey-like distinctions between explaining “hard” phenomena and interpreting “soft” ones”. There are no epistemological differences, he thinks, between theoretical physics and literary criticism.⁸

Similar conclusions are also sometimes drawn by writers from the post-structuralist tradition. If there is genuinely nothing outside the text, or if all truth is the product of power relations, then relativism about the natural sciences might be thought to follow just as straightforwardly as relativism about the social sciences or relativism about the meaning of works of art.

Clearly, though, it would be a Pyrrhic victory for those who are keen to emphasize the similarities between the natural and social sciences if they were able to achieve their goal only by impugning the status of the natural sciences. Nor is any relativist position easy to defend. One does not have to be a scientific realist to be impressed by the successes of science; and want to know what it is about the scientific method that has resulted in knowledge that has enabled us to manipulate the physical world with increasing dexterity. Yet, for relativists, the apparent success of the natural sciences must either remain a mystery or else be explained away as illusory.

The position that I want to defend does not rely on relativism or on any other position that derogates science. Instead, I seek to show that, even on a more positive view about what the natural sciences can achieve, it remains possible accurately to describe the social sciences in a similar light.

* * *

Over the course of this chapter, I consider several ways in which the traditional account of science has been challenged. I make no attempt whatsoever to settle the profound disagreements that remain between philosophers of science in these areas; and any

⁸ Richard Rorty, *Objectivity, Relativism, and Truth: Philosophical Papers Volume 1* (Cambridge: Cambridge University Press, 1991), 1.

endorsement I make of particular positions should be treated as provisional. But I do hope to show that we can no longer safely assume that science is the straightforward search for truth that it was once thought to be.

In addition, I suggest that those who have argued against naturalism in the social sciences have tended to ignore these developments in the philosophy of science. Humanists contrast the social sciences with a traditional account of science which is uncritically assumed to be accurate, and conclude that they should not be treated as sciences because they do not fit this picture. By questioning these assumptions about science, I want to suggest that naturalism does not imply such rigid prescriptions for the social sciences as are often attributed to it.

4.1 The Decline of Foundationalism

The rejection of foundationalist philosophy has been well documented. However, for philosophers interested in the social sciences it is worth repeating, at least in summary form, so that our beliefs about the status of the social sciences are not influenced by incorrect assumptions about the natural sciences.

Foundationalism incorporated two main ideas. One was the thought that our knowledge about the world rests upon a foundational base in logic (both deductive and inductive)⁹ and pure observation; that the rules of logic and our immediate experiences are available to us in a way that ensures a solid grounding for knowledge.

The notion that our knowledge of the natural world has this kind of foundation was, historically, thought to be a reason for rejecting the idea that the social sciences could be continuous with the natural sciences. Our observations of social phenomena are impure.

⁹ For most philosophers of science in the twentieth century, the rules of logic required for science included those of both inductive and deductive logic. Of course, many earlier philosophers had sought knowledge about the world that did not rely on induction from experience – the search for the synthetic *a priori*. By the twentieth century, though, this kind of approach had been rejected as a foundation for science. By allowing a role for induction, foundationalism ceased to be tied to the search for absolutely certain knowledge; instead the focus was on well-supported theories.

Identifying emotions and actions which have symbolic significance requires a level of conceptual sophistication well beyond that which is supposed to be necessary for pure observation. Knowledge of the social world requires an understanding of the context in which events occur. And we must conceive of social actions as intentional. We cannot build up knowledge about the social world from observations such as ‘An appendage of the object in my visual field is moving’. We need to start with observations like ‘The parking attendant is beckoning me to drive on’. And this kind of observation requires a different kind of understanding.¹⁰

The second idea of foundationalism was a conception of science according to which there are sound logical links between our theoretical beliefs and the observational evidence on which they rest. The truth of a theoretical statement, or its degree of probability, was thought to be demonstrable from the relevant set of observational reports or observation statements. In some accounts, a parallel story is told about how it is that we come to have theoretical beliefs.¹¹ We make observations about the world around us, subject them to a rational, mechanistic procedure, and emerge with accurate theoretical knowledge; or at least, theories about the world that are well-supported by evidence. Again, it is argued that the social sciences do not seem to fit this model.¹²

The decline of foundationalism as a credible philosophical position has, therefore, removed one of the obstacles to naturalism in the philosophy of social science.

Problems with foundationalism – the Vienna Circle

For Descartes, one of the goals of philosophy was to find a foundation of knowledge about the world that was beyond all doubt. By the late nineteenth century, the Cartesian route to

One notable exception to the induction-centred approach was Popper’s falsificationism which promised to provide an account of science in which induction played no part.

¹⁰ All this is just another way of saying that the social sciences involve interpretation.

¹¹ Those who drew a distinction between the context of discovery and the context of justification did not accept this additional element.

certainty had been rejected, but the search for a philosophical foundation for science had not been abandoned. Mach argued that talk about ‘theoretical terms’ like atoms was just shorthand for talk about observations. Russell hoped to show that our knowledge of the world is built up from our immediate knowledge of our basic experiences or sense data.¹³ Schlick, Carnap and Neurath – leading lights in the Vienna Circle – also hoped to show how theoretical knowledge was developed from experience.¹⁴

However, the members of the Vienna Circle became increasingly concerned about the role of ‘pure’ observation in the foundationalist programme. Carnap and Neurath were critical of the notion of sense data that Russell had employed. Neurath objected that we cannot discover the truth of scientific statements purely by comparison with our experiences. We can only deduce the truth of a theoretical sentence by comparison with other *sentences*.

It became a crucial task to specify a conception of observation sentences or ‘protocol sentences’ that would retain the required purity but also be capable of standing in logical relations to more complex theoretical sentences. Unfortunately, attempts to provide such an account ran into severe obstacles. Carnap and Neurath argued that *all* sentences about the content of experience are theory laden to a greater or lesser extent and, hence, that none is irrevocable. Schlick suggested that observational reports lose any special epistemological status that they have once they are no longer in the present. They could not, he said, be the starting point for the construction of scientific knowledge.

These concerns led Neurath to adopt a coherence theory of truth. The truth of scientific beliefs could be assured if ‘truth’ just involved non-contradiction. But this seemed to imply that scientific truths were not as objective as had originally been assumed.

For the more realistically minded Carnap, such a manoeuvre was unacceptable. He hoped that Tarski’s theory of truth would at least allow us to hold on to the correspondence

¹² See Taylor, *PP2*, 20.

¹³ Bertrand Russell, ‘Knowledge by Acquaintance and Knowledge by Description’, *Proceedings of the Aristotelian Society*, 11 (1910), 209-32.

intuition – the idea that the truth of sentences depends on the world – even if this meant abandoning the idea that we would be able to say with any certainty which observation sentences are true.

There would still be one class of statement – the class of analytic statements, known to be true by virtue of their meanings – that could enjoy a privileged status. And these could be used to provide a logical link between observations and theory; or, more formally, a translation between observation sentences and theoretical sentences. Although we would have to give up on attempts to demonstrate the certainty of scientific beliefs (or attempts to specify precisely the degree to which they are confirmed), it would at least be possible to provide a rational reconstruction of how scientific theory is built from experience. The second part of the foundationalist programme could be salvaged. However, even this more limited version of foundationalism would run into opposition, as we shall see below.

Duhem and Quine

Decades before the Vienna Circle had formed, Duhem had advanced a theory with anti-foundationalist consequences. According to Duhem, a scientist must employ her judgment. She must have what he described as a characteristic of *bon-sens*.

Duhem used this idea to challenge the assumption that scientific theories are directly amenable to empirical tests.

[T]he physicist can never subject an isolated hypothesis to experimental test, but only a whole group of hypotheses; when the experiment is in disagreement with his predictions, what he learns is that at least one of the hypotheses constituting this group is unacceptable and ought to be modified; but the experiment does not designate which one should be changed.¹⁵

¹⁴ Moritz Schlick, 'The Foundation of Knowledge', in A.J. Ayer (ed.), *Logical Positivism*, (London: Free Press; Allen & Unwin, 1959).

¹⁵ Pierre Duhem, *The Aim and Structure of Physical Theory*, (1st pub. French 1914, 2nd edition), trans. P. Wiener, (Princeton: Princeton University Press, 1954), 187.

In order to decide how she should adjust her beliefs in response to such an experiment, the scientist needs to rely on her intuitive sense. Duhem's argument here is not an attack on the propriety of observation. But it calls into question the possibility of attempts to establish a straightforward path from observation to theory. Evidence, he says, does not unambiguously direct our theoretical beliefs.

Quine developed this idea to present a radical attack on the aspect of foundationalist philosophy that had been retained by all the members of the Vienna circle: the attempt to provide a method for translating the theoretical sentences of science into sentences about observations, logic and mathematics.

The complexity of Quine's argument has often led to it being misunderstood. At its heart lie two principles: strict empiricism and a version of Duhem's holism thesis. Quine asserted (and on this point, most of those he criticized agreed) that the only evidence that is available to us is the evidence of our sensory experience. He also agreed with Duhem that individual theoretical assertions do not have an empirical content of their own. Anomalous evidence does not falsify individual theoretical commitments. But in Quine's version of the argument, the holism thesis takes on a linguistic edge and it is radicalized to include all the theoretical statements that we affirm including those that had previously been thought to be analytic and, hence, immune from rejection. His thesis amounts to the claim that no theoretical sentence has a *meaning* of its own.

In the most famous exposition of the thesis, Quine casts his argument in terms of the problems facing a field-linguist attempting to translate a completely unknown language.¹⁶ Consequently, it is tempting to think that the indeterminacy thesis poses a problem specifically for those who study linguistic behaviour (or human behaviour more generally). However, for Quine the argument has much greater scope.¹⁷ In *The Roots of Reference*, the

¹⁶ Willard Van Ormon Quine, *Word and Object* (Cambridge: MIT Press, 1960).

¹⁷ In *Word and Object*, he talks (rather cryptically), for example, about mapping a single speaker's verbal behaviour onto itself. In other works the scope of the argument is made clear.

same argument is cast in terms of the position facing a child learning its first language.¹⁸ The question here is: how, given the evidence available, does the child come to be able to talk about the world? The same underlying issue is summed up in the title of Quine's final book. How do we get *From Stimulus to Science*¹⁹? Perhaps the best account of how the indeterminacy thesis relates to the debate about foundationalism, though, is found in the article 'Epistemology Naturalized'²⁰. Here it is clear that Quine's position is that no translational reduction of the type proposed by Carnap and others could be possible. The terms we use to talk about the world do not have a straightforward meaning such that individual sentences involving such terms can be determinately mapped on to particular experiences. In other words, the part of foundationalism retained by Carnap should, according to Quine, also be rejected.

Quine's rejection of the possibility of finding a determinate translation manual for theoretical science should be differentiated from earlier concerns about observation sentences. Indeed, Quine was rather more optimistic about the role of observation sentences which, he thought, when taken holophrastically (all in one go), were not subject to indeterminacy. It is only when one takes an observation sentence piecemeal – where each word is understood in a theoretical way, with theoretical commitments – that the problem of indeterminacy arises.

It is also important to recognize that the indeterminacy thesis is not merely an instance of the underdetermination of theory by data.²¹ It is not simply that different translation manuals are equally consistent with the totality of possible evidence and that,

¹⁸ Willard Van Ormon Quine, *The Roots of Reference* (La Salle: Open Court, 1974).

¹⁹ Willard Van Ormon Quine, *From Stimulus to Science* (Cambridge: Harvard University Press, 1995).

²⁰ Willard Van Ormon Quine, 'Epistemology Naturalized', in *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969), 69-90.

²¹ See Section 4.2.

consequently, we cannot say which is the correct one. Rather, it is that, for Quine, there is no *fact of the matter* about what the meaning of a particular sentence is.²²

Of course, Quine's thesis does not enjoy universal support among philosophers of science. But we do not have to accept the argument in full to recognize that the relation between observation and theory in science is not as straightforward as was once thought. Every aspect of the foundationalist programme has been seriously called into question. It is wrong, therefore to suppose that the social sciences are not genuinely scientific because they do not conform to the model of science that foundationalism proposed. When Munslow unquestioningly contrasts history with natural science on the grounds that the latter employs an "objective process" to arrive at "incontrovertible facts", he radically oversimplifies the situation.²³ And Taylor is wrong to attribute to naturalists the view that our knowledge of the human world is to be built mechanically from brute sense data. The status of observation in the development of scientific beliefs is profoundly complex. So it should come as no surprise that the link between observation and theory in the social sciences is not straightforward either.

4.2. Scientific Realism

The debate between realists and anti-realists of one sort or another has been going on for centuries. In a sense, then, it is somewhat anachronistic to suggest that the rejection of realism is a recent development. However, in the twentieth century the debate about realism became focused on science, as did many philosophical debates. And, though there have been anti-realist philosophers of science (as well as anti-realist scientists) for more than a century, the general public consensus and, significantly, the general trend among philosophers of *social science*, has been to accept a naïve form of realism about science. With this conception in mind, it seemed relatively easy for humanist philosophers to reject the idea

²² This point is a consequence of Quine's physicalism. The only facts that there are, are physical facts. There are no such things as meanings or propositions for there to be facts about.

that the social sciences were part of a larger scientific enterprise. Social scientists were not finding out truths about the world like the truths found by natural scientists, so their work should be categorized separately.

The core of the thesis of scientific realism is the claim that our scientific theories (those that are currently accepted by the scientific community) are, on the whole, better approximations to the truth than their predecessors. This core is often, though not necessarily, combined with the related thesis that scientists *aim* to develop true or approximately true theories. Or, if individual scientists do not, that the scientific method²⁴ tends towards the establishment of true theories.²⁵

The historical debate

In the seventeenth and eighteenth centuries, the debate between realists and their opponents centred on whether we can have knowledge of an absolutely real world. Berkeley repudiated the claim that our senses give us experience of a world independent of ideas. The thought that “sensible objects have an existence natural or real, distinct from their being perceived by the understanding,” he argued, involves “... a manifest contradiction”.²⁶ Hume agreed that “the existences, which we consider, when we say, *this house* and *that tree* are nothing but perceptions in the mind”.²⁷ Kant also developed a theory of knowledge with an anti-realist edge. We can only have positive knowledge, he argued, of the world of *appearances*, not of things as they are in themselves.

²³ Alan Munslow, *Deconstructing History* (London: Routledge, 1997), 4.

²⁴ Some philosophers doubt that there is any such thing as ‘the scientific method’. See Section 4.3.

²⁵ It is sometimes said that, as well as a claim about truth, there is at the heart of Scientific Realism a claim about reference: that the terms for entities postulated by scientific theories refer to things in the world. Certainly, it is a necessary condition for a theory to be true that the entities it postulates exist and, hence, that its terms refer. But referential success is not a sufficient condition for truth or approximate truth and nor is it obviously a virtue in itself. The terms of the sentence ‘The earth is the biggest planet in the solar system’ refer but it is well known to be false.

²⁶ George Berkeley, *A Treatise Concerning the Principles of Human Understanding*, (1st pub. 1734), ed. J. Dancy, (Oxford: OUP, 1998), §4.

²⁷ David Hume, *An Enquiry Concerning Human Understanding*, (1st pub. 1777), ed. P. Nidditch (Oxford: Clarendon Press, 1975, 3rd edition), 118.

Cast in these terms, the debate between realists and anti-realists has little direct bearing on how we conceive scientific practice. None of Berkeley, Hume or Kant doubted that science was progressing towards a true account of nature. Indeed, Kant thought that the principles of Newtonian Mechanics could be shown to be true *a priori*.²⁸

In the twentieth century, the terms of the debate about realism were recast. For the members of the Vienna Circle, statements whose truth values could not in principle be verified, such as those about whether there exists an independent world of things beyond our experience of them, were to be rejected as metaphysical and meaningless. Carnap wrote:

*[N]either the thesis of realism that the external world is real, nor that of idealism that the external world is not real can be considered scientifically meaningful. This does not mean that the two theses are false; rather they have no meaning at all so that the question of their truth and falsity cannot even be posed.*²⁹

But such claims did not call into question the idea that science progresses towards the truth. Indeed, it was the role of philosophy, the Vienna Circle thought, to clear away metaphysical confusions precisely so that science could proceed without undue hindrance. Realism became primarily a knowledge thesis rather than an independence thesis to use Papineau's helpful terminological distinction.³⁰

Even Popper, who rejected the idea that the scientific method involves attempting to verify theories in favour of his falsificationist account, shared many of the same underlying realist assumptions. We could never know, Popper thought, whether one of our scientific theories was true because we could not conduct the infinite number of tests required to verify a theory. But the quality that we seek in a theory, and the quality that we hope our theories have, is a high degree of verisimilitude. And that concept is elaborated in terms of truth and falsity content.

²⁸ Immanuel Kant, *The Metaphysical Foundations of Natural Science*, (1st pub. German 1783), trans. J. Ellington (Indianapolis: Bobbs-Merrill, 1970).

²⁹ Rudolf Carnap, *The Logical Structure of the World: Pseudoproblems in philosophy*, (1st pub. German 1928), trans. R.A. George, (London: Routledge & Kegan Paul, 1967), 334.

³⁰ David Papineau (ed.), *The Philosophy of Science* (Oxford: OUP, 1996), Introduction.

Doubts about realism

There had, before the rise of the Vienna Circle, been some philosophers with a different conception of science, perhaps most notably Poincaré and Duhem. Impressed by the development of non-Euclidean systems of geometry, Poincaré came to believe that there are elements of our scientific world view that are conventional; chosen from competing alternatives on pragmatic grounds of simplicity and convenience rather than on any robust grounds for believing one alternative to be a closer approximation to the truth than its rivals.³¹ Duhem questioned the idea that scientists seek to give a literally true account of the world. Instead, he thought, scientific theories are valued for the ability they give us to predict the phenomena we observe.³²

In later works, Carnap also developed his rejection of meaningless metaphysical claims in a way that had features in common with Poincaré's conventionalism. Scientists, he suggested, can choose between what he called 'linguistic frameworks'. The framework provides a discourse for settling specific questions, such as whether an electron is present. If we choose, for practical reasons, a framework that includes talk about electrons, then electrons there surely are. But "the acceptance of a linguistic framework must not be regarded as implying a metaphysical doctrine concerning the reality of the entities in question".³³

In the second half of the twentieth century, further arguments against scientific realism were developed. A shift of emphasis occurred in that claims about the meaninglessness of questions about the truth and falsity of theories were replaced by rather

³¹ Henri Poincaré, *Science and Hypothesis*, (1st pub. French, 1902), trans. G.B. Halsted, (Lancaster: Science Press, 1946).

³² Pierre Duhem, *To Save the Phenomena: an essay on the idea of physical theory from Plato to Galileo*, (1st pub. French, 1908), trans. E. Doland & C. Maschler, (Chicago: University of Chicago Press, 1969).

³³ Rudolf Carnap, 'Empiricism, Semantics and Ontology', in *Meaning and Necessity: a study in semantics and modal logic* (Chicago: University of Chicago Press, 1956, 2nd edition), 250.

more direct arguments to the effect that we just do not have good reasons for supposing that our theories are true.

One argument that has lent support to such an anti-realist conclusion is that suggested by the thesis of underdetermination of theory.³⁴ Quine and others suggested that the evidence that we can gather from experience is insufficient to decide which scientific theories are true. There are always alternative theories that fit with all of the evidence. And it is not simply that we have not yet gathered enough evidence. Rather, the argument goes, there will always be alternative theories available even if we gather all the possible evidence.

This has led some philosophers to question whether we can have any confidence that the theories we happen to have chosen are anything like an approximation to the truth. If there are indeed alternative theories available with the same empirical content as those that we accept, and especially if it can be shown that some of those alternatives have root-and-branch differences from our current theories, then why should we continue to believe that our theories are approximately true?

Critics of this argument have responded that there is no evidence to suggest that our theories are radically underdetermined. It is always possible to *manufacture* an alternative theory with the same empirical consequences as one that we accept by adding some arbitrary constant. Or simply by stipulating that for any scientific theory, *T*, there is an alternative theory *T'* which says that everything is just as *T* says it is but denies the existence of an entity that *T* postulates. However, it is argued that such gerrymandered examples do not achieve what proponents of the underdetermination thesis claim on its behalf. The choice between theories like *T* and *T'* is not typical of the choices between theories that scientists actually make; the differences between them are trivial. We might even question whether constructions like *T'* deserve to be treated as distinct theories at all. Psillos has also argued that even if there are some cases of genuine empirical equivalence between non-trivial

³⁴ To suggest that there is just one underdetermination thesis is rather misleading. Numerous formulations have been proposed by different philosophers.

theories, realism need not be generally rejected. “[T]he existence of empirically equivalent theories can create a genuine problem,” he suggests, “only if it is shown to be a global phenomenon.”³⁵

Another line of anti-realist argument was developed from Kuhn’s approach to the philosophy of science in *The Structure of Scientific Revolutions*. Kuhn noticed that the historical record did not fit at all well with the accounts of scientific methodology and scientific progress traditionally suggested by philosophers of science. Scientific theory has not developed gradually along a continuous path to arrive at its present position. Instead, the history of science is characterized by periods of what Kuhn called ‘normal science’, in which research is guided by a paradigm, punctuated by scientific revolutions during which the conceptual, theoretical and methodological commitments that paradigms provide are open to question.

Kuhn’s account of science is not isolated intellectually from those that preceded it. It shares Neurath’s concern that observation reports are not theoretically neutral. And it restates Duhem’s suggestion that there are some theoretical commitments that go unquestioned for long periods of time. Because anomalous evidence does not refute individual theoretical assertions, it can always be accommodated in a number of different ways, thus allowing some favoured theory (or paradigm) to be retained. There is also a similarity between Kuhn’s paradigms and Carnap’s linguistic frameworks. In both, the acceptance of a particular scheme is supposed to settle questions about what kinds of entities exist.

Some of Kuhn’s more radical suggestions, though, challenge realism more fundamentally. The claims that different paradigms are incommensurable and that scientists working under different paradigms are working in different worlds are incompatible with the view that there is such a thing as a true account of the world that scientists aim to discover.

³⁵ Stathis Psillos, *Scientific Realism: How Science Tracks Truth* (London: Routledge, 1999), 168.

Such claims have not received widespread support. Quine, for example, thought that his conception of observation sentences ruled against incommensurability. Others have pointed out that Kuhn's position seems to be self-defeating.

However, though many of his particular arguments have been rejected, Kuhn's approach of concentrating on the history of science has been a fruitful one for anti-realists. The thought that the history of science has been characterized by a succession of theories that have all turned out, sooner or later, to be false has led some to propose a 'pessimistic meta-induction'. This suggests that, based on the past failure of theories, we have good grounds for supposing that current theories are also false.³⁶ That our current theories are successful is, it is claimed, no defence against this charge. Past theories that have since been completely overturned also allowed scientists to make successful predictions and to manipulate the external world.

The occurrence of sudden and radical theoretical shifts in the history of science also casts into doubt the conception of science as a cumulative process of gradual improvement.

Again, such claims have not gone unchallenged by defenders of realism. It has been suggested that history does not, after all, show that theory or paradigm shifts are as frequently radical as has been claimed; that generally a great deal is kept when one theory is replaced by another. In particular, it has been noted that a great deal of the mathematical structure of a rejected theory is often retained. This thought has led to the thesis of Structural Realism: the claim that, though theories might not give a completely true account of the world, particularly with respect to the theoretical entities they postulate, they do contain a good deal of truth insofar as they accurately describe the mathematical structure of the universe.³⁷

³⁶ See, for example, Larry Laudan, 'The Confutation of Convergent Realism', *Philosophy of Science*, 48 (1981), 19-48.

³⁷ See John Worrall, 'Structural Realism: The Best of Both Worlds?', *Dialectica*, 43 (1989), 99-124.

A further influential attack on realism is proposed by Van Fraassen.³⁸ He combines a rejection of the central thesis of scientific realism – that our theories are approximately true – with a rejection of the related thesis that science *aims* to discover the truth. It is not the truth that we are after according to Van Fraassen. Rather, we seek theories that allow us to predict regularities in the observable world. We accept those theories that enable us successfully to achieve this goal without taking on any further commitment about their truth. We accept theories, that is, that are *empirically adequate*.

The success of science, Van Fraassen exhorts, is not inexplicable on such an account and, significantly, nor is realism the best explanation for success. There is a process at work within science analogous to the process of natural selection in biology. Those theories that fail are rejected and replaced by more empirically adequate ones. It is competition that leads to increasing success.

* * *

The foregoing summary evidently cannot do justice to the full range and complexity of arguments that have been put forward on both sides in the debate between scientific realists and anti-realists. But it is significant that these debates happen at all. My position does not depend on endorsing or rejecting scientific realism. I am interested in the consequences of these arguments for the separate debate about the relationship between the natural and social sciences. What the arguments show is that any consensus there once was about the importance of truth as a guiding principle for science has broken down. According to some philosophers, truth (or at least approximate truth) is still achievable in science; for others, it is either unachievable or unimportant. Others still have developed a range of more nuanced positions.³⁹ Philosophers of *social science* cannot afford to ignore such issues. We should not unquestioningly accept humanist accounts of the social sciences in which they are contrasted with the natural sciences on the grounds that the goal of the latter, but not the

³⁸ See, especially, Bas Van Fraassen, *The Scientific Image* (Oxford, Clarendon Press, 1980). Van Fraassen's anti-realism is based on a version of the argument from underdetermination.

former, is to achieve absolute objectivity and truth. Naturalists do not have to be committed to an extreme form of realism for the social sciences.⁴⁰

4.3 Unity or Disunity?

The position that I defend might be described as a version of the unity of science thesis: the idea that all of the sciences, including the social sciences, in some way constitute a unified enterprise. However, as it stands, such a claim is terrifically vague. There are several conceptions of what the unity of science thesis involves. Some versions of the thesis have provided another source of dissatisfaction with naturalism for philosophers of social science. It is suggested that the natural sciences do constitute a neat, unified whole but that the social sciences have no place within it.

I want to argue that this picture is inaccurate. Drawing on the work of a number of philosophers, some of whom have supported unity, others of whom have opposed it, I will suggest that a plausible view of the relationship between the sciences is one that is captured by the concept of a family resemblance term. There is not an essential feature, or set of features, that a discipline must possess in order to qualify as a science. There is, rather, a range of traits distributed across the sciences, but not present in every case, that are characteristic of both the natural and social sciences.

Unity and reductionism

³⁹ This category includes positions like structural realism and Fine's 'Natural Ontological Attitude'.

⁴⁰ For what it's worth, it seems to me that the debate between realists and anti-realists in the philosophy of science, like the debate between humanists and naturalists in the philosophy of social science, is unnecessarily polarized. Our intuitive response seems to depend to a large extent on what cases we take to be exemplary. When cast as a debate about unobservable entities, particularly elementary physical particles, anti-realism seems plausible. The history of science does provide examples of successful theories which postulated unobservable entities that have subsequently been rejected as non-existent. Also, contemporary science, particularly theoretical physics, incorporates theories which seem so remote from normal experience and direct observation that it is easy to believe that, though successful, they do not provide a true description of the universe. However, in other fields, the burden of proof appears to lie firmly in the anti-realist's court. Whilst it seems reasonable to remain at least sceptical about the existence of superstrings, it is much less intuitively obvious as to why anyone should doubt the existence of cells or atoms. We might think that the most reasonable position is to accept realism about some parts of science and anti-realism about others. Choosing between the two competing camps might not be necessary at all.

For many, unity implies the possibility of reduction and, particularly, the reduction of all science to physics. This was certainly the view which Helmholtz's put forward in his famous address of 1869.⁴¹ And it is also the principle that guided Putnam and Oppenheim.⁴² A pyramid structure is imagined which is thought to describe the relations between the sciences. At the top is physics. Beneath that are chemistry, engineering, *etc*; then biology and geology and, further down still, psychology and the social sciences. The thought is that each science can be reduced to those above it so, in principle, everything could be reduced to physics.

Any such proposal is bound to seem absurd to those involved with the study of complex, meaningful, social systems. One apparently reasonable response, then, is to argue that, whilst all of the natural sciences could in principle undergo a reduction, the social sciences could not. The unity of the natural sciences thus becomes an argument in favour of humanism.

However – and this needs to be emphasized – it is not necessary to accept reductionism, or the pyramidal picture of the sciences, in order to defend a version of the unity of science thesis. Indeed, many of the most influential advocates of the unity thesis have had quite a different understanding of what their project involved. Comte, for example, did not defend reductionism. He was certainly a proponent of unity but he thought that there are concepts that are required in biology and in the social sciences that are neither used in physical theory nor reducible to more basic concepts.⁴³

Perhaps the most widely misunderstood proponents of the unity of science thesis are Carnap and Neurath. It is very easy to read Carnap's *The Unity of Science*⁴⁴ as a defence of the claim that all science should be reduced to physics. And it is true that Carnap speculated

⁴¹ H. Von Helmholtz, 'On the Aim and Progress of Physical Science', in D. Cahan (ed.), *Science and Culture: popular and philosophical essays* (Chicago: University of Chicago Press, 1995).

⁴² Paul Oppenheim & Hilary Putnam, 'Unity of Science as a Working Hypothesis', in H. Feigl, M. Scriven & G. Maxwell (eds.), *Concepts, Theories, and the Mind-Body Problem* (Minneapolis: University of Minnesota Press, 1958).

⁴³ Comte did believe in a hierarchy of sciences, similar to the reductionist's pyramid.

that, should there ever be a reduction of the sciences to a single discipline, it would probably be to physics. But to propose or defend such a reduction was not his aim. He was primarily concerned with developing a unified *language* for science. All scientific claims, he argued, must be publicly testable and there must be the possibility of bringing different scientific specialities to bear on the same practical or scientific problem.

Neurath was even less enamoured by reductionist versions of the unity thesis. Instead of seeking to reduce one science to another, he saw the process of unification to be one of building bridges between distinct disciplines. And, like Carnap, he decried the introduction of concepts and terminology to particular sciences that prevented interdisciplinary dialogue.⁴⁵ Indeed, one of the prime motivations for Neurath's commitment to unity was his antipathy for hermeneutic philosophy of social science with its talk of empathy and interpretation. "Empathy, understanding (*Verstehen*) and the like," he suggested, "help the research worker, but they enter the totality of scientific statements as does a good cup of coffee which also furthers a scholar in his work."⁴⁶

Scientific methods and 'the scientific method'

Another element that is often thought central to the unity thesis is the idea that the sciences share common methods. Again, it is argued that the social sciences have no place in the unified scheme of sciences because their methods are so dissimilar.

Behind this version of the unity thesis, at its worst, is a rather hackneyed conception of how scientists go about their work. We are supposed to conjure up a picture of a scientist in her laboratory (actually, probably his laboratory), conducting experiments with precisely

⁴⁴ Rudolf Carnap, *The Unity of Science*, (1st pub. German 1932), trans. M. Black, (London: K. Paul, Trench, Trubner & co., 1934).

⁴⁵ See Richard Creath, 'The Unity of Science: Carnap, Neurath, and Beyond', in P. Galison and D. Stump (eds.), *The Disunity of Science: Boundaries, Contexts, and Power* (Stanford: Stanford University Press, 1996), 417-427.

⁴⁶ Otto Neurath, *Empiricism and Sociology* (Dordrecht: Reidel, 1973).

calibrated instruments. The experiments will produce quantifiable data which can be analysed to extract well-supported results and conclusions.

This conception of science is no longer credible; at least, not if taken as a prescription for all scientific inquiry. It is another casualty of the rejection of Kitcher's 'Legend'. Not only is it no longer safe to talk about science resting on an indubitable foundation, or striving towards the discovery of the absolute truth. But the idea that all scientists employ the same methods, in the pursuit of greater understanding or more reliable theories, also needs to be overturned.

Of course, there are some scientists whose methods do approximate to the traditional picture. But there are many more whose methods do not, including many theoretical physicists as well as those from the 'softer' sciences.

The fact that social scientists do not work in laboratories is not a sufficient reason for categorizing them separately from the natural sciences. Indeed, a lot of social science research involves using methods that are not so dissimilar from those employed in natural science. The collection of quantifiable data is crucial to many studies. And, in economics, experiments have become increasingly important.⁴⁷

In addition to talk of practical scientific methods – what scientists actually do – there is a related conception of 'the scientific method' which formed part of the traditional picture of science. The idea was that there was a uniquely scientific way of considering evidence, and developing, testing and appraising theories.⁴⁸ Again, though, the traditional picture has come under attack. Haack argues that there is no such thing as 'the scientific method'; that it is just an extension of common sense. "Scientific inquiry", she says, "is continuous with

⁴⁷ However, the status of experiments in economics is a matter of debate.

⁴⁸ This conception was related to the aspect of foundationalism which saw theoretical knowledge as the product of a machine-like, logical process – see 4.1.

everyday empirical inquiry.”⁴⁹ And within the category of empirical inquiry she includes “the natural scientific, the social scientific, the historical, the forensic, and so on”.⁵⁰

It might seem here as though Haack’s position is that there is nothing special about science at all. We might be tempted to place her in the same group as radical relativists, ‘anti-representationalists’ and others who denigrate science. This would be a mistake because Haack’s position is more subtle. The sciences are, she says, “epistemologically distinguished”, not least because of the specialized techniques, instruments and models which scientists have developed to assist their investigations.⁵¹ She talks about such techniques ‘amplifying’ everyday empirical inquiry.

Some philosophers of science would, no doubt, still feel uneasy about this account; they would want to retain a notion of the scientific method which is distinct from other kinds of inquiry. Perhaps they would argue that the specialized techniques that Haack talks about make science categorically different from other kinds of endeavour. I will not attempt to resolve this issue. But I will say that for philosophers of social science it is important to recognize that the concept of ‘the scientific method’ cannot be unquestioningly used, as though it were a simple, universally-agreed idea. Being involved in a scientific enterprise does not necessarily involve following a thoroughly-worked out and uniquely-scientific set of rules.

The rejection of unity

In recent years, the unity of science thesis has come under sustained pressure. Dupré has proposed a radically anti-unitarian position. He rejects reductionism but he also rejects other attempts to identify similarities and connections between different scientific disciplines. For example, he rejects supervenience theories which state that, though no translational

⁴⁹ Susan Haack, *Defending Science – within Reason* (New York: Prometheus Books, 2003), 94.

⁵⁰ *Ibid.* 96. Haack does not argue that there are no differences between the natural and social sciences, and in this respect I am also in agreement with her (see Chapter 5).

⁵¹ *Ibid.* 95

reduction to physics is always possible, macrophysical phenomena are still dependent on microphysical properties.⁵² Such theories, Dupré argues, are unwarranted. They erroneously presuppose that there is causal completeness at the microphysical level, in which, he argues, we have no good reason to believe.⁵³

This position has affinities with Cartwright's rejection of unity. She argues that "the claims to knowledge we can defend by our impressive scientific successes do not argue for a unified world or universal order, but rather for a dappled world of mottled objects".⁵⁴ Our theories only work in particular contexts, almost always highly controlled ones. They do not tell us about what the world in general is like. "Laws can be true," she argues, "but not universal. We need not assume that they are at work everywhere, underlying and determining what is going on."⁵⁵

Dupré also rejects claims that there is methodological unity between different sciences. "The role of theory, evidence, and institutional norms," he asserts, "will vary greatly from one area of science to the next."⁵⁶

In some places, Dupré describes his position as one in which any distinction between science and non-science is rejected. On such a view, any attempt to demarcate science is misguided. Such a strong conclusion, though, is unnecessary. The positive side of the disunity thesis is that it frees us from the dogma that all good science must conform to a specific picture. And, especially, it overturns the view that any discipline must resemble physics in order to qualify as a science. Recognizing this, though, does not force the conclusion that there are no connections between different sciences.

In other places, Dupré's account of science is much closer to that of a family resemblance term. There is not a single set of characteristics that are shared by all scientific

⁵² An example of such a thesis is Davidson's anomalous monism.

⁵³ See John Dupré, 'Metaphysical Disorder', in P. Galison and D. Stump (eds.), *The Disunity of Science*, 101-117.

⁵⁴ Nancy Cartwright, *The Dappled World: A Study of the Boundaries of Science* (Cambridge: Cambridge University Press, 1999), 10.

⁵⁵ *Ibid.* 37.

disciplines. Instead, there are myriad connections and similarities between disciplines, which enable us to identify different activities as being scientific despite the differences between them.

It does not take a great deal of imagination to see how this picture of the sciences might be used to defend a modest version of naturalism about the social sciences. If science is a family resemblance term, then we could happily accept that there are differences between the social sciences and the natural sciences without abandoning the notion that the social sciences are scientific. There would be some features that were shared by natural and social sciences and other features that were not shared. Significantly, we would be able to allow a role for a distinct kind of interpretation in the social sciences without having to abandon naturalism.

4.4 Explanation

Scientists aim to explain phenomena. I shall have more to say about the aims of science in Section 4.5 but for the moment it suffices to say that attempts to explain account for a good deal of scientific activity.

Explanation is also an issue over which naturalists and humanists clash in the philosophy of social science. A central tenet of humanism is that scientific explanation is not possible in the social sciences. Other types of explanation are possible, it is claimed, but not *scientific* explanation. Since Bacon, any trace of teleology has been thought antithetical to proper science. Any account of the human world that includes talk about peoples' reasons or purposes has, consequently, been regarded with suspicion. Functional explanations have also tended to be treated as unscientific because of their apparent similarity to teleological explanations. Further types of non-scientific explanation have also been suggested. Those from the hermeneutic tradition often describe the understanding that we are able to achieve

⁵⁶ John Dupré, *The disorder of things: metaphysical foundations of the disunity of science* (Cambridge: Harvard University Press, 1993).

of others as providing a type of explanation. But, they claim, it is quite distinct from scientific explanation. Structural explanation is also put forward as a model for the explanation of social structures that is distinct from explanation of the natural world. In history, a further type of explanation, narrative explanation, has been posited. Again, it is distinguished from scientific explanation.

Such claims need to be elaborated in two ways: first, the conception of scientific explanation that is being invoked must be explicated to show that it is indeed distinct from the other proposed types of explanation; and, secondly, the possibility of scientific explanation in the social sciences must be ruled out. In this section I am concerned with the first of these issues. The second will be left until Chapter 5.

The D-N model

The model of scientific explanation that dominated philosophy from the middle of the twentieth century until relatively recently was the covering law model and, in particular, the *deductive-nomological* model (D-N model) developed by Carl Hempel. The importance of Hempel's account in setting the terms for debate was such that it is still difficult to begin any discussion of explanation without at least referring to it. But in the present discussion it is more important than normal to describe the D-N model because, despite significant developments in philosophical accounts of scientific explanation, it is still something like the D-N model that many writers about the social sciences seem to have in mind when they talk about the relation between explanations in the natural and social sciences.

Hempel's model suggests that a full scientific explanation should have the form of a deductively valid argument. The explanandum should be logically entailed by the explanans. It must also be nomological. That is, the explanans should contain at least one universally applicable law of nature (as well as statements describing relevant initial conditions).

A prototype of this model is what most writers on the social sciences in the nineteenth and early twentieth century had in mind when they considered the possibility of scientific explanations of the social world. Windelband thought that goal of the (natural) sciences is to discover “the general nomological relationship”⁵⁷ between the facts that are studied. The Hempelian model of explanation was also what humanist philosophers from the middle of the twentieth century rejected for the social sciences. Writing in 1957, William Dray pointed out that in history we scarcely ever bring what is explained under a law.⁵⁸ And his point can easily be extended for the other social sciences. We know very few, if any, laws of human behaviour. There is little hope, then, that we could ever formulate properly scientific explanations in the social sciences.⁵⁹

Such accounts were consistent with the dominant account of explanation of their time. What is more concerning is that, despite more recent developments in philosophical debates about explanation, it is still something like the D-N model that many writers on the social sciences take as their standard. Often, this is done with little or no discussion as to its merits. Munslow, for example, has no hesitation in saying that science “works on the assumption that data are connected by a universal explanation”.⁶⁰ MacIntyre attributes to naturalists the view that “the aim of the social sciences is to explain specifically social phenomena by supplying law-like generalizations which do not differ in their logical form from those applicable to natural phenomena in general”.⁶¹

Reading such accounts one might find it surprising to hear that within the philosophy of science there is no general consensus on an account of scientific explanation; or that there are any problems with the D-N model as Hempel originally set it out. However, as Hempel recognized himself, not all intuitively acceptable scientific explanations fit the D-N model.

⁵⁷ Wilhelm Windelband, ‘History and Natural Science’, (1st pub. German 1894), trans. Guy Oakes, *History and Theory*, 19 (1980), 174.

⁵⁸ William Dray, *Laws and Explanation in History* (Oxford: Clarendon Press, 1957).

⁵⁹ The influence of Hempel’s work is also apparent in Georg Von Wright, *Explanation and Understanding* (London: Routledge and Kegan Paul, 1971).

⁶⁰ Munslow, *Deconstructing History*, 4.

And there are some accounts that fit the model that are intuitively objectionable when considered as attempts to explain. Such puzzling cases compel us at least to modify or addend the D-N model, and might lead us to replace it. How, precisely, we should do this is a matter of intense philosophical debate that I do not hope to solve here. I do, though, hope to indicate that there may be good reasons for being considerably more liberal about what to count as a scientific explanation than those who fixate on the covering law model have usually supposed.

Statistical explanation

One consequence of thinking of explanations as valid arguments is that prior knowledge of the explanans of an explanandum event should have been sufficient for prediction that the event would occur. This is known as the Symmetry Thesis. In some situations, though, we seem to be able to explain the occurrence of an event even though we could have had no grounds for deducing that it was going to occur. In some cases, Hempel thought, this is because the explanation we have of the event is incomplete or elliptical. We frequently do not spell out all of the initial conditions and laws that are implicitly taken for granted when we provide an explanation. For pragmatic reasons we omit some information that is required to make a genuinely valid deduction. In many cases, a full explanation would involve so many initial conditions of marginal relevance that the only practical solution is to introduce a *ceteris paribus* clause. (Interestingly, Hempel thought that we can explain events in history using D-N model explanations although they are always partial and subject to *ceteris paribus* clauses.)⁶²

However, Hempel also accepted that some explanations are irreducibly statistical or probabilistic. His *inductive-statistical* model (I-S model) accounts for the explanation of events from statistical laws. We might not be in a position to say that some event was bound

⁶¹ Alisdair MacIntyre, *After Virtue* (London: Duckworth, 1985, 2nd edition), 88.

to happen given the initial conditions but it might be explicable on the grounds that it was highly probable.

As it is stated here, this model seems unsatisfactory. Some philosophers have objected to the restriction of statistical explanations to those explananda with high probabilities.⁶³ If the statistical law that ninety percent of measles patients develop a rash of type X allows us to explain why James, who has measles, develops a type X rash, why shouldn't the law that twenty percent of untreated syphilis patients develop paresis allow us to explain why John, who has untreated syphilis, develops paresis? Hempel needed to restrict such explanations to those with high probabilities in order to defend the Symmetry Thesis. If we restrict statistical explanations to those cases with high probabilities, then knowledge of the explanans would still have been sufficient to predict that the explananda would occur, even if such prediction could not have been deductively certain. However, this thought does not justify such a restriction

Underlying the challenge to accepting only high probability statistical laws is the thought that it is not the outright probability of some event occurring that determines whether we can explain it but, using Salmon's terminology, the *statistical relevance* of the factors that we cite in our explanans. The reason that John's untreated syphilis is explanatory of his development of paresis is that, although only twenty percent of untreated syphilitics develop paresis, nobody else does. It is because the conditional probability of developing paresis given untreated syphilis is so much greater than the conditional probability of developing paresis given not-syphilis that makes untreated syphilis explanatory.⁶⁴

Already, we seem to be moving towards a more liberal conception of scientific explanation; one that might accommodate explanations in the social sciences where the use

⁶² Carl Hempel, 'The Function of General Laws in History', *Journal of Philosophy*, 39 (1942), 35-48.

⁶³ See Rudolf Carnap, *Philosophical foundations of physics: an introduction to the philosophy of science* (New York: Basic Books, 1966), and Wesley Salmon, 'The Status of Prior Probabilities in Statistical explanation', *Philosophy of Science*, 32 (1965), 137-146.

⁶⁴ In this case $p(P|\sim S)=0$. But that needn't be the case for the citation of S to be explanatory. If $p(P|S)$ remains at 0.2 and $p(P|\sim S)$ increases to 0.01 we would still have a satisfactory explanation according to the S-R model.

of statistics is rife. However, arguments have been put forward against any such liberalization. Kitcher defends the thesis of Deductive Chauvinism, the idea that all explanation is deductive. This thesis does not involve the claim that we cannot explain probabilistic facts, but it insists that we do not use probabilities in our explanantia.⁶⁵ According to Kitcher, where we have a probabilistic account we should treat it “as a placeholder for an underlying, unknown, deductive explanation”.⁶⁶ We have not genuinely explained why John has paresis until we have a deductive or necessary explanation.

As Kitcher recognizes, Deductive Chauvinism implies that stochastic events are not properly explicable at all. If the decomposition of a radioactive atom is genuinely random — if the best we can say is that there was a probability of p that the atom should have decomposed between T_o and T_I — we cannot explain why the atom decomposed during that particular time. And we should say the same if it turned out that cases of paresis among untreated syphilitics were similarly random.

I will not attempt to provide a refutation of Deductive Chauvinism. But I will say that it has the unattractive consequence of ruling out a lot of putative explanations in some areas of the natural sciences and those from other disciplines. The thought that, instead of explaining phenomena, many scientists just suggest place-holders for explanations seems oddly restrictive. Whilst we might accept that a deductive explanation is preferable to a statistical one, it seems unnecessary to go so far as to say that statistical explanations are not explanations at all, especially when so many areas of science are unable to confirm regularities beyond statistical correlation. Instead, we could just accept that there are different kinds of explanation.

⁶⁵ Hempel had recognized this distinction. See ‘Deductive-Nomological vs. Statistical Explanation’, in H. Feigl and G. Maxwell, (eds.), *Scientific Explanation, Space and Time* (Minneapolis: University of Minnesota Press, 1962), 98-169.

⁶⁶ Philip Kitcher, ‘Explanatory Unification and Causal Structure’, in P. Kitcher and W. Salmon (eds.) *Scientific Explanation* (Minneapolis: University of Minnesota Press, 1989), 449.

Causal explanation

If we adopt this more liberal approach then the use of statistical explanations undermines the notion that the D-N model can account for all scientific explanations. That is, the model seems to rule out too much. But the D-N model is also accused of letting in explanations that seem highly unsatisfactory. Without modification, it is unable to discriminate between intuitively explanatory regularities and intuitively non-explanatory ones.

One type of problem case is where the law provided in the explanans seems utterly irrelevant to the explanandum. Salmon suggests the following D-N model explanation: John Jones did not become pregnant in the last year because he was regularly taking the contraceptive pill during that time and people who take the contraceptive pill do not become pregnant.

A second type of puzzle emerges because the facts in the explanandum and explanans of an explanation can be reorganized so as to use those originally in the explanandum to explain those in the explanans. The classic example of this problem is the explanation of the length of a shadow in terms and the length of the tower that casts it.⁶⁷ On the D-N model, we can explain the height of the tower in terms of the length of the shadow just as successfully, but such an explanation seems intuitively unacceptable.

One response to these puzzles, advocated by Salmon and others, is to introduce the idea that causation plays an important role in explanation. That John Jones does not become pregnant is not explained by his taking the contraceptive pill because taking the pill is not causally relevant to his failure to conceive. The height of the tower explains the length of the shadow because it is the tower's blocking of the sun's rays that causes the shadow. The length of the shadow does not similarly cause the height of the tower.

It might seem as though the simple amendment of stipulating that only causal laws be used in D-N explanations might incorporate this insight without too much bother. But once

we accept the importance of causation for some scientific explanations, the notion that we must always seek *laws* becomes rather questionable.

Ruben has developed an account of causal explanation in what he calls ‘folk physics’ where, he takes it, there are no universal laws.⁶⁸ In order explain an event *e*, we identify a cause of *e*, *c*, such that *c* would not have caused *e* if it had not had the properties that it did. Or, to be more precise, we identify a cause under a certain description (e.g. ‘the *F*’) such that *c* would not have caused *e* if it had not satisfied the given description. So, for example, the striking of a match causally explains its lighting because the striking caused the lighting but if the thing that had occurred had not been a striking it would not have caused the lighting.⁶⁹

Although Ruben’s analysis is principally concerned with explanations in ‘folk physics’, he doesn’t think that its scope is limited to this area. Importantly, he also thinks that the same model of explanation is applicable to areas of science which deal with the behaviour of microscopic objects.⁷⁰ In other words, he thinks that at least some scientific explanations fit the same model as common or garden explanations; that scientific explanations do not form a separate set. In a more recent book, Ruben argues that at least some explanations of human action fit his model of causal explanation as well.⁷¹

Salmon also defends a conception of explanation in which the task is to discover causal processes rather than laws. He relates such a task to Hume’s attempt to discover causes.

Let us take Hume’s challenge seriously: let us try to find a physical connection between cause and effect.... The first step is to focus our attention on processes instead of events (or facts). We will see that causal processes are

⁶⁷ For a full explanation, a law relating the position of the sun and the height of opaque physical objects with the length of shadows that the objects cast would have to be provided.

⁶⁸ David-Hillel Ruben, ‘A Counterfactual Theory of Causal Explanation’, *Nous*, 28 (1994), 465-81. ‘Folk physics’ is the name Ruben gives for our store of everyday knowledge about the world.

⁶⁹ Ruben considers a number of objections to this approach. In the course of his discussion he refines his analysis to deal with difficulties, such as over-specific descriptions of causes and cases where the occurrence of the cause inhibits another event which would itself have had the same effect. These complicating factors, though, do not affect the general thrust of the theory.

al Theory of Causal Explanation’, 469.

and *Its Explanation* (Oxford: OUP, 2003), Ch.6. I discuss whether there can be a role for ; in the social sciences in Chapter 5.

precisely the connections Hume sought, that is, that the relation between a cause and an effect is a physical connection (although it may not be the *necessary* connection Hume referred to).⁷²

We might think of explanations that refer to such processes as attempts “to lay bare the mechanisms that underlie the phenomena we observe and wish to explain”.⁷³ Judea Pearl has something similar in mind. He focuses on attempts to discover ‘ontological’ causal relationships. We can, he thinks, discover the “objective physical constraints in our world”.⁷⁴

Harré and Cartwright have also cast doubt on the wisdom of concentrating on laws that provide a deductive relation between events. In *The Principles of Scientific Thinking*, Harré lambasts those who have restricted the scope of scientific explanations to deductive nomological explanations. “The most pervasive and seriously misleading myth of contemporary philosophy,” he writes, “is the belief that the ideal form for knowledge, and particularly for scientific knowledge, is the deductive system.”⁷⁵ He also dismisses what he calls the myth of events, the idea that knowledge of regularities among independent events exhausts our knowledge of the world. Instead, he thinks, we can have knowledge of the powers and dispositions of objects, knowledge of structures and knowledge of the causal mechanisms that are responsible for observed regularities. We can explain phenomena by analogy or by representing an objects structure as well as by identifying laws.

Cartwright argues along similar lines. She is not opposed, she says, to realism (understood in a certain way). What she does reject is what she calls ‘fundamentalism’, the idea that in science we discover laws that accurately describe the whole of the universe. “[E]ven our best theories are severely limited in scope.”⁷⁶ Like Harré, Cartwright emphasizes the virtue of attempts to describe the *capacities* that particular objects have. This picture fits well with her rejection of the unity of science. In different disciplines that study

⁷² Wesley Salmon, ‘A New Look at Causality’, in *Causality and Explanation* (Oxford: Oxford University Press, 1998), 16.

⁷³ Wesley Salmon ‘Scientific Explanation: Causation and Unification’, in *Causality and Explanation*, 71.

⁷⁴ Judea Pearl, *Causality: Models, Reasoning, and Inference* (Cambridge: Cambridge University Press, 2000), 25.

⁷⁵ Rom Harré, *The Principles of Scientific Thinking* (London: Macmillan, 1970), 8.

different systems, we need different strategies for developing models and explanations. There are no universal laws that apply in every context.

Pragmatics

It seems that notion of what it is to explain is not as unitary as had previously been thought. But questions about whether explanations need to be deductive, and whether they must invoke universal laws, are not the only reasons for taking a more liberal view.

Van Fraassen responds to the puzzles about explanation by concentrating on the pragmatics of explanation. What counts as a satisfactory answer to a why-question depends upon the context in which it is asked. There are possible contexts in which the length of the shadow *is* explanatory to the height of the tower. This pragmatic account fits easily into Van Fraassen's anti-realist philosophy. He argues that "the assertion that theory *T* explains, or provides an explanation for, fact *E* does not presuppose or imply that *T* is true or even empirically adequate".⁷⁷ This doesn't mean that all explanations are equally acceptable. An important, and problematic, task for Van Fraassen is to find a way for distinguishing between genuine relevance relations and contrived ones. But the crucial point that a good explanation need not be a true one is well motivated.

Unification

A further account of explanation that has become popular in recent years emphasizes the importance of theoretical unification for explanation. Michael Friedman insists that our account of scientific explanation must go hand in hand with an account of how explanations increase scientific understanding. The kinetic theory of gases serves as an exemplar. It explains several properties of gases and, furthermore, it "also allows us to integrate the

⁷⁶ *The Dappled World: A Study of the Boundaries of Science*, 9.

behaviour of gases with other phenomena, such as the motions of the planets and of falling bodies near earth”.⁷⁸

James Woodward contributes towards a similar view, defending an ‘epistemic’ account of explanation against Salmon’s preference for an ‘ontic’ account. One does not, in practice, explain the behaviour of a gas by plotting the individual trajectories of molecules. Instead, “one abstracts radically from details of such individual causal processes and focuses on finding a way of representing the aggregate behavior of the molecules”.⁷⁹ Kitcher also sees virtue in such an approach. “Science supplies us with explanations whose worth cannot be appreciated by considering them one-by-one but only by seeing how they form part of a systematic picture of the order of nature.”⁸⁰

Salmon has responded to this critique of his causal account by suggesting a more liberal view of explanation.⁸¹ Both causal *and* unificatory explanations are of value to science. We are guided as to which type is more appropriate in a particular situation by pragmatic considerations.

Pluralism about explanation?

Surveying these different accounts, it is difficult to avoid the conclusion that the concept of a scientific explanation is not clearly defined. It is possible that one of the competing accounts will come to dominate the arena, perhaps by finding a way of incorporating the values that alternative accounts seem to possess. Until then, though, we should be careful about ruling out what seem to be explanatory accounts of phenomena as being unscientific merely on the grounds that they do not correspond precisely to a few exemplary explanations from classical physics.

⁷⁷ *The Scientific Image*, 100.

⁷⁸ Michael Friedman, ‘Explanation and Scientific Understanding’, *Journal of Philosophy*, 71 (1974), 15.

⁷⁹ James Woodward, ‘The Causal Mechanical Model of Explanation’, in Salmon and Kitcher (eds.) *Scientific Explanation*, 363.

⁸⁰ Philip Kitcher, ‘Explanatory Unification and Causal Structure’, in Salmon and Kitcher (eds.), *Scientific Explanation*, 430.

We might also go further and suggest that the apparent diversity among explanations points us towards a pluralistic conception. According to such a view, the concept of scientific explanation could not be captured by a single model. Instead, we would just accept that there are different kinds of explanation which qualify as scientific. In addition to the types of explanation discussed above, we might also add explanations that use models, explanations by analogy and functional explanations.

I only make the suggestion of pluralism here tentatively. There is no space to consider the full range of arguments either for or against. But I do want to say that it is at least a plausible view. This is significant because it means that the social sciences cannot be quickly dismissed as unscientific just because explanations of social phenomena are not all of the same type.

Hacker ignores the possibility of pluralism when he argues that naturalism in the philosophy of social science implies that all explanations of social phenomena would have to be ones that invoked causal laws.⁸² With a pluralistic conception of explanation, it would be better to say that naturalism implies that the social sciences should be characterized by a plurality of different types of explanation. In the next chapter I will argue that this is precisely what the social sciences are like. Just as it seems that there may be several distinct kinds of explanation that are prevalent in the natural sciences, so are there different types of explanation in the social sciences.

4.5 Conclusion: The Aims of Science

In the previous sections I have recounted some of the most significant developments that have occurred in the philosophy of science in the last one hundred years. I have attempted to show that, where there was once agreement about the nature of science, there are now profound disagreements. There is no consensus about whether scientific theories are

⁸¹ Wesley Salmon, 'Scientific Explanation: Causation and Unification' in *Causality and Explanation*, 68-78.

approximately true, whether science forms a unified enterprise (and if it does, where the line of demarcation between science and non-science lies) or how to define scientific explanation. Beneath these issues lie a series of deeper questions: what is the nature of scientific understanding; what is it that science aims to do; and what does it achieve?

A complete answer to these questions is beyond the scope of this chapter but some preliminary points can be made. There are several reasons for doing science and for funding it. Some of them are practical: we want to be able to predict what will happen in the future and what impact our interventions in the world will have; we also want to be able to manipulate the world for our own benefit and to prevent human suffering. There are also more purely academic reasons for scientific research. We have a desire to understand the world better, to know why things are the way they are and why events occur.

Both types of reason also motivate work in the social sciences. The Government wants to know how different systems of punishment will affect levels of crime, and investment managers want to be able to predict future stock market prices. We are also interested, purely academically, to know why it was that the Roman Empire declined and how society is ordered among the Achuar of the Amazon.

It is common for philosophers of social science to oversimplify this picture. The tendency is to affirm that the single goal of natural science is the discovery of an objectively true account of the universe and that of the social sciences is to come to gain a subjective understanding of other people. Neither of these characterizations is accurate. It is far from clear whether scientists are (always) interested in discovering the truth and nor is it right to assume that what they discover are universally applicable laws. And the social sciences are not exhausted by attempts to interpret the meanings of other peoples' actions.

⁸² P.M.S. Hacker, 'Wittgenstein and the Autonomy of Humanistic Understanding', *Wittgenstein: Connections and Controversies* (Oxford: Clarendon Press, 2001).

Chapter Five: Limited Naturalism

In previous chapters I have argued that the notion of interpretation that is applicable to the social sciences is not closely analogous to the notion that is pertinent to the study of works of art. There is not, then, a convincing argument to be made directly from the observation that interpretation has a significant role in the social sciences to the conclusion that social scientific investigation is akin to the study of art and, correspondingly, radically dissimilar from investigation in the natural sciences.

I have also argued that the account of science that has traditionally been taken for granted by philosophers of social science, and which still dominates many analyses of the relationship between the natural and social sciences, is outdated.

In this chapter, I aim to show that scientific practices and goals are indeed relevant for the social sciences; that it is both possible and desirable to go beyond interpretation. Hence, I defend a version of naturalism, the idea that the social and natural sciences are of a piece.

A note of caution must immediately be expressed though. In defending naturalism, I by no means intend to suggest that there are no differences between the natural and social sciences. I reject reductionist accounts of the social sciences, according to which our knowledge of people, actions and social practices should be reduced to knowledge about neurophysiological states, chemistry and physics. I also reject versions of naturalism which seek to discredit interpretative social science. The picture of the social sciences that I describe is not one that is characterised exclusively by *either* an interpretative approach or a scientific approach. Rather, it is one in which *both* kinds of approach are employed.

The naturalism I defend is also a pluralistic naturalism. That is not to say that in the social sciences different approaches are always as good as one another, or that we can simultaneously accept incompatible explanations of a single phenomenon. Rather, I argue that there is not a single style of explanation or single type of model which is appropriate for all aspects of social inquiry. In this respect, my version of naturalism differs from many which have been suggested before.

Indeed, I shall begin this chapter with an account of the failures of naturalist programmes within the social sciences. There have been numerous attempts to show how the principles and methods of the natural sciences could be incorporated into the social sciences. However, the proponents of such unificatory schemes tend to neglect obstacles to providing a simple universal model. Many are guilty of attempting, unjustifiably, to colonise all areas of social inquiry with a theoretical model that is inappropriate beyond a narrow range of issues. Those I shall criticise include behaviourists, functionalists, evolutionary psychologists and some rational choice theorists.

Instead of offering a simple unified account, the naturalism I shall defend acknowledges that there is no single model that describes the social sciences. Like the natural sciences, the social sciences are characterised by a variety of different explanatory strategies and types of theory. One such strategy is the interpretative strategy as humanists describe it (with the obvious caveat that I do not accept conceptions of interpretation which invoke an analogy with interpretation in the arts). However, I shall argue that interpretation does not have such a special role as is often suggested. Not only does interpretation not preclude explanation or exhaust social inquiry, but advocates and practitioners of interpretative social science frequently fail to recognise that, within what are presented as interpretative accounts, other types of explanation and theorising are routinely employed.

The argument that I present, then, is almost the reverse of that suggested by Lukes to explain the interest of Durkheim's work. Lukes is sceptical about Durkheim's stated

naturalist principles. He claims that although Durkheim officially advocates positive explanations of social facts, what he really presents are interpretations of the phenomena he studies.¹ My counter-claim is that in presenting what they label as interpretations of social phenomena, humanist social scientists are really providing more complex analyses that, though they certainly involve interpretation, also involve other types of explanation.

5.1 Naturalism overstated

It is common for defenders of naturalism to slip into an unacceptable scientism. By doing so, it becomes much easier for opponents of naturalism to pick holes in their accounts of the social sciences, and, consequently, humanist positions gain credibility. Hacker, for example, begins his argument against naturalism by stating that he is opposed only to the *illicit* extension of explanatory models and methods from the natural to the social sciences.² He finds it easy to unearth examples of such unwarranted encroachment in the works of naturalist philosophers and social scientists from Hume, through Comte, Mill, Durkheim and the members of the Vienna Circle, to behaviourist psychologists and those who seek to describe the cognitive processes of the brain on the model of a computer. By emphasising *illegitimate* attempts to apply the principles of natural science to the study of man and society, Hacker provides indirect justification for his humanist account that focuses on interpretative understanding as the dominant approach in the social sciences.

One can hardly deny that there have been flaws in different versions of the naturalist programme. And, sadly, the tendency towards scientism continues today. However, such failures do not necessitate the rejection of naturalism and a retreat to the safety of humanism, where the standards of science cannot be brought to bear on work in the social sciences.

¹ See Lukes's Introduction to Emile Durkheim, *The Rules of Sociological Method*, (1st pub. French 1895), trans. W.D. Halls, ed. S. Lukes, (London: MacMillan, 1982), 15.

² P.M.S. Hacker, 'Wittgenstein and the Autonomy of Humanistic Understanding', *Wittgenstein: Connections and Controversies* (Oxford: Clarendon Press, 2001) 38.

Through awareness of the mistakes made by those who have proposed flawed naturalist positions, we can avoid such pitfalls ourselves and recognise the limits of naturalism.

In this section, I consider four naturalist programmes that became popular at different times in the twentieth century. In the case of evolutionary psychology, and, in a more advanced form, rational choice theory, this popularity continues today. In each case, I suggest that there is a problem with the way in which the basic model or theory has been applied in the social sciences. What is lacking is a sense of proportion: the recognition that any single approach is limited in its power to explain social phenomena. I do not want to suggest that any of the programmes I discuss is of no use at all (although in the case of behaviourism, I will suggest that the scope for genuinely explanatory accounts of social behaviour is severely restricted); only to argue that naturalists need to be more circumspect than they have tended to be when making claims about what their favoured programme can achieve.

Behaviourism

In the early decades of the twentieth century, some philosophers and psychologists reacted against the conception of the social sciences which had been developed by humanist thinkers. They were concerned that the project of developing a genuinely scientific study of human behaviour would be frustrated by the demand that the mental experiences of individuals should be the starting point for accounts of social life. Any social science which involved asking people how they felt or what they believed just seemed too messy. Neurath, for example, complained about “the empathetic immersion” which he found in Weber: “Over this poetic activity there is no test, no control, nor does it belong in a scientific account.”³ Instead, they wanted a science of man which took mental experience out of the equation.

³ Otto Neurath, *Empiricism and Sociology*, ed. M. Newarth & R. Cohen (Dordrecht: Reidel, 1973), 357.

One solution was the proposal to reduce all mental concepts to the physical states and events which were assumed to underlie them. The thought was that human actions and beliefs are just complex manifestations of simple physical processes. Once we had found a way to reduce them to their physical underpinnings, we would be able to explain human actions without having to rely on troublesome intentional concepts.

In the early twentieth century, though, this remained a purely theoretical solution. With almost no understanding of how the brain worked, and how physical events could bring about conscious experiences, it was impossible to develop anything like a practical programme for the social sciences along such lines.⁴

An initially more promising approach was behaviourism. Using ideas developed by Pavlov in his study of animals, Watson sought to describe and explain human behaviour in terms of stimulus and conditioned response. In 1913, Watson laid the foundations for a behaviourist programme in which the conscious experiences of the human subjects under study could be ignored.⁵ This, he argued, would allow psychology to become a truly objective branch of the natural sciences; one which would enable the prediction and control of human behaviour.

Neurath was optimistic that behaviourism might be the solution that was needed for the social sciences. He promulgated the idea that sociologists should restrict themselves to “behaviouristic phrases” which are compatible with a unified physical language.⁶ By adopting this method, he thought, difficulties relating to conscious experience could be overcome. “The problem of ‘matter’ or ‘mind’ is solved by the disappearance of the theory of the ‘mind’ leaving nothing but the theory of ‘matter’”⁷

⁴ With advances in neuroscience, the possibility of being able to explain human actions in terms of physical processes in the brain may now be becoming a realistic hope. However, see section 5.2 where I argue that even were we able to accomplish the type of reductions that physicalists envisage, there would still be room for other kinds of explanatory strategies which retained the unreduced concepts of mental experience.

⁵ See John B. Watson, ‘Psychology as the Behaviorist Views It’, *Psychological Review*, 20 (1913), 158-177.

⁶ Neurath, *Empiricism and Sociology*, 359.

⁷ *Ibid.* 360.

And what began as a theoretical model within psychology, soon began to develop into a full programme for the social sciences, exactly as Neurath hoped. Another important figure in the development of behaviourism – Weiss – grappled with the problem of describing the effects of human action and interaction using only the strictly limited terms allowed by behaviourist principles. In his targets were “all attempts to explain human achievement by the introduction of an element which is beyond the range of physical measurement”.⁸ Other behaviourists began to focus on the kinds of stimuli involved in social interaction.

Behaviourism was developed further by Skinner. He moved away from the idea that human behaviour was a matter of conditioned reflexes (Watson’s original formulation) to a more complex analysis of how behaviour is learnt through rewards and sanctions. The underlying principle, though, was the same: conscious experience should be completely disregarded.⁹

For a while, Skinnerian behaviourism seemed to many – including, unusually, many members of the general public – to open up the possibility of genuine control of human behaviour. It was believed that the long-sought science of man had been discovered. However, by the time that Skinner was being hailed as “the most influential of living American psychologists” in *Time* magazine, the expectation that it would serve as a foundation for all the social sciences had already been shattered.

Critics argued that the model of man which behaviourism hypothesised was profoundly wrong. Behaviourism treated the human mind as an empty black box, with information entering at one end and behaviour being ‘emitted’ at the other. Actually, in these terms, the criticism is somewhat unfair. Of course, behaviourists didn’t believe that the mind was so inert. As Dashiels (another early behaviourist) put it, “the conception of a simple stimulus leading to a simple response is only a convenient abstraction from the actual

⁸ Albert Weiss, *A Theoretical Basis of Human Behaviour* (Columbus, Ohio: R.G. Adams, 1925), 137.

⁹ See, for example, B.F. Skinner, *Science and Human Behaviour* (New York: MacMillan, 1953).

facts”.¹⁰ But what they did present was a *model* of how behaviour is produced which was so radically over-simplified that it had almost no power to enhance our understanding of complex human action. The classic examples of behaviourist explanations are entirely unlike ordinary social life. Indeed, behaviourism was almost uniquely explicated by providing examples from the explanation of animal behaviour. When applied to cases of social behaviour, it was manifestly less successful.

A further problem for behaviourism was that it was restricted to conceiving behaviour in strictly individualistic terms. The stimuli and conditioned responses, central to its theoretical foundation, are received and emitted by *individuals*. This too made it a cumbersome tool for dealing with complex social situations, where often it is much easier to talk about groups of people or shared customs.¹¹

Behaviourism survived within some areas of psychology for several decades, until the rise of cognitive psychology. But as a foundation for the social sciences it had already been rejected by the 1950s.

The excesses of behaviourism help us to understand the popularity of the humanist response. Indeed it now seems rather amazing that anyone ever thought that behaviourism could deliver what was initially promised. However, in our rejection of behaviourism, we should not be too quick to agree to counter-proposals. Behaviourism failed principally because it refused to countenance any mention of mental experience: thoughts, beliefs, desires, emotions, self-understandings. But humanists insist that mental experience must be the starting point for *all* investigations of human action.

Behaviourists and humanists share the mistake of supposing that there must be a unified approach to the explanation of human behaviour. There is no good reason why, as a matter of principle, we should reject either behaviourist explanations or those that refer to mental experience. That humans are conscious does not restrict us from explaining or

¹⁰ J.F. Dashiell, *Fundamentals of Objective Psychology* (Boston: Houghton Mifflin, 1928), 39.

¹¹ See the comments in section 5.2 on methodological individualism.

predicting their actions in a way that ignores their mental experience. If the stimulus-response framework proved to be a powerful one in social research then it could be employed without compunction. The fact is, though, that behaviourist explanations simply cannot account for the majority of human behaviour in which social scientists are interested. The successes in the explanation of animal behaviour and reflexive human behaviour where automatic responses are conditioned are not generally extendable to cases of complex deliberative social action.

Functionalism

The problems with behaviourism left room for functionalism to develop as an alternative naturalistic programme within the social sciences, especially in the United States, in the 1950s and 1960s. Parsons, who was at the forefront of the functionalist school in this period, reported that when he had returned to the USA in the late 1920s from studying in Germany that he “found behaviorism so rampant that anyone who believed in the scientific validity of the interpretation of subjective states of mind was often held to be fatuously naive”.¹² But as the vogue for behaviourism declined, so functionalism rose in its place.

Of course, functionalism in anthropology had been around since the early decades of the twentieth century, when it had been developed by Malinowski and his followers. And its roots can be traced back further to Durkheim. However, it was only with the work of Parsons and his school that functionalism became regarded as a powerful programme in other areas of the social sciences.

Functionalists shared with behaviourists the view that explanations which could avoid the minutiae of individuals’ conscious experiences would be more efficacious. But they rejected the individualism of behaviourist psychology in favour of a more holistic

¹² Talcott Parsons, ‘On Building Social System Theory: A Personal History’, *Daedalus* 99 (1970), 826-881.

approach which emphasised the function of different institutions in the social system. And they were not nearly so dogmatic about intentional concepts.

Functionalists were able to incorporate the insight that human action, unlike animal behaviour, is rule governed. However, for functionalists, this did not mean that the social sciences should be dominated by the interpretation of agents' self-understandings. The norms that guide action, they thought, are publicly available and objective. Each individual internalises the norms of the society in which she lives.¹³

Of course, for humanists the marginalisation of individual self-understandings was unacceptable. Again, though, the real problems for functionalism came from the fact that its advocates saw it as a grand unifying theory for the social sciences that could account for the whole of the social world.

It is perfectly true that some of the institutions in almost any society will contribute towards social stability. But we should not assume, as many functionalists did, that the whole social system is like an organism, the elements of which contribute in an organised way to the smooth running of the whole. We must also reject any suggestion that societies comply with a preconceived design. As has been pointed out many times, such claims make it difficult to account for social conflict and social change. They justify a conservative attitude because they seem to suggest that the replacement or abolition of social institutions would have a deleterious effect on the social organism.

As well as these internal problems, the advocates of functionalism became rather too confident about its scope. Wallace and Wolf suggest that by the late 1950s functionalism had come to dominate sociology completely in the United States.¹⁴

However, rejecting these excesses of the functionalist tradition does not entail a full-scale rejection of the functionalist approach. In Section 5.3 I will defend the role of

¹³ See Parsons, *The Social System* (London: Routledge & Kegan Paul, 1951), for the classic account of this process of internalisation.

¹⁴ Ruth Wallace & Alison Wolf, *Contemporary Sociological Theory: Expanding the Classical Tradition* (Upper Saddle River, N.J.: Prentice Hall, 1999, 5th edition), 17.

functional explanations in the social sciences. Here I just want to reiterate that the fact that social action involves conscious deliberation, and that social actors have self-understandings, does not automatically entail that any explanation of their actions must relate all of those experiences in detail. Explanations which finesse mental experience, or have their focus elsewhere, are not necessarily bad explanations. On the other hand, we should not fall into the trap of supposing that functional analysis alone holds the key to successful social science.

Rational choice theory

In the cases of behaviourism and functionalism, it is easy to see how each approach was supposed to make the social sciences genuinely scientific. Behaviourists proposed explaining human behaviour as though they were just like animal behaviour; functionalists sought to model the operations of social systems on those of organisms. The same is also true for the evolutionary accounts of social behaviour which I consider below: humans are to be treated just as well-adapted animals or complex machines which enable the replication of genes. In the case of rational choice theory, the link with natural science is less clear.

The physical sciences do not employ any equivalent of rational choice theory; and any evidence of rational deliberation among animals – which might lead us to think that its scope could be extended into biology – is certainly sketchy. Nevertheless, there are good reasons for discussing rational choice theory in the same context as other naturalist approaches. For one thing, its proponents, like the proponents of other approaches, have frequently suggested that it is the most plausible (or the only possible) basis of a universal science of society: “If an institution or a social process can be accounted for in terms of the rational actions of individuals, then and only then can we say that it has been explained.”¹⁵

¹⁵ James Coleman, *Individual Interests and Collective Action: Studies in Rationality and Social Change* (Cambridge: Cambridge University Press, 1986), 1. See also Coleman, *Foundations of Social Theory* (Cambridge: Harvard University Press, 1990).

Much is made of the formal axioms on which rational choice theory is based; the idea being that they provide a foundation similar to that provided by the laws of classical mechanics. Rational choice theory is also held up as a ‘paradigm’ for the social sciences in the Kuhnian sense.¹⁶ That is, it provides a framework of shared principles, techniques and terminology which allow social scientists to engage in ‘normal science’ (puzzle solving) without constantly having to question fundamental assumptions.

Impressed by the success of rational choice models of economic behaviour, social scientists have attempted to apply the same principles to other areas of social action. Thus we have rational choice explanations of revolutionary action and voting behaviour, and game theoretic models of international relations. Underlying these applications is the theoretical assumption that, as Papineau has it, “agents always perform those actions with greatest expected desirability”. It is supposedly easy for us to accept this principle because the conception of people as rational maximisers “is in fact part of our everyday thinking about human behaviour”.¹⁷

There is a vast literature on the pros and cons of rational choice theory and game theory – far too much to discuss at length here – but many of the problems of adopting it as the unique explanatory strategy for the social sciences can be understood without going into too much detail.

It is a necessary *assumption* of rational choice theory that agents are rational maximisers.¹⁸ But, as Mill pointed out, no political economist “was ever so absurd as to suppose that mankind are really thus constituted”. We make the assumption because “this is the mode in which science must necessarily proceed”.¹⁹ What rational choice theory

¹⁶ See, for example, Bruno Frey, *Economics as a science of human behaviour: towards a new social science paradigm* (Boston: Kluwer Academic Publishers, 1999, 2nd edition).

¹⁷ David Papineau, *For Science in the Social Sciences* (London: Macmillan, 1978), 82.

¹⁸ Some would prefer to say that people are rational *maximisers*, that they are maximisers between certain boundary thresholds or that they act in accordance with some other more complex general strategy. This is of little consequence to the argument here which concerns the misapplication of any such explanatory account to areas of social behaviour where it is inappropriate.

¹⁹ John Stuart Mill, *A System of Logic* (London: John W. Parker, 1843), Bk.VI, Ch.9, §3. Papineau agrees with this assessment even though he thinks that it is part of our ordinary thinking to suppose that people are

provides us with is a model that allows us to explain and predict certain human actions by describing them in the terms of an idealised framework. The model is a powerful tool in economics. We can explain puzzling phenomena like Giffen goods; we can predict the effect on investment patterns of changes in the interest rate or the rate of inflation; and we can account for the amount of a good that a monopolist chooses to supply. Such explanations and predictions are successful because the model of maximising agents, though not a fully accurate model of reality, is an idealised description of the economic behaviour of individuals and companies. It is reasonable to suppose that investors do indeed seek to maximise the returns on their investments and that monopolists seek to maximise profits.

The extension of the model of *homo economicus* to other areas of social action is not so successful. For example, it runs into problems when it is used to explain voting behaviour. There may indeed be a tendency for people to vote in a general election for the party which they expect will implement policies that are economically the most beneficial for themselves. But it is obvious that this is by no means the only or the most important consideration that affects party choice. This is not necessarily a problem in itself. An explanation does not have to give a comprehensive account of the actual decision-making process that people go through to be successful. However, the rational choice model just makes voting behaviour seem mysterious. For one thing it makes the decision to bother voting at all difficult to understand. Given the minute possibility of any individual's vote affecting the outcome of an election, a rational maximiser would surely not incur the opportunity cost of spending time finding out which party was more likely to benefit her interests or going to the polling station to cast her vote. And how are we to explain the voting choices of all of those who consistently vote for a party that they know will implement policies to their economic disadvantage? The obvious answer is that we need an

maximisers. At least, he affirms that agents do not always consciously calculate expected outcomes. In any case, it is not a necessary condition of the usefulness of an explanatory model that it be true.

explanation that is not limited to consideration of the economic outcomes for individuals of different options.

Defenders of rational choice theory might complain that this assessment is unfair. In the explanation of voting and other areas of social action it is not *economic* outcomes that are supposed to be maximised. However, this leads to the obvious but troubling question of what precisely it is that rational agents do maximise in such contexts. In the case of the monopolist it is clear that it is profits that are being maximised. If we want to extend the scope of rational choice theory beyond areas of social action in which economic goals are the prime motivation for individuals we will have to find something else.

Ideally, the maximised good would be quantifiable. We should at least be able to identify a preference ordering of outcomes for an individual agent independently of her decision on any particular occasion. Unfortunately, usually we cannot.

The most obvious way to extend the scope of rational choice theory to non-economic aspects of human action is to say that actions designed to maximise economic returns are just an example of the more general tendency of humans to act in order to maximise happiness or pleasure. Such a strategy comes with the additional advantage that it allows us to account, in a straightforward manner, for some examples of behaviour that seem to contradict the model of economic agents as rational maximisers. In some cases, people are happy to accept a sub-optimal economic outcome because they are compensated in some other, non-economic way. However, it is transparently the case that there is no independent way of measuring the happiness associated with different outcomes or even of ordering outcomes according to how much happiness they bring particular individuals. The claim that people are rational happiness maximisers in all areas of social life is devoid of any empirical content. Papineau's assertion that we think of people as always performing those actions with greatest expected desirability is not a theoretical claim; it is a matter of faith. If what we want is a good model that gives us the power to explain and predict social action, we must

limit the application of rational choice theory to a narrow range of areas of social life. It is not universally applicable.

Evolutionary Theory and the Social Sciences

Darwin's theory of evolution by natural selection has, for a long time, been regarded by some as an example of successful science with important lessons for the study of the social world. The Social Darwinists of the late nineteenth and early twentieth century applied evolutionary theory to cast doubt on the efficacy of social reform. Others have appropriated evolutionary language to defend claims about racial supremacy. Such programmes have long since been abandoned by serious social scientists not only because of their repugnant moral implications but also because they were shown to be intellectually bankrupt. However, other attempts to emulate the success of evolutionary theory in the social sciences have gained far wider support.

Edward Wilson's *Sociobiology: The New Synthesis* brought together studies of social behaviour among animals and humans in an attempt to show how behavioural traits could be adaptive for the success of different species. Evolutionary explanations have also been widely employed in association with the tenets of game theory to explain economic behaviour. And, in the last ten years, the new discipline of evolutionary psychology has spawned an enormous literature in which various aspects of human behaviour are explained in terms of the psychological mechanisms that evolved during the Pleistocene in response to the challenges that early humans encountered.

Whilst I do not want to reject all of the claims advanced by exponents of these disciplines²⁰, the tendency among evolutionary theorists to slip into erroneous pseudo-science provides a salutary lesson for those who want to defend naturalism. Advocates of evolutionary approaches, keen to demonstrate the power of their explanations, end up

²⁰ Indeed, that there is a limited role for evolutionary explanations in the social sciences is exemplary of the pluralistic naturalism that I want to defend.

overstating their case. Systematic errors are made that, unfortunately, bring the programme into disrepute and make it easy for humanists to reject the application of scientific methods to the social sciences. A more acceptable naturalism requires a good deal more circumspection.

Before proceeding further, it is worth making explicit a distinction between two types of evolutionary explanation of human behaviour: those that are supposed to be *continuous* with evolutionary biology and those that are supposed to be *analogous*. Clarity on this matter is important if we want to be precise about how different evolutionary accounts of the social world are supposed to work.

In the first type of explanation, some aspect of human behaviour is explained, at least partially, in terms of the genetic make-up of human beings. For example, that humans (and other animals) sneeze when dust is present in the nostrils can be explained as a genetically evolved response to a particular type of stimulus. In such cases, the mechanism that brought about the behavioural trait in question is well confirmed: random genetic mutation and natural selection.

In the second type of evolutionary explanation, the precise mechanism is not well confirmed but is taken to be analogous to the mechanism involved in explanations of the first type. Some such explanations rely on selection at the group level. Others invoke Dawkins's concept of the meme, a unit of cultural transmission analogous to the gene.²¹

Explanations of the first type inherit scientific respectability from their direct connection with biology. However, as I shall argue below, the scope for such explanations in the social sciences is extremely limited. Explanations of the second type – those based on an analogy with genetic evolution – have potentially greater scope. But their quality as explanations is far more questionable and, where they are successful, it is not at all clear that describing them as evolutionary explanations is helpful or accurate.

²¹ Richard Dawkins, *The Selfish Gene* (Oxford: Oxford University Press, 1989, 2nd edition), 192.

Most defenders of evolutionary accounts in the social sciences are not unaware of the fact that there are pitfalls to be avoided. But this does not prevent them from falling into them. Claims that the new approaches rest on modest assumptions, and that they do not imply that other types of social science are impotent, do not stand up to detailed examination of what is said in support of them.

Barkow, Cosmides and Tooby, the editors of an early and influential book on the subject, suggest that evolutionary psychology is not an imperialistic discipline. They claim that, unlike other models of the social sciences, it takes on board the importance of ‘conceptual integration’ which “simply involves learning to accept with grace the irreplaceable intellectual gifts offered by other fields”.²² And it is a crucial feature of their account that there are environmental as well as genetic influences on behaviour. Officially, then, they do not maintain that evolutionary explanations are uniquely powerful. However, this restraint does not last long. Tooby and Cosmides confidently assert that evolutionary psychology allows us “to understand *for the first time* what humankind is and why we have the characteristics that we do”.²³ And Barkow suggests that “[o]ur evolved psychology underlies even the most novel and complex of sociocultural forms”.²⁴

Runciman admits that “many sociological topics do indeed call for methods different from those of the biological anthropologist or the evolutionary psychologist”.²⁵ But he has no hesitation in compiling a long list of metacultural constants “ranging from play and laughter through exchange and the division of labour to punishment and retaliation, which are present in all known cultures and societies and must therefore be presumed ... to have emerged in the course of natural selection during the long millennia of the Pleistocene”.²⁶

²² Jerome Barkow, Leda Cosmides & John Tooby (eds.), *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (Oxford: Oxford University Press, 1992), 12.

²³ John Tooby & Lena Cosmides, ‘The Psychological Foundations of Culture’, in Barkow, Cosmides & Tooby (eds.), *The Adapted Mind*, 20. (Italics added)

²⁴ Jerome Barkow, ‘Beneath New Culture is Old Psychology’, in *The Adapted Mind*, 627.

²⁵ W.G. Runciman, ‘The Selectionist Paradigm and its implications for Sociology’, *Sociology*, 32 (1998), 169.

²⁶ *Ibid.* 164.

Blackmore hopes and expects that the new discipline of memetics will prove to be “the grand new unifying theory we need to understand human nature”.²⁷

From our experience of other explanatory models which have been seized upon as potential unifying theories for the social sciences, these bold claims should arouse caution and a good degree of scepticism. And, sure enough, when specific evolutionary explanations are scrutinised closely, it quickly becomes apparent that they cannot achieve everything that is promised of them.

Memetics and group selection: searching for a mechanism

Even the advocates of memetics accept that there are substantial differences between the processes of genetic and memetic replication.²⁸ But that does not detract from their popularity with those who see memes as the best or only way of integrating the social sciences with the natural sciences.²⁹ The problem with such accounts is that, whilst they appear to offer a way of scientifically explaining a vast array of social phenomena, the evolutionary mechanism that is supposed to underlie the explanations is so sketchily described that we are left feeling dissatisfied. The questions that interest social scientists are, in nearly every case, simply not answered by an account based on memetic evolution. Almost invariably we need a richer explanation.

When we consider cases of genetic evolution, it is, in general, relatively straightforward to explain why a particular gene is a successful replicator. The genes that are responsible for sneezing in response to dust are successful because they contribute towards the smooth working of the respiratory system, which is essential for survival and, hence,

²⁷ Susan Blackmore, *The Meme Machine* (Oxford: Oxford University Press, 1999), 9.

²⁸ Runciman, ‘The Selectionist Paradigm and its implications for Sociology’, 177.

²⁹ For more examples of the popularity of the meme, see Daniel Dennett, ‘Memes and the Exploitation of Imagination’, *Journal of Aesthetics and Art Criticism*, 48 (1990), and Stephen Pinker, *How the Mind Works* (New York: Norton, 1997).

reproduction. In proposed cases of memetic evolution, no such account can be given without relying on other types of social or psychological explanation.

Blackmore almost admits as much. She recognises that the analogy between genetic and memetic evolution is not perfect. The process of memetic transmission, for example, is more varied than that of genetic transmission. In a crucial passage, she accepts that understanding why some memes are more successful replicators than others requires wider knowledge of human preferences and social conditions. It seems as though she is about to allow a role for alternative explanatory strategies. However, the wider knowledge that she thinks is required is just “the stuff of evolutionary psychology”.³⁰ We might ask why other approaches to the study of human preferences and social conditions do not get a look in here. The answer, I suspect, is that they do not satisfy the fashion for all things evolutionary.

Selection at the group level seems to provide a plausible mechanism for some evolutionary social explanations. It is uncontroversial to suggest that societies with practices and institutions that contribute towards their success are likely to survive, whereas those with socially damaging customs are likely to die out. It is far from clear, though, whether such explanations represent a significant advance on other types of explanation that have been employed by social scientists for many years. Functional explanations also proceed by identifying attributes of a social system that contribute towards the system’s continued existence or towards its success. Evolutionary explanations that rely on group selection seem to offer very little beyond this except for an evolutionary metaphor. No mechanism is forthcoming which makes the development of new cultural practices seem like the random mutation of genes. Nor does the transmission of culture from one generation to another seem to have any close link with genetic inheritance. One might conclude that talk of evolution among societies is merely a linguistic analogy.

³⁰ Blackmore, *The Meme Machine*, 58.

Genetic determinants of social behaviour?

Turning to cases in which behavioural traits are supposed to be explained by evolution at the genetic level, what is striking about a good deal of the literature in which such explanations are proposed is that the examples chosen are often not cases of genuinely social behaviour at all.

One of the central tenets of evolutionary psychology is that the human mind is not an organ that facilitates learning and responsive behaviour using a single general mechanism. Rather, there are myriad psychological mechanisms, each of which evolved in response to particular features of the Pleistocene environment, and each of which influences particular aspects of human behaviour. Some of these mechanisms govern what are basically physiological systems. Morning sickness, for example, is explained as adaptive because of the danger to the foetus of toxic chemicals found in plants. During the later stages of pregnancy, when the greatest threat to foetal development comes from an insufficient supply of energy, morning sickness abates.³¹ Convincing as this sounds, one could hardly describe vomiting as a social action.³² And the same could be said about a number of the other favourite examples put forward by evolutionary psychologists in support of their approach, e.g. colour perception, and the way adults modulate their voices when speaking to infants. To prove the applicability of evolutionary explanations to the social sciences, we need different examples. But as we move from the physiological to the social, the proposed explanations become increasingly speculative and, correspondingly, less convincing.

Many examples concentrate on behaviour relating to reproduction (mate preference, sexual habits, effort allocation in childcare, *etc.*) This is where evolutionary psychology is at its strongest. It is easy to see that genetically endowed psychological mechanisms that are

³¹ Margie Profet, 'Pregnancy sickness as adaptation: a deterrent to maternal ingestion of teratogens', in Barkow, Cosmides & Tooby (eds.), *The Adapted Mind*: 327-65

³² It has been pointed out to me that there may be some contexts in which vomiting is indeed a social action. Apparently, it was *de rigueur* to vomit at Roman banquets to demonstrate that the feast had been suitably sumptuous. In contemporary society, public vomiting may be an act of deliberate rule-transgression. I imagine that most pregnant mothers do not fit into either of these categories.

positively linked to individual reproductive fitness would be more likely to be replicated than those with a negative or neutral effect. Hence, it is natural for males to compete for sexual partners and, once partnerships are established, to guard jealously their rights to sexual congress. Parental care is similarly explained.

Problems emerge, though, when evolutionary psychology is applied to other aspects of social behaviour or when its advocates attempt to marginalise, or ignore altogether, other explanatory strategies. We are often presented with wildly speculatively hypotheses or, worse, *ad hoc* responses to apparent counterexamples that are introduced to protect the central paradigm.

Buss proposes that inherited psychological mechanisms can be invoked to explain social traits ranging from the rules governing food sharing to our appreciation of brightly coloured artworks.³³ In the latter case, it is suggested that our enjoyment of art is a consequence of a genetic predisposition to seek out environments with plentiful resources. Buss admits that this is little more than speculation.

Similar problems are also evident in evolutionary attempts to explain altruistic behaviour. For Wilson, explaining altruism was “the central theoretical problem of sociobiology”.³⁴ It is certainly a significant puzzle. On a first look, it might seem that evolutionary accounts should be entirely incompatible with unselfish behaviour. On closer consideration, the contradiction is not as stark as that. But even with a technical definition of altruistic behaviour – behaviour that enhances the personal fitness of others at the expense of the fitness of the individual concerned – no fully satisfactory account can be given.

Wilson’s primary solution to the puzzle of altruism is the concept of kinship. “[I]f the genes causing the altruism are shared by two organisms because of common descent and if the altruistic act by one organism increases the joint contribution of these genes to the next

³³ David Buss, *Evolutionary Psychology: The New Science of the Mind* (Needham Heights: Allyn & Bacon, 1999), 405ff.

³⁴ Edward Wilson, *Sociobiology: The New Synthesis* (Cambridge: Harvard University Press, 1975), 3.

generation, the propensity to altruism will spread through the gene pool.”³⁵ In other words, altruism by organisms is an explicable (and even predictable) consequence of the selfishness of genes.

When limited to the claim that altruistic behaviour need not be incompatible with the principles of natural selection, this explanation is perfectly reasonable. But problems emerge when the account is elaborated, with the aid of a mathematical model, in an attempt to show under what conditions altruistic behaviour is adaptive.³⁶

The basic premise of the model is that we are more likely to act altruistically to assist those who are closely related to us than to others, and that altruism is also more likely when our actions will enhance the fitness of more individuals. In cases of sexual reproduction, each parent, it is assumed, shares 50% of his or her genes with each of his or her offspring. Individuals also share 50% of their genes with full siblings, 25% with cousins and grandchildren, and so on. A successful gene for altruism would be one that encouraged or brought about altruistic behaviour when the total gain, in terms of the survival of genes that an individual shares with others, is greater than the cost of the behaviour involved. So, it should be adaptive to risk one's own life to save three siblings. Similarly, it would also be adaptive to act altruistically if one could increase the fitness of a sibling by more than twice the amount that such action would reduce one's own fitness.

Obviously, this metric cannot provide a complete account of altruistic behaviour, even on the simplified definition of what that involves. Evolutionary theorists are happy to accept that genetic inheritance only ever works in coordination with environmental factors to

³⁵ *Ibid.* 3-4. Wilson also hypothesises that altruism might be selected at the group level. (p. 560) And, in the literature, other possible evolutionary mechanisms have been suggested. In his famous study, Axelrod found that generally cooperative strategies were more successful than uncooperative, selfish strategies in repeated economic games and, hence, tend to spread throughout a population. (Robert Axelrod, *The Evolution of Cooperation* (New York: Basic Books, 1984)). Axelrod's work has been widely endorsed by advocates of evolutionary explanations in the social sciences. Dawkins, for example, wrote a very favourable Forward for the second edition in 1990. Blackmore proposes another alternative: a memetic explanation of altruism.

³⁶ The pressure for a more precise model comes from the realisation that the scope of the explanation, as it stands so far, is severely restricted. Sociobiologists and evolutionary psychologists want to explain why people act altruistically in some circumstances but not others. They are not satisfied by the more vague claim that altruistic behaviour can be adaptive.

cause behaviour. There are many other factors that might influence an individual's decision to act altruistically on any particular occasion. However, even the most superficial survey of the varying importance of family ties, and the range of kinship structures, in different societies reveals that Wilson's kinship metric is fundamentally flawed. It is not just that there are individual counterexamples to the predictions that the model makes. But there are whole societies where altruistic behaviour is focused, not between siblings or parents and their children, but, for example, between individuals and their maternal uncles. There is also clearly no uniformity, between societies, in the degree to which familial ties are considered important, relative to other social relationships. Such variation simply cannot be explained by the evolutionary model. If we want to understand altruistic behaviour, we have to employ other approaches.

There is also a further problem with the suggested model. The claim that a mother shares 50% of her genes with her children is by no means a straightforward truth. There is no general agreement about what the basic genetic unit is. But the altruism metric requires that we understand the concept of a gene to refer to something very specific. Geneticists working in other areas use quite different notions. For example, it is claimed that the human genome and the genomes of higher apes share more than 90% of their genetic code. For the genetic explanation of altruism to work we have to accept that it is only the genes that vary between humans that are important. Otherwise, according to the proposed model, we would have to conclude that altruistic behaviour should be practically ubiquitous. That people ever act selfishly would become difficult to explain.

* * *

Such attempts to extend the scope of evolutionary explanations within the social sciences are typical of the damaging tendency which sees naturalists overstate their case. It often seems that the proponents of evolutionary psychology and memetics are so impressed by their theoretical models that they assume that *every* aspect of human behaviour must be explicable

in evolutionary terms. The commitment is so strong that even highly speculative explanations are accepted as useful contributions to the debate, with little or no hesitation to consider whether the behavioural trait in question could be better explained using a different approach.

It is hardly surprising, then, that those who think that individual conscious experience is important for understanding human behaviour find evolutionary approaches abhorrent; and that they continue to insist that naturalism is wrong-headed. To paint a more justifiable picture of naturalism, we need to recognise that the power and scope of evolutionary explanations, like other explanatory models, is limited.

5.2 Laws, reductionism and individualism

From what I have said above, it should be clear that my main criticism of many naturalist programmes is that their exponents tend to be too single-minded. In an effort to demonstrate the power of their models, or explanatory approaches, behaviourists, functionalists, rational choice theorists and evolutionary psychologists all fail to recognise their limits. Pluralistic approaches are rarely considered.

I shall say more about the limited, pluralistic naturalism that I advocate in section 5.3, where I shall also argue for a role for other kinds of (scientific) explanation in the social sciences. In this section, I want to concentrate on some related underlying issues which contribute to problems with many naturalist accounts: the search for universal laws, reductionism and individualism.

Universal laws

In the period before the social sciences had begun to develop into their modern, recognisable form (roughly, from the Renaissance to the middle of the nineteenth century), many

philosophers, as well as historians and others interested in the study of human society, thought that the trick to achieving scientific understanding of man and society was to discover universal laws. Just as it was believed that investigation would uncover the laws which governed the physical world, it was also assumed that universal laws of human nature and social laws could be discovered. “It is universally acknowledged,” Hume wrote, “that there is a great uniformity among the actions of men, in all nations and ages, and that human nature remains the same, in its principles and operations.”³⁷ Laws also figured centrally in the positivist philosophies of Comte and Mill. According to Comte, without knowledge of the laws that control social events “no scientific provision of them would be possible”.³⁸

Early humanists like Dilthey questioned the special attention given to laws, preferring to emphasise the importance of individuals, but they did not doubt that they had an important role.³⁹

As the social sciences began to develop into more specialised disciplines, social scientists generally stopped making explicit attempts to identify universal laws. However, for many naturalist social scientists, it remained an unquestioned assumption that good theories would be universally applicable. Evolutionary psychologists, for example, assert that the psychological mechanisms which underlie human behaviour are common to people in all societies.

Laws also continued to play an important role in the accounts of some twentieth century philosophers. Hempel thought that his nomological models of explanation were applicable to the social sciences. “[T]he deductive and the probabilistic model of nomological explanation accommodate more than just the explanatory aspects of, say, classical mechanics: in particular, they accord well also with the character of explanations

³⁷ David Hume, *An Enquiry Concerning Human Understanding*, (1st pub. 1777), ed. P. Nidditch (Oxford: Clarendon Press, 1975, 3rd edition), 65.

Course de Philosophie Positive, (1st pub. French 1853), trans. and ed. G. Lenzer as *Auguste Comte's Positivism* (New York: Harper & Row, 1975), 223.

that deal with the influence of rational deliberation, of conscious and subconscious motives, and of ideas and ideals on the shaping of historical events.”⁴⁰

There are two types of law that social scientists might attempt to discover: laws of human nature and laws that govern society at a more macroscopic level. Hobbes recognised this distinction and thought both types of law to be important. The first section of *The Elements of Law Natural and Politic* is devoted to an account of human nature and the second to the consideration of “the nature of a body politic, and the laws thereof”.⁴¹ Methodological individualists concentrate on laws of human nature, holists on social laws. Neither is acceptable to humanist philosophers of social science.

We have already seen arguments that are deployed by humanists to contest versions of naturalism based on supposedly universal laws in Chapters 2 and 3. Human nature, it is argued, is not uniform in all societies and in all ages. There is an enormous amount of variation between cultures. And the rules that guide behaviour are not like the laws of nature; they are normative and can be broken.

Such arguments are indeed successful against versions of naturalism which rely on universal laws. Many statements about the social and historical world would appear absurd if they were taken to indicate commitments to exceptionless laws. For example, Machiavelli’s assertion that “when princes have given more thought to personal luxuries than to arms, they have lost their state,”⁴² is obviously false if taken as a claim which implies the existence of a universal law. Nor could it be rendered as a useful probabilistic law without limiting its scope to states of a certain type or those from a particular period in history.

There are few, if any, universal laws of human nature either. It is almost always possible to find exceptions to even the most apparently obvious generalisations about

⁴⁰ Carl Hempel, ‘Explanation in Science and History’, in R.G. Colodny (ed.), *Frontiers of Science and Philosophy* (Pittsburgh: University of Pittsburgh Press, 1962), 33.

⁴¹ Thomas Hobbes, *The Elements of Law, Natural and Politic*, (1st pub. 1650), ed. J.C.A. Gaskin (Oxford: Oxford University Press, 1994), 109.

⁴² Niccolò Machiavelli, *The Prince*, (1st pub. Italian 1532), trans. P Bondanella and M. Musa (Oxford: Oxford University Press, 1984), 49.

humans. It is false, for example, that all children will choose sweets over vegetables and that all women are bad drivers.

However, the lack of universal laws in the social sciences is not a problem for all versions of naturalism. In Chapter 4, I criticised philosophers of social science who cling on to an outdated and inaccurate conception of the natural sciences. I argued that the notion that exceptionless laws are a necessary element of all scientific knowledge is wrong. In many cases, scientific research results in knowledge that is restricted to particular events or objects. Furthermore, the possibility of truly exceptionless laws, even in physics, is by no means uncontroversial.

Defending naturalism about the social sciences does not entail a commitment to the existence of universal laws of human nature, or to the belief that we must be able to generalise about all societies at all moments in history. Social science does not have to imitate Hobbes's approach to the study of the social world in order to be scientific.

Reductionism and individualism

Many naturalist programmes in the social sciences involve, implicitly or explicitly, reductionism of one sort or another. The principal attraction of reductionism is the thought that reducing social objects to more basic entities simplifies our view of the social world and makes it easier to predict and explain social phenomena. This is not a wholly unreasonable view. We know from the natural sciences that some successful explanations do proceed by reducing macroscopic objects to their microscopic constituents. And I have no doubt that the best explanations of some social phenomena are achieved by reducing social objects in a similar way.

What I object to is the supposition that reduction is *always* beneficial to advancing knowledge or, worse, that it is *necessary*. Another aspect of the outdated view of science

described in Chapter 4 is the belief that all scientific explanations conform to a

simple model: roughly, that employed by classical mechanics. This motivates reductionism in the social sciences because it makes it seem as though the only prospect for genuinely scientific social science is to copy that particular model. If we adopt a more realistic view of what the natural sciences are like, it becomes clear that scientific explanations are more varied than the traditional picture allows.

Not all forms of reductionism are the same. In some versions, but not others, it is insisted that theories and explanations at the macroscopic level can be *translated* into alternatives at the microscopic level. The central claim, though, common to all versions of reductionism, is that it is both possible and desirable to describe and explain sociological phenomena at a more basic level than our ordinary talk about them.

For some, reductionism is a consequence of a commitment to methodological individualism – one might say that individualism is a branch of reductionism. Social facts, individualists think, should be reduced to facts about individuals, and explanations in the social sciences should, or ideally should, be cast in individualistic terms. Other reductionists hold a more radical position. Guided by physicalism and a strong ‘pyramidal’ conception of the unity of science thesis, it is proposed that social phenomena should ultimately be explained in terms of the physical events that occur in peoples’ brains and which, it is supposed, are causally responsible for their actions.⁴³

I reject all versions of explanatory reductionism in the social sciences. Strong arguments have been put forward against specific forms of reductionism, some of which I shall consider below. But I also want to argue that there is a more general mistake which underlies both reductionism and the humanist conclusions that are often drawn by those who oppose it: that the genesis and fabric of social objects severely constrain how they are to be explained.

⁴³ As discussed above, many of the advocates of behaviourism envisaged this kind of reduction. Behaviourism was regarded as a step in the right direction.

Physicalism

The radical physicalist version of reductionism is the easiest to refute. In Chapter 4, it was suggested that there are serious problems with the unity of science thesis when it is taken as a claim about the reducibility of all scientific disciplines to elementary physics. Dupré, Cartwright and others have argued that there is no unified world order that underlies the phenomena studied by the different sciences. But even without this metaphysical uncertainty, there is no reason to accept reductionism as an epistemological guide to good science.

Holding a world picture according to which everything in the universe is constructed of the same basic particles, which are subject to the same laws of nature, does not entail that one must *explain* everything in terms of the behaviour of these basic particles, or that such explanations are better than those that involve concepts of more macroscopic objects.

Humanists have correctly pointed out that even if we were able to provide a complete causal explanation at the physical level of a social event, say, someone's decision to convert from Catholicism to Protestantism, such an explanation would not be more informative than an interpretative account. However, this observation does not motivate full acceptance of the humanist picture of the social sciences, where interpretation is dominant. The humanist argument relies on a more general point: that elementary physical explanations are not always better than non-physical ones.

One can employ the same point to defend other kinds of holistic explanation against the claims of reductionism, including those which don't involve any attempt to interpret individual actions. An explanation of a rise of street crime cast in terms of increases in unemployment and drug addiction among the young, for example, is not superseded by one which traces the physical causes of events that occur in the brains and bodies of those

responsible. Not only would such an explanation be absurdly complicated, but it would fail to satisfy the desire we had sought to fulfil in seeking an explanation.

Moreover, the rejection of physicalist reductionism is not restricted to the social sciences. We should also reject reductionist programmes in various areas of the natural sciences. It is not preferable, or more scientific, for example, to explain earthquakes in terms of the movements of subatomic particles than it is to explain them in terms of the movements of tectonic plates. The fact that everything is made from elementary physical particles entails nothing about how phenomena are to be explained. We should be guided here by pragmatic considerations. Reducing an object to its most basic constituents is not an end in itself.

Methodological individualism

This still leaves versions of reductionism associated with methodological individualism. Individualists can accept that reduction to the most basic level possible should not be seen as an end in itself, without abandoning their rejection of holistic explanation. They argue that explanations at the individual level should be preferred simply because they are more informative, because they get to the root of the matter at hand. And, for many individualists, holistic explanations could, at least in principle, be translated into explanations at the individual level.

Elster's views are typical in this regard. "In the social sciences," he claims, "the elementary events are individual human actions"⁴⁴ "Talk about institutions is just shorthand for talk about individuals who interact with one another and with people outside the institutions. Whatever the outcome of the interaction, it must be explained in terms of the motives and the opportunities of these individuals."⁴⁵

and Bolts for the Social Sciences (Cambridge: Cambridge University Press, 1989), 3.

This approach has been rejected by holists with humanist sympathies.⁴⁶ It is argued that the proposed reduction of social concepts to individualistic ones is impossible. Any description of a social action is bound to involve concepts which simply cannot be understood abstracted from the social wholes to which they refer. An action such as cashing a cheque, for example, only has the meaning that it does because it is embedded in a particular social context. It cannot be described without the use of concepts that refer to institutions beyond the individual.

However, as Bhargava points out, not all versions of methodological individualism involve a commitment to a semantic thesis about the reducibility of social concepts to individualist ones.⁴⁷ The central claim of individualism is just that the best explanations are those which explain outcomes in terms of the actions of individuals. And such a claim could be defended even if it were accepted that individualistic explanations must involve irreducible social concepts.

To undermine individualism, then, we need to challenge the view that individualistic explanations are more informative than holistic ones. Actually, the burden of proof here surely lies with individualists. They need to provide a reason for thinking that apparently-informative macroscopic explanations could always be improved upon by considering individual actions. Individualists cannot argue that explanations at a more microscopic level are *necessarily* preferable to macroscopic explanations. If they did, they would be committed to the strong physicalist version of reductionism. Instead, they must argue that explanations at the individual level are more informative than holistic explanations *as a matter of fact*.

One individualist line of argument is linked to the position in the structure/agency debate according to which it is individual people who are fundamentally responsible for historical events. It is the actions of individuals, it is claimed, that bring about social structures and social contexts. So any explanation which suggests an important role for

⁴⁶ E.g., Stephen Lukes, 'Methodological Individualism Reconsidered', *British Journal of Sociology*, 19 (1968): 119-129.

structure just leads on to the question of what individual actions were responsible for that structure's development. For example, explanations of revolutions that emphasise the institutional and social conditions in which revolutions occur, can be superseded by individualist explanations by showing that institutional and social conditions are themselves consequences of the actions of earlier individuals. The existence of strong peasant organisations, for example, which holists emphasise as an important cause of the Russian Revolution, can be explained with reference to the laws that were instituted by individual political leaders. On this view, individualist explanations are rock bottom explanations.

However, this notion of rock bottom explanations can be successfully challenged. The fact that we can identify individual actions that created and shaped social institutions does not force us to accept individualism. The actions of historical individuals can themselves be explained by locating them in the social context in which they took place.⁴⁸ How we choose to explain a particular phenomenon will depend on pragmatic considerations. It has not been demonstrated that individualist explanations are always more informative.

The underlying reason for the popularity of methodological individualism is the incorrect assumption that our views about the ontology of society constrain how features of it are to be explained. For individualists, social institutions are just the products of individual actions. The institutions, and society in general, would not exist if the individuals did not. In other words, it is only the individual people that are ontologically basic. The best explanations, they think, must therefore be those that explain phenomena by identifying the individual actions that brought them about.

Those who make such an assumption are guilty of a similar mistake as some humanists who suggest that interpretation exhausts the explanation of human action.

⁴⁷ Rajeev Bhargava, *Individualism in Social Science* (Oxford: Clarendon Press, 1992).

⁴⁸ This point is made forcefully by Michael Taylor. He argues that "neither facts about individuals nor facts about social structures provide "rock bottom" or "ultimate" explanations". (Michael Taylor, 'Structure, Culture and Action in the Explanation of Social Change', *Politics and Society* 17 (1989)).

Humanists think that the social world is constituted by meaningful social objects and that, consequently, all attempts to explain aspects of it must involve attempts to understand those objects. Individualists think that the social world is the product of individuals and that, as a result, all attempts to explain in the social sciences must involve the identification of individual action. Neither position allows for a plurality of approaches.

5.3 Pluralism about explanation

In the foregoing sections it has repeatedly been suggested that philosophical models of the social sciences fail because they propose too monolithic an account of how inquiry about the social world does, and should, proceed. This is an error that has been made by many naturalists who concentrate on a single style of explanation at the expense of others, be it behaviourist, functionalist or explanation based on what is supposed to be universal human nature; as well as by humanists who are preoccupied with the interpretative dimension of the social sciences.

This tendency for philosophers to focus on a single explanatory strategy is perhaps the most damaging in the philosophy of social science. It leads to intractable arguments in which the advocates of each strategy feel compelled to dismiss one another's positions in order to defend their own. The causes of this unhappy state of affairs are complex. Certainly, political and ideological beliefs are involved. But perhaps the most consistent obstacle to a better understanding of the social sciences is the erroneous belief that all natural science conforms to a simple picture, with a prescribed set of methods and a single model of explanation; and the consequent supposition that the situation must be similar in the social sciences. In Chapter 4 this conception of the natural sciences was dismissed. The related conception of the social sciences must be rejected as well.

Not all philosophers have been prone to this tendency.⁴⁹ But frequently, even those who recognise the possibility of alternative explanatory strategies devote nearly all of their attention to just one. Mahajan, for example, who discusses a number of different types of explanation that have some role in the social sciences, thinks that a particular combination of narrative and interpretative techniques is by far the most important for the social sciences. Other kinds of approach, he says, are only of limited use.⁵⁰

Once we abandon the belief that there must be a single explanatory strategy in the social sciences, we can begin to appreciate fully the great advances that have been made in our knowledge of the social world through the adoption of various different approaches. Contrary to what has become the orthodoxy among humanist philosophers of social science, and the social scientists who share their theoretical framework, the study of the social world is not exhausted by interpretative inquiry in a way that makes it radically different from the study of the natural world. Indeed, there are several explanatory strategies that are shared by the natural and social sciences.

In this section I argue that there is an important role in the social sciences for two kinds of explanation in particular: causal explanation and functional explanation. I by no means intend to suggest that these are the only kinds of explanation pertinent to the social sciences, or that they are the most important. But they are significant in that they are frequently dismissed by humanists as being irrelevant to the social sciences, or of only having illusory value.

From what I said in 5.1, it should be clear that I defend a role for many explanatory strategies in the social sciences – including evolutionary explanations and rational choice explanations – so long as the limits of any single approach are recognised. In what follows, it

⁴⁹ See, for example, James Bohman, *New Philosophies of Social Science* (Cambridge: Polity Press, 1991), and Daniel Little, *Varieties of Social Explanation: an introduction to the philosophy of social science* (Oxford: Westview, 1991).

⁵⁰ Gurpreet Mahajan, *Explanation and Understanding in the Human Sciences* (Oxford: Oxford University Press, 1997, 2nd ed.), 98-100.

will also become clear that the role I see for causal and functional explanations is also limited.

Causal Explanation and Causal Modelling

Apart from the discovery of universal laws, the most common feature of the natural sciences that is singled out as being absent from the social sciences is the importance of the discovery of causes. In Chapter 2 I discussed the arguments put forward by humanist philosophers of social science, particularly those who have inherited Wittgenstein's philosophical legacy, about the differences between reasons and causes. The conclusion that is drawn by Winch, von Wright and others is that the explanation of human action cannot properly be described as a species of causal explanation. Or at least, if it is so described, we must guard against the scientistic assumption that such explanations are similar to causal explanations in the natural sciences. We do talk about someone's belief that x being the cause of her decision to do y but it is wrong to think that the relation between x and y is identical to the relation between two physical events one of which causes the other. And the process of inquiry required to discover someone's reasons for action is not that which is employed in science to discover the causes of an event. It is, rather, a process of interpretation.

I also considered, and rejected, what has probably, in recent years, been the most popular naturalist response to this humanist argument. Those who have invoked Davidson's philosophy of action, according to which reasons are indeed causes, as a way of reintroducing causation into the social sciences rely on a misreading of Davidson's position. They gloss over Davidson's distinction between causal relations and causal explanations and they ignore Davidson's own statements about the limited nature of explanations of behaviour.⁵¹

⁵¹ To recap, Davidson's alternative account of causal explanation does not offer a quick fix for the naturalist because, according to Davidson, in the case of human action, we are unable to identify nomological causal relations between reasons and actions described in intentional terms even though we know that, at the physical

Despite the problems with attempts to respond to the humanist argument about reasons and causes, I suggested in Chapter 2 that it is insufficient to demonstrate the irrelevance of causation to the social sciences. I will elaborate that claim here.

Underlying both the humanist argument and the Davidson-inspired naturalist response are faulty assumptions about what the social sciences would have to be like to be scientific. There are two assumptions in particular that lead philosophers to the erroneous conclusion that causes are unimportant for the social sciences: the accounts of causation and causal explanation that are employed; and the unnecessary concentration on explanations of individual action. By drawing on themes from Chapter 4, and what was said about methodological individualism above, I want to argue that both of these assumptions should be rejected.

On a strict regularity account of causation it might seem that there are indeed no causes to be discovered in the social world. Types of social event are not constantly conjoined.⁵² Nor does Mackie's popular account of causes as INUS conditions seem to offer much hope for identifying social causes.⁵³ Human beings, unlike inanimate objects, can always choose to break the rules that govern their behaviour. No set of social conditions, then, is strictly sufficient to bring about a particular event and, consequently, there are no social INUS conditions. On both of these analyses, though, the claim that it is impossible to find social causes of social phenomena is reliant on the fact that there are no universal social laws. Two events, *a* and *b* are said to be causally related when there is a universal causal law that links events of type *A* with events of type *B*. Causal explanation is achieved by invoking a causal law.

level, such relations must hold. The assumption that the natural sciences aim at a more rigorous type of causal explanation (i.e. explanations in which genuine causal relations are uncovered) still remains.

⁵² It is worth noting that, as Hoover points out, Hume did not let his regularity account of causation get in the way of the investigation of causal processes in the social world. Hume clearly distinguished between practice and philosophical curiosity. We may be ignorant of the necessary connection that links a cause and an effect but that does not prevent us from making successful causal inferences. See Kevin Hoover, *Causality in Macroeconomics* (Cambridge: Cambridge University Press, 2001).

⁵³ See John Mackie, 'The Direction of Causation', *Philosophical Review*, 75 (1966), 441-66.

However, the idea that scientists who are trying to discover the causes of some event are always looking for causal relations of this sort is quite wrong. As I argued in Chapter 4, causal explanations need not rely on the truth of universal laws. Recall Salmon's alternative account of scientific explanation according to which what we aim to discover are the *real causal processes* at work in the world.

It is also wrong to suppose that the only acceptable causal claims are those that relate events. Harré is right to point out that objects or things have causal powers as well as events.⁵⁴ Indeed, as Strawson suggests, it seems reasonable to suppose that it is from the experience of *objects* having causal power to affect us, and our own causal power to affect objects, that we develop our understanding of causation in the first place.⁵⁵ Hyman and Alvarez have defended a related account of agent causation in the philosophy of action which raises the possibility of two types of causal explanation. We can say that an agent caused an event without having to deny that every event that is caused must be caused by another event. "[T]he explanations of an event which we give when we identify the agent that caused it and the events that caused it are not competing explanations but complementary ones."⁵⁶

Recognising that there might be more to causation than a strict regularity account, focused purely on connections between events, is the first step towards seeing how there could, after all, be a role for causal explanation in the social sciences. The conception of agents causing events immediately makes causation seem less remote from the concerns of social scientists.

The second assumption behind the humanist argument can also be challenged. Some humanists give their position credibility by focusing especially on the explanation of

⁵⁴ Rom Harré, *The Principles of Scientific Thinking* (London: Macmillan, 1970), 5.

⁵⁵ Peter Strawson, *Analysis and Metaphysics: an introduction to philosophy* (Oxford: Oxford University Press, 1992).

⁵⁶ Maria Alvarez & John Hyman, 'Agents and their Actions', *Philosophy*, 73 (1998), 232. This account of agent causation must be distinguished from flawed earlier versions according to which 'agents cause their actions'. See, e.g. Richard Taylor, *Action and Purpose* (Englewood Cliffs: Prentice Hall, 1966).

individual actions which, they argue, involves a kind of interpretation. By concentrating almost exclusively on the particular reasons that motivate the actions of specific individuals, it does indeed seem that interpretation has a particularly important role.

It is clearly not the case in practice, though, that social scientists are always concerned with explaining phenomena in terms of the beliefs and desires of the individuals responsible.⁵⁷ And, as I argued above, we should not be persuaded by versions of methodological individualism according to which such explanations are *always* preferable. By questioning the tendency to emphasise explanations of individual action at the expense of more macroscopic phenomena, we open the way to giving more prominence to the discovery of causes in the social sciences.

* * *

How, then, can social scientists discover causes in the social world? One method is through the use of statistical data to produce models of causal systems. This method has been extensively elaborated in the ongoing programme developed by Spirtes, Glymour and Scheines (SGS for short) and in that of Pearl.⁵⁸ The rules for the discovery of causes that these programmes suggest have a similar status to the five canons that Mill stipulated for the discovery of causes. But whereas Mill associated the discovery of causes with the discovery of universal laws, SGS and Pearl think of causes along the lines suggested by Salmon: “causal relationships are ontological”.⁵⁹

A second major advance is that the rules for the inference of causes that SGS and Pearl elaborate are specifically designed for use on naturally occurring data. This makes them particularly useful for the social sciences where experimentation and the use of

⁵⁷ Merrilee Salmon makes a similar point. “Those who deny that there is a strong similarity between *reason* explanations of human action and explanations in physical science should remember that not all explanations in the social sciences appeal to laws connecting reasons (or dispositional properties such as fear) with actions.” (Merrilee Salmon, ‘Explanation in the Social Sciences’ in Kitcher & Salmon (eds.), *Scientific Explanation*, 399-400.)

⁵⁸ See Peter Spirtes, Clark Glymour & Richard Scheines, *Causation, Prediction and Search* (New York: Springer-Verlag, 1993), and Judea Pearl, *Causality: Models Reasoning, and Inference* (Cambridge: Cambridge University Press, 2000).

⁵⁹ Pearl, *Causality*, 25.

randomised control groups are difficult. Social scientists need alternative tools for dealing with interfering, exogenous causal factors. It is such tools that SGS and Pearl provide.

The graphs that SGS and Pearl produce to model the connections between the variables of a system are based on relations of statistical dependence and independence. Some critics have suggested that it is highly questionable as to whether such relations can warrant the attribution of causal connections. Humphreys points to an example used by SGS as a demonstration of the power of their computer programme⁶⁰ based on the scores of candidates sitting a number of different tests. The programme successfully picked out which of the individual tests are genuine components of the United States Armed Forces Qualification Test (AFQT) and which are not, despite the fact that there are strong correlations between performances in some of the non-component tests and overall AFQT score. Humphreys is unhappy with the assessment that what the diagram that is produced represents is a *causal* structure. Those tests whose scores go towards the calculation of the overall AFQT score are *constituents* of it, not causes. In general, Humphreys wants to say that the graphs produced by the SGS and Pearl methods are not representations of causal relations, but are devices for representing “epistemic dependency relations”.⁶¹

Humphrey’s point has some justification. But SGS and Pearl are not really guilty of making the rash assumptions that his criticism seems to attribute to them. They accept that the methods that they describe require prior intuitive understanding of the concept of causation if they are to be of any value. Such understanding is required not only to discriminate between causal relations and relations of other types but also, in many cases, to choose between different graphs that the algorithm suggests.

SGS and Pearl are also open about other assumptions that are required for inferring causal connections. These include the Causal Markov Assumption: a variable *X* is

⁶⁰ A crucial part of the project is to develop computer programmes that can untangle the causal connections from complex data sets.

independent of every other variable (except X 's effects) conditional on all of its direct causes; the Faithfulness Assumption: all independence relations in a population are a consequence of the Causal Markov condition⁶²; and the Causal Sufficiency Assumption: the set of *measured* variables M include all the common causes of pairs of M .

What we have, then, are powerful statistical methods for inferring and representing causal relations from naturally occurring data, but methods which rely on an intuitive concept of causation. It might be objected that this makes SGS and Pearl's methods unacceptable. However, it is incumbent upon those who want to rule out such causal analyses from the social sciences to justify the claim that our intuitive understanding of causation is inadmissible.

The obvious way to attempt to do this is to argue that in the natural sciences we can discover causal connections by observing constant conjunctions between different types of events. The causal systems discovered using statistical methods would then seem like poor relations of genuinely scientific causal explanation. As we have seen, though, this conception of the natural sciences is far from being generally accurate. That we are limited to searching for inexact causal mechanisms is not a consequence of the backwardness of the social sciences. And it does not imply that we should abandon the search for social causes in favour of an approach dominated by the interpretation of meanings.

* * *

Of course, not all explanations in the social sciences are based on statistical analyses of the type that SGS and Pearl have developed. In history and political science we are often concerned with individual events rather than sociological trends. Humanists might argue, then, that the scope for causal explanations in the social sciences is rather limited. Of course, even this would involve a significant admission for those humanists who suggest that the

⁶¹ Paul Humphreys, 'A Critical Appraisal of Causal Discovery Algorithms', in Vaughn McKim & Stephen Turner (eds.), *Causality in Crisis: Statistical Methods and the Search for Causal Knowledge in the Social Sciences* (Notre Dame: University of Notre Dame Press, 1997), 251.

social sciences are exhausted by attempts to interpret meaningful social objects. And it is a crucial element of the limited naturalism which I advocate that a whole range of explanatory strategies are employed in the social sciences, including the strategy of interpreting agents' reasons for action. But I also want to suggest that there are other uses of causal explanation in the social sciences, beyond the modelling of causal processes through statistical analysis.

The concept of agent causation provides a philosophical basis for other causal explanations of social events. Humanists correctly point out that identifying people's reasons for action is a different task from identifying the causes of physical events. But that doesn't mean that intentional actions, and the agents who perform them, can have no place in causal explanations. I argued in section 5.1 that there is nothing wrong in principle with accounts of social phenomena that ignore the conscious experiences of the people involved. In some circumstances, we do want to know the beliefs and desires of individual social actors. But in other situations we are just interested in the effects of what agents do.

Psephologists, for example, are interested in the effect of voting systems and voters' decisions on election outcomes. They are not, in general, principally concerned with the reasons that voters have for casting their votes in a particular way. In a psephological explanation of an election result, the actions of voters are crucial causal factors.

In history, too, we might sometimes be interested just in the consequences of an individual's actions, or her decisions, without caring a great deal about her motivation. Peel's decision to force through repeal of the Corn Laws in 1842, for example, had profound and complicated effects on both the British economy and the political parties, most of which were wholly unintentional. Some historians are interested in the reasons for Peel's decision and what he hoped repeal would achieve. But such issues are not exhaustive of historical inquiry.

⁶² This assumption rules out the possibility that statistical independence is a coincidence resulting from contrary causes precisely balancing each other out.

Functional Explanation

Rejecting the view that all explanations in the social sciences must conform to a single model also leaves the way clear for a more positive assessment of the role that functional explanations can play in the social sciences. Functional explanations have tended to be held in ill repute. Their value has been cast into doubt for a number of reasons. First, there is the suspicion that functional explanations involve a commitment to teleological ideas, which have long been considered inadmissible in any scientific enterprise. Secondly, it is objected that functional explanations are unsatisfactory because they propose to explain events by citing their effects. Thirdly, critics complain that the explananda of functional explanations can never be deduced, or even rendered probable, by the proposed explanations. Fourthly, functional explanations are mistrusted because it is thought that they rely on what are taken to be dubious concepts like social survival or social success. And, lastly, it is suggested that, even if we can recast functional explanations in a way that exonerates them of these other failings, their role is purely heuristic; that they merely stand as place-markers, waiting to be replaced by more complete mechanistic explanations. I shall argue that none of these criticisms is justified; at least not to the extent that we should altogether reject functional explanations.

The accusation that functional explanations necessarily involve a commitment to a teleological view of society can easily be refuted. Whilst it is true that many functionalist sociologists in the past did subscribe to organic models of society in which the different elements of the social system were taken to be the different aspects of a co-ordinated design, no such view is necessary. That a property of a social system, or the occurrence of a practice, is functional for the smooth running and continued existence of the society in question does not imply that it has been purposively designed to fulfil that function.

We can also absolve functional explanations from the charge that they propose to explain events and states of affairs simply by citing their effects. As Hempel noted, and as

Cohen has elaborated, we can analyse functional explanations as disposition or consequence explanations. That is, as explanations in which “a dispositional fact explains the incidence of the property (or event-type) mentioned in the antecedent of the hypothetical specifying the disposition”.⁶³ In the classic example of the Hopi rain dance, we explain the persistence of the ritual not just by pointing to the effects of the dance’s occurrence – the reinforcement of community ties and the preservation of society – but by pointing to the dispositional fact that the dance has those effects. We say that the dance occurs because it has the effects that it has.

In a typical functional explanation, then, a social practice or event is explained by the fact that its occurrence contributes towards the stability of the social system and, hence, towards its own continuation or repetition. But functional explanations involve more than the claim that there is a positive feedback loop. Any practice or event-type that is involved in a self-reinforcing feedback loop can be explained in terms of its previous occurrences, including non-functional and dysfunctional practices. For example, the tendency of parents to drive their children to school because they are concerned about traffic danger is potentially self-reinforcing. The fact that a number of parents drove their children to school at t_0 might have brought about the conditions in which parents will decide to drive their children to school at t_1 . What is special about functional explanations, on the dispositional analysis, is that the occurrence of the practice *at* t_0 is explained by the disposition.

This analysis helps to counter the initial objection that functional explanations proceed simply by citing effects, but it raises other significant questions. For Cohen, functional explanations are not incompatible with other kinds of explanation. Where we have a functional explanation of an event or practice, we can ask further questions about why it is that the practice has the consequences that it has. We can try to find out what the mechanism is. In the case of some non-social functional explanations, it is easy to identify mechanisms.

⁶³ Gerry Cohen, *Karl Marx’s Theory of History – A Defence* (Oxford: Clarendon Press, 1979), 263. Carl Hempel, ‘The Logic of Functional Analysis’, in *Aspects of Scientific Explanation and Other Essays in the*

Central heating systems have functional dispositions to maintain a constant temperature because they are designed for that purpose. Functional explanations of animal behaviour can be backed up by evolutionary accounts of how they developed. In the social sciences, identifying mechanisms is more difficult.

The third strand of criticism is that functional explanations fail as deductions of their explananda, and as attempts to make them seem probable. It is claimed that there are always alternatives to any functional practice or institution. No functional explanation can explain why any *particular* practice is performed, rather than one of the numerous potential alternatives. It should be clear from what was said in Chapter 4, however, that neither deductive validity nor the high probability of the explanandum is a necessary condition for successful explanation. It is also worth pointing out that the value of functional explanations is not overturned by the insight that other forms of explanation might be required to explain the development of particular social practices. The fact that the functional explanation of the Hopi rain dance does not account for specific details does not provide grounds for rejecting it (and functional explanations generally) as valueless. Of course, different explanatory strategies might be brought to bear on a single phenomenon. As I have been arguing, there is not a single explanatory model for the social sciences.

However, whilst this analysis provides the basis of a defence of functional explanations against the first three types of criticism outlined above, we still require responses to the other objections. Indeed, if anything, it makes these objections seem more pertinent. We have seen that many functional explanations do indeed rely on notions like the persistence of a society. And if functional explanations are to be deemed entirely compatible with other kinds of explanation we might wonder whether we need functional explanations at all.

On the second of these points, Salmon and Cohen make insightful remarks. Salmon argues that in biology, whilst it might turn out to be the case that all functional explanations could be replaced by physical or chemical explanations, we cannot currently be sure that that is the case. It would be perverse, he thinks, to abandon functional explanations because of this possibility.⁶⁴ We can make a similar point for the social sciences. Cohen asserts that “we may have good reason for thinking that a functional explanation is true even where we are at a loss to conjecture by what means or mechanism the functional fact achieves an explanatory role”.⁶⁵ In any case, even where we do know the mechanism that underlies a functional explanation, we might sometimes prefer the functional account for pragmatic reasons.

Turning to the problem of how we are to define survival or persistence, it is instructive to consider how such terms are defined in biology where functional explanations are widely used. It appears relatively straightforward to determine what it is for a species to survive or for a physiological trait to become accentuated. It is a matter of fact that dodos are extinct and that giant pandas are not. With societies, though, things are a lot more complex. Obviously, we cannot say that the ancient Greek society has survived because there are many descendants of ancient Greeks alive today.

Social survival depends on the survival of institutions and customs. In some cases, we are confident about saying that institutions have survived, or that they have become extinct. Many institutions and customs in Britain – from the courts system to the custom of celebrating birthdays – have survived over long periods of time. Others, such as the British Empire and privately owned banks, have not. There are also cases where we can say confidently that an institution has grown stronger or weaker. For example, the union movement has clearly declined in the UK over the last 25 years, as demonstrated by the reduction in union membership from 13.2 million in 1979 to 7.4 million in 2003.

⁶⁴ Wesley Salmon, ‘Comets, Pollen, and Dreams: Some Reflections on Scientific Explanation’, in *Causality and Explanation*.

⁶⁵ Cohen, *Karl Marx’s Theory of History*, 266

Other cases, unfortunately, are not so straightforward. Customs and institutions can evolve gradually over time. And there can be ambiguities about when an institution was created. Should we say, for example, that the political institutions of France have only existed since 1958 when the 5th Republic was established? Or are the current institutions similar enough to those from the earlier republics for us to say that they have continued to exist over a much longer period?

In this type of case, it seems that we need the kind of understanding suggested by humanists. We have to interpret the meaning of customs and institutions, including the meanings attributed to them by participants. This categorically does not indicate that interpretation dominates inquiry in the social sciences. Or that functional explanations are devalued. It shows, rather, that the social sciences can and must incorporate a mixture of approaches and explanatory strategies.

The use of functional explanations is widespread in the social sciences, even in works whose authors profess a commitment to the interpretative approach. Returning to Descola's account of the Achuar, it is easy to find numerous functional explanations. For example, the practice of trading native goods with members of other Jivaro tribes is explained because of its function in preserving relations of mutual dependence between distant *amik*.⁶⁶ Rituals that strengthen group identity are also functionally explained.⁶⁷ Accounting for the variations between different versions of these rituals requires a different kind of explanation but their occurrence can be explained in terms of the disposition that they have to promote social stability.

Functional explanations are also employed by Foucault to explain the development of practices of punishment.⁶⁸ In different contexts, Foucault contends, different systems for dealing with law-breakers are required. The system that developed in Europe under the

⁶⁶ Descola, *The Spears of Twilight: Life and Death in the Amazon Jungle*, 160.

⁶⁷ *Ibid.* 313-4.

⁶⁸ Michael Foucault, *Discipline and Punish – The Birth of the Prison*, (1st pub. French 1975), trans. A. Sheridan, (London: Allen Lane, 1977).

Ancien Regime had the function of reasserting the power of the monarch in public displays of retributive violence. In capitalist society, though, this system became dysfunctional and a new one was required. Foucault does consider some of the legislative changes that brought about change but in the main, what he provides, is a functional explanation of the modern system of punishment. The institutions we have, he thinks, reinforce the conditions that are required for the maintenance of capitalist society.

5.4 Realism and Anti-realism in the Social Sciences

In Chapter 4, I surveyed the ongoing debate between realists and anti-realists in the philosophy of science. I suggested that there was no prospect of a decisive and complete victory for either side. Nevertheless, there are some important lessons to be learnt. First, it is not a necessary condition for a theory to be successful that it be true. False theories can be of explanatory value and they can lead to successful predictions. Secondly, the burden of proof in the debate seems to vary depending on which area of the natural sciences is under consideration. Anti-realism about superstrings is a lot easier to accept than anti-realism about blood cells. This suggests the possibility of maintaining a realist attitude towards theories in some fields and an anti-realist attitude towards those in others. In addition, a corresponding point can be made about the aims of science. It may be that in some cases discovery of the truth is an aim of scientific research but not in other cases.

A similar diversity of attitudes towards realism is also noticeable in the social sciences. There are certainly some good theories that are false. We have already seen that the power of rational choice theory for explaining and predicting behaviour is not a consequence of it providing a true account of individual decision-making processes. The conception of *homo economicus* is an example of a Weberian ideal-type. That is, it is a theoretical construction that is developed by abstraction from the experience of real individuals. It does

not accurately describe any actual individual because real people are always influenced by a number of different considerations, not just those of economic maximisation.

In other areas, social scientists are more realistically inclined. Lloyd, who explicitly rejects the DN-model of explanation, argues that what we seek in social history is knowledge of the *real mechanisms* that underlie events and states of affairs.⁶⁹ Trout insists that the psychological phenomena that we can measure in the social sciences are real.⁷⁰ Realism about such phenomena, he thinks, is the only way in which we can make sense of claims that one measurement is more accurate than another. It is also suggested by the fact that different methods are available for measuring single values in the social sciences.

We should not assume that the tendency to take a realistic or anti-realistic attitude varies simply according to which social science is under consideration. Dugger distinguishes two approaches to economics with different associated ideas about the importance of realism. Institutionalist economists, he suggests, are keen for their accounts of the institutional context of economic activity to be as realistic as possible. Neoclassical economists are more interested in the predictive power of models and theories than whether they present a realistic account of economic behaviour.⁷¹ Similarly, in sociological studies of bureaucracies, some accounts seek to provide a detailed and realistic account of the structure of particular bureaucracies; others attempt to develop a more generalised, idealistic model.

The variation in attitudes about the truth, or otherwise, of models in the social sciences suggests that they share the same kind of diversity of approaches as the natural sciences. In different situations, social scientists use different explanatory strategies to enhance understanding and knowledge about the social world. Philosophical accounts which suggest a single approach, be it the interpretative approach favoured by humanists, or one of the many explanatory models that have received widespread popularity at one time or

⁶⁹ Christopher Lloyd, *Explanation in Social History* (Oxford: Basil Blackwell, 1986), 70.

⁷⁰ Trout, *Measuring the Intentional World: Realism, Naturalism, and Quantitative Methods in the Behavioural Sciences*.

another, do not leave sufficient room to allow for this diversity. The prospect for far-reaching advances in our knowledge about the social world is, once again, better served by a more pluralistic approach.

5.5 What kind of pluralism?

The limited naturalism that I advocate, then, is one which recognises the need for pluralism about different types of explanation. No single explanatory model has sufficient scope to provide naturalists with a straightforward way to demonstrate the scientific status of the social sciences. Evolutionary explanations can enlighten us about some aspects of human behaviour, as can functionalist explanations, rational choice explanations, and so on. But attempts to extend the application of a single type of explanation beyond a narrow range of phenomena invariably result in problems. Limited naturalism also calls for pluralism about the epistemic status of the models that are employed.

But what kind of pluralism is this? It is not equivalent to the pluralism about artistic interpretation suggested by advocates of conceptions (5) and (6) in Chapter 1. According to those conceptions, a single work of art could be subject to multiple interpretations, including interpretations that are incompatible but simultaneously acceptable. Even limited naturalists cannot abide incompatible explanations in the social sciences.

It is closer to the pluralism I advocated about different *types* of interpretation of works of art. I argued in Chapter 1 that there can be more than one interesting approach to take in relation to an artwork. Some interpreters try to uncover the artist's intentions; others consider audience responses; others still investigate the relations between individual works. I want to say something similar about the social sciences: social phenomena can be subjected to different kinds of investigation. For example, a ritual practice might be explained functionally, or in terms of its historical development. The position isn't precisely analogous,

⁷¹ William Dugger, 'Methodological Differences between Institutional and Neoclassical Economics', *Journal of Economic Issues*, 13 (1979), 899-909.

though, because in the social sciences the range of approaches that are appropriate in any particular situation is more limited. The situation is more accurately described as one where the social scientist has to look for the right set of tools for the job.

There are similarities between this pluralism and the situation in the natural sciences. In Chapter 4 I suggested that, with no consensus around a single theory of scientific explanation, it might be best to adopt a pluralistic attitude. Identifying causal processes might be the goal of some scientific explanations, but it would be unwise to rule out explanations which didn't uncover causes as unscientific. Ruben thinks there is at least one kind of explanation, routinely employed in the natural sciences, which cannot be analysed as a species of causal explanations. In some cases, we can explain a feature or property of an object by asserting an identity relation between the object under different descriptions.⁷² So, for example, we can explain why ice is water by pointing to the fact that it is H₂O; or that the temperature of a gas has risen on the grounds that the mean kinetic energy of its constituent molecules has increased. It is not that the chemical structure *causes* the ice to be water, or that the increased mean kinetic energy *causes* the rise in temperature. Rather, it is the identity between H₂O and water, and between temperature and mean kinetic energy, which makes such statements explanatory.

Ruben also thinks that there might be other kinds of non-causal explanation, though he remains uncommitted. These include explanations based on the dispositions of objects and supervenience explanations. Like Ruben, I do not intend to make any assertions about the independence, or otherwise, of any one of these kinds of explanation. Suffice it to say that scientific explanations are not unambiguously uniform. The same is true of the social sciences.

Again, though, we should be careful not to stretch this analogy too far. The debate about theories of explanation in the natural sciences is almost wholly focused on the question

⁷² Ruben, *Explaining Explanation* (London: Routledge, 1990), 218ff.

of what it is that makes explanations explanatory. There is not a great deal of disagreement about whether any particular putative explanation is explanatory or not.⁷³ In the social sciences, the situation is different. Individual explanations, and whole theoretical programmes, are contested. Some critics of evolutionary psychology, for example, deny that it has any relevance at all to the social sciences.⁷⁴ This further kind of dispute is in part a consequence of the fact that there is more overlap between theorists and practitioners of social science than between philosophers of science and scientists themselves. The people who conduct social research are, in many cases, the same people who debate about its philosophical foundations.

Another important difference is that the social sciences do indeed involve interpretation in a way in which the natural sciences do not. It is an important explanatory strategy. Actually, it might be better to say that there are several important strategies which are referred to as ‘interpretation’. In this chapter, I have tended to treat it as a single uniform approach. But from what was said in Chapter 2, it should be clear that there are several distinct (but related) approaches.

One interpretative endeavour is the attempt to uncover individuals’ reasons for action. This undoubtedly involves understanding something about the cultural contexts in which the actors are situated, but more importantly it requires knowledge of the particular individuals’ characteristics: what beliefs and desires they have; their conception of the good; what makes them tick. This type of interpretative investigation can be carried out even on people from one’s own society. Another type involves trying to grasp the social conventions of an alien culture. And historical interpretation – uncovering the significance of surviving documents and artefacts – is a different process again.

Admitting a role for interpretation, though, does not detract from my central point. Even if we accept that all of these kinds of interpretation are employed by social scientists,

⁷³ Except for those who insist that only deductively valid explanations are genuinely explanatory.

that still leaves plenty of room for other kinds of explanation as well, many of which do share features in common with the kinds of explanation routinely employed by natural scientists.

⁷⁴ See, for example, John Dupré, *Human Nature and the Limits of Science* (Oxford: OUP, 2001). Dupré describes evolutionary psychology as ‘worthless’ (p. 70).

Conclusion

One way to think about the debate between naturalists and humanists in the philosophy of social science is in terms of contrasting attitudes towards abstraction. Our understanding of the natural world, and our control over it, is enhanced by our ability to recognise patterns and to abstract from the multitude of details which crowd our experiences of it. Naturalists want the social sciences to mirror the natural sciences in this respect. Humanists argue that abstraction in the social sciences is misguided.

For humanists, the details of individual cultures, and individual lives, are what are important about the social world. Any approach that tries to marginalise specific details seems, to them, to be wrong-headed. Hence, humanists are sceptical about the value of rational choice theory, where individual decisions are explained and predicted in terms of an abstract model of human behaviour. And they have little or no regard for functional explanations of ritual practices which pay more attention to the fact that the rituals are performed than to any details about them.

Many – possibly most – naturalists inadvertently antagonise humanists because they suggest that their abstract models have the power to transform the way we think about all aspects of the social world. For example, evolutionary psychologists do not think that their approach, based on the model of man as the inheritor of psychological mechanisms which evolved during the Pleistocene, complements humanist approaches that focus on the specific details of individual cultures. Instead, they think it supersedes them. It is hailed as a dramatic advance which allows us to explain human behaviour scientifically, whereas before we were dabbling around in the dark.

It is extremely regrettable that the debate has become polarised in this way. The moderate view, that the social sciences should involve a variety of approaches, sometimes considering individual details and sometimes abstracting from them, is rarely heard.¹ Yet this is, on the face of it, a very attractive view. We should demand a strong argument before we reject it.

Taming the analogy between interpretation in the arts and interpretation in the social sciences

In philosophy, we should be cautious about arguments based on analogies. The insight that two types of object, or two types of activity, share features in common is not sufficient to warrant the conclusion that all of the concepts and theories which are known to apply to the first kind of object can unproblematically be brought to bear on objects of the second kind.

Such caution is required in respect of the analogy between interpretation in the arts and interpretation in the social sciences; particularly so, because the consequences of the proposed analogy are potentially far-reaching. In a general way, humanists hope that pointing to connections between the study of artworks and the study of social objects encourages the thought that the social sciences should be demarcated from the natural sciences. More specifically, they argue that the subjectivity of interpretation introduces an essential element to the social sciences which is incompatible with objective or scientific approaches.

The more general humanist point can be accepted without abandoning the moderate view described above. There are indeed similarities between both the objects of study in the arts and the social sciences; and some of the ways of interpreting them. Both artworks and social objects are the product of intentional action. And both are situated within a cultural context of shared meanings and conventions. The task of interpreting a person's reason for

¹ This lack of moderation is particularly prevalent in the philosophical and theoretical literature. Social scientists themselves frequently do (of course) adopt a mixed approach. I consider below an example –

performing a social action is similar to the task of interpreting an artist's intentions in producing a particular work. And identifying how the original audience would have understood Shakespearian drama is not disconnected from identifying how the Elizabethan public would have responded to social events.

However, we are not faced with a choice of placing the social sciences wholly within one of the two cultures of arts and sciences. The similarities between some social science and the study of artworks are matched by similarities between other areas of social inquiry and the natural sciences. For example, the use of statistical data to uncover causal processes is a method shared by sociology and epidemiology. And, though I have criticised the overstatement of their scope, evolutionary explanations extend beyond biology into areas of the social sciences.

The second, more specific humanist argument poses a greater challenge to the moderate view. By drawing the analogy with interpretation in the arts, humanists try to demonstrate that scientific approaches in the social sciences can't get off the ground. The process of interpretation, they argue, is never-ending.

My principal aim has been to show that the analogy is not strong enough to support this conclusion. The argument is not straightforward because it is difficult to pin down a definition of interpretation in the arts. The five conceptions of meaning and interpretation that I described in Chapter 1 (and their various sub-conceptions) could, in principle, be extended further. What seems clear, though, is that the conception of interpretation which humanists have in mind, when they run their anti-naturalist argument, must leave open the possibility of multiple interpretations of a single object. They want to invoke the analogy to suggest that the social sciences are subject to something like reader response theory, according to which the meaning of a work is (partially) dependent on the interpreter's

Putnam's account of the quality of government in Italy's regions – which uses such an approach to great effect.

perspective. Unfortunately for humanists, the analogy is much more difficult to justify with this conception in mind than with other conceptions.

In exemplary cases of interpretative social science, it does not seem natural to say that two incompatible interpretations could be just as good as one another. Of course, different social scientists might emphasise different features of a social object. But that is not enough for the analogy to hold. For example, if an anthropologist presented an interpretation of the betting practices of spectators at a Balinese cockfight which was incompatible with Geertz's, we would not be inclined simply to shrug our shoulders and put the inconsistency down to the plurality of possible interpretations. We would want to investigate further to find out which interpretation was correct.

In the absence of a compelling argument for a strong analogy, the way is left open for a limited form of naturalism. The arguments put forward by Wittgenstein and Taylor, which suggest that the knowledge gained from naturalistic approaches in the social sciences is banal, should not be allowed to detract from the genuinely enlightening work produced by social sciences who employ just such approaches.

The mixed approach: an example

I finish by considering an example of the mixed approach that I advocate: Putnam's account of the varying success of regional government in Italy.²

Putnam's book traces the introduction and development of the new tier of regional government which was established in 1970. He seeks to explain why the experiences of citizens in different parts of Italy have been so uneven in respect of their regional governments. And, following on from this study, he asks the more general question: why do some democratic governments succeed where others fail?

² Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton: Princeton University Press, 1993).

Putnam begins by making some impressionistic remarks about his experiences of travelling through Italy. He describes the day-long drive from Seveso in northern Italy to Pietrapertosa in the south. This journey, he says, “is less impressive for the distance spanned than for the historical contrasts between the point of departure and the destination.”³ He goes on to describe the “dingy” anteroom in Puglia’s regional government headquarters in Bari and the “indolent functionaries” who are to be found there. They contrast dramatically with the “courteous receptionist” at the corresponding building in Bologna, which is compared with the offices of a “modern, hi-tech firm”.⁴

This fits well with the humanist conception of how to do social science. Attention to detail and attempts to relate the experiences of Italian citizens are, for humanists, the order of the day. An interpretative approach is also employed later in Putnam’s account when he comes to explain regional variation. He emphasises the importance of feeling a sense of civic attachment and he discusses the role that specific kinds of civic societies play in Italian life, in both the present day and in the past.

However, Putnam is not satisfied with a purely interpretative approach. He sets a high score by the greater understanding that can be achieved through quantitative analysis.

Social science ... reminds us of the difference between insight and evidence. Our contrasting impressions of governance in Bari and Bologna, no matter how keen, must be confirmed, and our theoretical speculations disciplined by careful counting. Quantitative techniques can warn when our impressions, rooted in a single striking case or two, are misleading or unrepresentative. Equally important, statistical analysis, by enabling us to compare many different cases at once, often reveals more subtle, but important patterns, much as a pointilist painting by Seurat can best be appreciated by stepping back from the canvas.⁵

In line with this outlook, Putnam develops a complex measure of institutional performance. He combines twelve separate indicators, ranging from the promptness with which regional governments present their annual budgets to the number of day centres created as part of a

³ *Ibid.* 4.

⁴ *Ibid.* 5.

⁵ *Ibid.* 12.

national drive to improve childcare, in order to ensure that no single issue is given too much weight.⁶ Using this measure, Putnam is able to investigate what social factors influence institutional success. By employing similar techniques to those championed by Pearl and SGS, Putnam is able to draw a powerful conclusion: “By far the most important factor in explaining good government is the degree to which social and political life in a region approximates to the ideal of the civic community.”⁷

Again, when it comes to defining ‘civic-ness’ Putnam is not satisfied by impressionistic accounts based on personal experiences in the different regions. He constructs another complex measure; what he calls a ‘Civic Community Index’. This incorporates data on the number of civic associations in a region with newspaper readership figures, turnout in national referendums and the incidence of preference voting in general elections.⁸ By combining these four different measures, he is able to reduce the risk of being misled by a single indicator.

In tracing the roots of civic traditions, Putnam also attributes causal influence to the actions of individual historical figures and to specific historical events. The constitution for Sicily, issued by Frederick II in 1231, is singled out as being particularly important, not just because of its significance at the time but because of the effects it had on the development of the region in the following centuries.⁹ The social consequences of the Black Death are also emphasised.¹⁰ Here, then, are examples of a different kind of causal explanation; not based on a statistical analysis, but based on the study of the (unintentional) consequences of individual action and demographic change.

The benefits of Putnam’s mixed approach are significant. His statistical analysis reveals that civic engagement is more important than economic factors when it comes to

⁶ Putnam also compares the data on institutional performance with survey data on levels of satisfaction with regional government among citizens. There is a strong correlation between the two.

⁷ *Ibid.* 120. Importantly, ‘civic-ness’ provides a much more powerful explanation of success than does economic development, levels of education or social stability.

⁸ In Italy, voters have a choice of voting for a party list in general elections or identifying a preferred candidate.

⁹ *Ibid.* 122-4.

explaining success and failure in Italian regional government (though economic indicators are correlated with government success). And by considering a broad range of indicators, he is able to demonstrate that his findings are not limited to striking, but exceptional, individual cases. At the same time, though, he is able to interpret the experiences of Italian citizens to readers who have no first-hand experience of Italian politics or Italian culture. The result is a compelling demonstration of the advantages of studying the social world in a way that does not privilege a single theoretical approach.

* * *

It is my contention that this kind of mixed approach underlies a great deal of successful work in the social sciences. Putnam is explicit about his adoption of a range of methods. But in many cases, different methods and types of explanation are employed unconsciously, or at least undeliberately. The use of functional explanation which can be found in Descola's account of the Achuar is an example of this.¹¹

In other cases, social scientists employ a variety of methods and present a range of explanations even though their official position is that the social sciences are dominated or exhausted by interpretation. Geertz, who in some places suggests that the truth of anthropological accounts is less important than their literary qualities¹², nevertheless seeks to back up his assertions with data. Even in his most famous essay – a classic of interpretative social science – we find a statistical analysis of the cockfights he witnessed (albeit a very simple one).

Of the fifty-seven matches for which I have exact and reliable data on the center bet, the range is from fifteen ringgits to five hundred, with a mean at eighty-five and with the distribution being rather noticeably trimodal: small fights (15 ringgits either side of 35) accounting for about 45 per cent of the total number; medium ones (20 ringgits either side of 70) for about 25 per cent; and large (75 ringgits either side of 175) for about 20 per cent, with a few very small and very large ones out at the extremes.¹³

¹⁰ *Ibid.* 131.

¹¹ See 5.3

¹² Geertz, *Works and Lives: The Anthropologist as Author* (Stanford: Stanford University Press, 1988), 63-4.

¹³ Geertz, 'Deep Play: Notes on the Balinese Cockfight', 426.

The same point can also be made about Foucault.¹⁴

Of course, particular pieces of work in the social sciences should not automatically be disparaged because they contain a single style of analysis. And individual social scientists should not necessarily be criticised because they concentrate on a single approach. In many cases, numerous social scientists individually contribute different, but complementary, strands of analysis. What is particularly striking about Putnam is the variety of evidence that he draws on, and the range of explanations that he presents, within a single book.

Concentrating on a single approach only becomes damaging when it is pursued to the principled exclusion of other approaches. It is when evolutionary psychologists suggest that theirs is the only way in which we can explain human and social attributes that we should object, and stand up for the mixed approach; or when humanists insist that the social sciences are exhausted by interpretation.

¹⁴ See 5.3

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