

# Is Psychology Science?

Peter Rickman tells us why it isn't

I was slightly taken aback when I heard a speaker at a psychology lecture meeting claiming confidently that psychology was a science. Of course, if we define science broadly, as the systematic search for knowledge, psychology would qualify for that label. But it is not terminology that is at issue here, but a matter of substantial importance.

When we talk of science, we primarily think of physical science. If a mother said that her son was studying science at Cambridge, would psychology come first to the listener's mind? The paradigm of the physical sciences is physics, because its elegant theories based on ample observation and experimentation provide clear explanations and reliable predictions. It also provides the foundations for the technologies which have transformed our lives. The man on the Clapham bus may not understand the laws of physics, but he happily relies on the means of transport based on those laws.

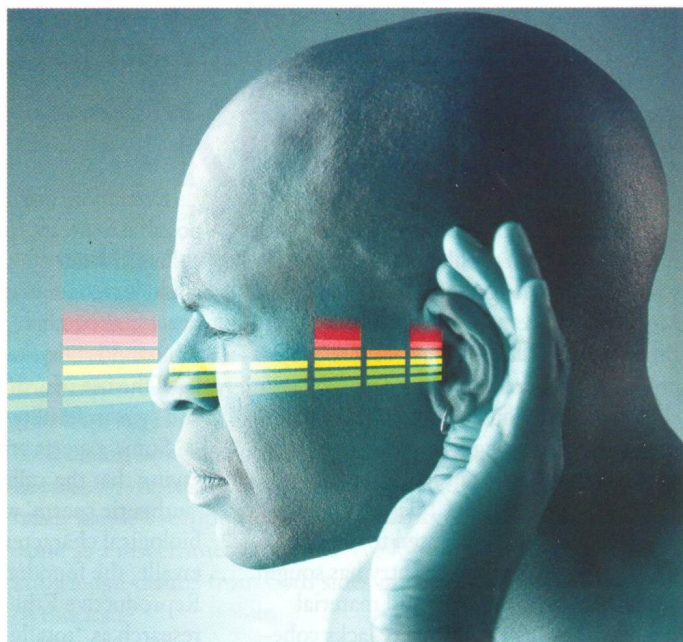
In consequence, the methods of physics become the model of scientific methodology. The different disciplines concerned with the study of humanity, such as psychology, sociology and anthropology, seem to fall woefully short of this. The concepts and theories of these disciplines are not consistently coordinated; and their application does not compare with that of physical sciences. While aeroplanes are pretty reliable, and millions of people enjoy television programmes, there are still too many divorces and mental breakdowns. Groups of violent youths still roam the city streets.

## Unobservable Truths

Many students of the mind sought the remedy for their failures and their lack of public esteem in modelling the methods of psychology on the physical sciences. An extreme example of this is *behaviourism*. Why not focus on studying observable human behaviour, as you can study the movements of falling bodies and theorise on that evidence? After all, humans are behaving bodies. There are various flaws in this approach, and one of them is illustrated by a well-targeted joke. Two behaviourists spend a night passionately making love. In the morning, one says to the other, "It was good for you. How was it for me?"

A proper starting point is to recognise the disciplines which study human nature as a distinct group which require, if not a complete alternative to the scientific method, at least some essential supplementary methodology.

The fact is that the bulk of the evidence given to the student of humanity on which to theorise, are not *observable facts*, but *communications*. These do not correspond to anything observable. In other words, what is in front of the psychologist are statements from interviews or completed questionnaires (eg, I am afraid of dying, I was abused in childhood, etc), responses to tests such as the Rorschach pictures, diaries, and the like. Similarly, sociologists use interviews, questionnaires and legal documents, while historians use biographies, letters, inscriptions on gravestones, eyewitness accounts of battles and revolutions and similar material. The same is true of other human



studies such as social anthropology or politics.

All this is pretty obvious and non-controversial. It needs mentioning because of widespread error of taking what is communicated in this material as simple data whose meaning is transparent. What is thus ignored is the immense complexity of the process of communication. For instance, the question, as well as the answers, may be misunderstood, or respondents may be lying to please the questioner, motivated by pride or shame or simply by wanting to get rid of the questioner. A lady confessed to me that when canvassers of different parties come to the door at election time, she says to all of them, "Yes I shall vote for you," and closes the door. Or, if a stranger rings your doorbell and asks you how often you have sex, will you necessarily tell him the truth? Certainly, commercial companies have been the loser when trying to sell goods because of so many people trying to be liked when answering their questionnaires.

An anecdote I quoted in one of my books illustrates one type of miscommunication. An investigator was puzzled when a man in prison answered 'no' to the questionnaire query 'Were you ever in trouble with the police?' He went to see the man and asked: "How come you gave that answer? After all, you are serving a prison sentence." The man answered: "Oh, I thought you meant *trouble*."

A case of partial failure in understanding is the famous study of the Authoritarian Personality, which successfully demonstrated some personality traits of fascists. It was later shown that the characteristics pinpointed were not confined to fascists, but also shared by members of left-wing parties. Here the interpretation of the data was flawed by political naïveté.

It follows that the human studies cannot naïvely ape physical science. If they don't want to resign themselves to being woolly and merely anecdotal, they must therefore address themselves systematically to the complex problems of communication.

## Hermes and Hermeneutics

There is an ancient discipline concerned with the interpretation of communications. In Ancient Greece, education focused on the study of literary texts. The theory and methodological approach for the understanding of such texts was called *hermeneutics*, after Hermes, the messenger of the gods. With the advent of Christianity, quarrels and schisms arose over the exact meaning of Biblical texts. To help settle these differences of opinion hermeneutics then became a branch of theology. This systematic textual interpretation continued throughout Antiquity and the Middle Ages up to modern times. Schleiermacher, philosopher, theologian and translator of Plato, was a professor of hermeneutics who widened the concept of this discipline. Not only texts but all other kinds of communication needed interpretation and could be subjected to this type of examination. Wilhelm Dilthey, a pupil of some of Schleiermacher's followers, systematically developed Schleiermacher's approach, demonstrating the vital contribution hermeneutics had to make to the human studies.

This is not the place for a full, systematic account of hermeneutics, but it is the place for drawing attention to some distinctive features of its methodology which are highly relevant. First, one needs to emphasise that unlike physical science, the focus of understanding in hermeneutics is not *classes* but *individuals*. Primarily, we aim to understand a poem, not poetry in general; a particular person, not the group to which he belongs. By contrast, in physics or chemistry, the example investigated is not of intrinsic interest. Once the experiment is finished, the contents of the test tube may be poured down the sink: they're only useful inasmuch as they help form general laws. Yet in the

human studies, the individual thing studied – it may be a person, a family or a whole community – remains of interest. The classic sociological study of 'Middletown' or the analyses of Sigmund Freud are examples.

Physical objects are substantially explained in terms of the class to which they belong. This is a diamond, this is a table, etc, and *they* behave in such-and-such ways. But such explanations of human beings – eg, she is a woman, he is a teenager, etc – are inadequate, and often rightly condemned as stereotyping. Instead, we tend to better understand individuals by placing them their context. A simple example concerns the way in which the correct meaning of a word is only specified by the sentence and general context in which it occurs. Terms such as

'club' or 'file' have several distinct definitions, and the meaning is determined only in the particular statement in which they occur. Similarly, a gesture like raising your hand might be understood as a greeting, a threat, or otherwise, according to other aspects of the circumstances which accompany the act.

Each meaningful expression is a crossing point of contexts. Take, for example, the John Donne poem 'The Sun Rising':

Busy old fool, unruly Sun,  
Why dost thou thus,  
Through windows, and through curtains, call on us?  
Must to thy motions lovers' seasons run?  
Saucy pedantic wretch, go chide  
Late school-boys and sour prentices,  
Go tell court-huntsmen that the king will ride,  
Call country ants to harvest offices;  
Love, all alike, no season knows nor clime,  
Nor hours, days, months, which are the rags of time.

Its grammar and vocabulary is obviously one of its contexts; but the context is also the history of the sonnets, Donne's personality, and the conditions and conventions of his age. To understand the poem with insight – though on one-level it appears to be immediately accessible – we have to trace the different contexts as far as is fruitful and practicable.

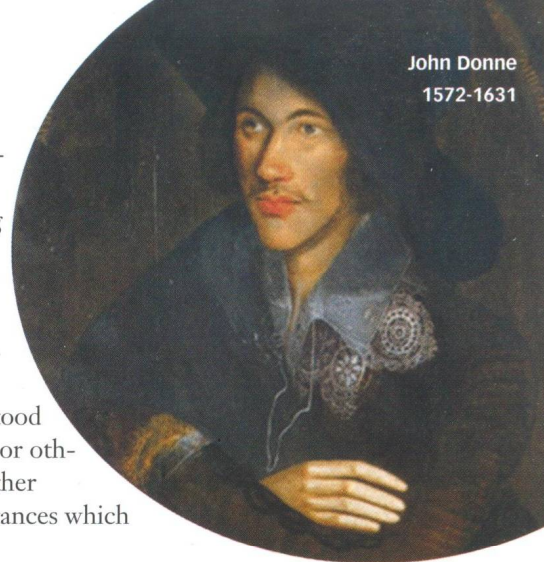
## Different Types of Disciplines

Because of the distinct methodologies involved, the distinction between the two groups of disciplines, the physical sciences and the human studies, is both necessary and justified. Of course, there are features common to both groups. Such processes as checking data, forming and testing hypotheses and the like, are required for all systematic research. Some of the methods of the physical sciences are also required in the social studies. The authenticity of manuscripts may need to be chemically tested, vital statistics analysed, and the like. Typical methods of the human studies are also not wholly absent from the physical sciences. For example, in astronomy, the movements of planets may be explained with reference to their contexts, such as their relation to other planets or against the background of the stars.

It remains true, however, that a human study such as psychology is not a science in the same sense as physics, because whatever it shares with the scientific method, it also receives essential support from the methods of hermeneutics. Faced with communications, we need to establish the background, likely knowledge and personal motives of the communicator.

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Hermes, the messenger of the gods, painted by Hendrick Goltzius (1611)