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Positivism

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Positivism is the codeword for a package of philosophical ideas that most likely no one has ever accepted in its entirety. These ideas include a distrust of abstraction, a preference for observation unencumbered by too much theory, a commitment to the idea of a social *science* that is not vastly different from natural science, and a profound respect for quantification. Like empiricism, to which it is closely related and with which it overlaps to a considerable degree, positivism is the label for a series of claims rather than any single claim. Moreover, many of these claims are analytically separable and do not entail one other so that it is entirely possible to accept some and not the rest. Inevitably, then, it is sometimes difficult to attach the label, without qualification, to any particular position or writer or even to identify the central ideas when several distinct positivisms (12, according to Peter Halfpenny) can be differentiated. But this problem has not prevented some methods writers in the social sciences from referring to positivism as a paradigm, implying that it makes up a quite determinate set of ontological, epistemological, and metaphysical beliefs, all locked together in an unbreakable structure that must, therefore, be rejected or embraced as a whole. This view requires a certain finessing of philosophical history, so this entry will begin with some excerpts from positivism's checkered career before returning to its role in social scientific methodological writing and in particular, its influence on qualitative research. Given that the history of positivism and the history of empiricism are entangled, it might be a good idea to read this entry alongside the corresponding one on empiricism.

Philosophical Positivism

Origins

The term was coined by Auguste Comte, but even for him it has several different connotations. It refers, in part, to a theory of history according to which every branch of knowledge passes through three stages (the theological, the metaphysical, and the positive state—when explanations by appeal to unobservable entities are finally abandoned) and which asserts that improvements in knowledge are responsible for historical progress. For Comte, positivism is also the assertion that there can be a

science of society aiming at universal laws akin to those in the natural sciences; the name of a proposed secular religion, involving the worship of society, and with its own priesthood and church; and, less strangely, the label for a unity of science thesis claiming that all the sciences can be integrated into a single system. But perhaps the central thread in Comte's positivism, at least from the point of view of the subsequent history, is its empiricism, the view that the only source of knowledge [p. 647 ↓] is experience. This idea is taken from the British empiricists and leads (as it did with John Locke, Bishop Berkeley, and possibly David Hume) to the view that there can be no knowledge of any reality beyond experience. It also led Comte to acknowledge the impossibility of obtaining absolute truth. This knowledge turns out to be a perennial positivist theme and is worth noting in the light of a familiar tendency to claim that positivism involves a commitment to absolute truth as well as knowledge with certainty. At any rate, the pivotal nature of empiricist ideas in positivist thought means that positivism is, in effect, a variant of empiricism.

A project frequently associated with positivism is that of quantification; indeed, for some writers, positivism and the quantitative paradigm are more or less synonymous. The incorporation of statistics into positivist thinking is normally attributed to Émile Durkheim, who built on Comte's empiricism by combining the idea of a science of society with the tradition of social physics. This tradition had developed during the 19th century and involved the collection of statistics for largely administrative purposes. What was innovative about Durkheim's proposal was the claim that statistics could be used to construct and test social theories, not just for the purposes of administration or reform. This claim has since become entrenched in popular understandings of positivism, and as a result, Durkheim's work (particularly *Suicide*) is recognized as one of the classic examples of positivist sociology.

Logical Positivism

However, the most iconic version of positivism is associated with the Vienna Circle and the school of logical positivism that emerged from it along with an affiliated group in Berlin. The circle's 1929 manifesto emphasizes two fundamental commitments: to empiricism (i.e., there is knowledge only from experience) and to logical analysis, by means of which philosophical problems and paradoxes would be resolved and

the structure of scientific theory made clear. It is, of course, the second of these commitments that represents logical positivism's distinctive contribution to the empiricist tradition.

Empiricism, then, was a premise of logical positivism, but there was much debate as to what counted as the experiential foundation of knowledge. For Ernst Mach, an important influence on the Vienna Circle, this foundation consisted of, quite literally, the scientist's own sense impressions, although some logical positivists held that sensations were not themselves the basis of science, but that *protocol sentences*—sentences recording those sensations—were. Later, however, this position was abandoned, at least by some positivists, in favor of the view that the experiential building blocks are in fact sentences that record not sensations, but the behavior of observable objects (e.g., measuring devices). In replacing sentences about sense impressions (which could be known to be true) with sentences about physical objects (which could not), this group of positivists effectively gave up the idea that knowledge could be certain and that there could be such a thing as absolute truth.

The logical analysis component of positivism has been based on developments in formal logic since the 19th century. Instead of a system of generalizations about psychological processes, logic was now seen as a formal symbolic language, empty of any empirical content that could be used to define precisely the conceptual relations between sentences. This development provided the logical positivists (or so they believed) with a means of translating theoretical sentences into sets of statements about experience and enabled them to organize the whole of scientific knowledge into an axiomatic system. These projects eventually broke down, as the positivists were the first to accept, partly because the translations were not forthcoming and partly because of the realization that no account of experience, no set of observations, can be theory-neutral. So, theoretical sentences cannot be translated into an observation language because observational terms are already theory-laden. Even so, two ideas persisted: first, that there are logical relations between theory and observation and second, that explanations consist of law-like generalizations from which the occurrence of specific events can be deduced. The latter is known as the *covering law* model.

Verifiability

The combination of empiricism and logical analysis leads to the principle for which logical positivism is best known: verifiability. This concept was an attempt to define a criterion capable of distinguishing between statements that are meaningful and those that are not (i.e., nonscientific, metaphysical statements). There were various formulations of this principle, but [p. 648 ↓] the basic idea was that any statement is literally meaningless whose method of verification cannot be specified in terms of experience. An associated principle, verificationism, held that the meaning of a statement just is its method of verification.

Verificationism eventually failed for the same reason that other logical positivist projects failed. Yet its position as a defining principle in the movement was strong enough to confirm the positivists in a form of antirealism. For example, if subatomic particles are not directly observable in experience and if it proves difficult or impossible to translate statements about them into the language of observation, then these statements cannot be regarded as meaningful. In which case, belief in the existence of subatomic particles is at best an optional extra. In fact, almost all the logical positivists were antirealists in this sense: They were, at the very least, noncommittal about the actual existence of unobservable entities. The same is true of their attitude toward law-like generalizations of the form *all X are Y*. Statements of this type cannot, strictly, be verified, as it is impossible to observe all Xs, so some logical positivists were equally skeptical about the meaningfulness of universal laws.

Summary

Like empiricism, then, positivism is a family of claims and concepts on which different authors have placed varying degrees of emphasis. It shares with empiricism a commitment to making experience the test of all knowledge and is skeptical about the idea of an unobservable reality that includes entities and forces not discoverable in experience, a skepticism that extends even to laws of nature. In its later forms, positivism adds to empiricism an enthusiasm for statistics—indeed, for quantification in

general—and the assumption that if a statement is meaningful, then it can, by definition, be subject to scientific testing and verification (an assumption subsequently weakened or dropped). It also attempts to translate what is known into formal languages, including mathematics, and to organize scientific theory into logical structures. However, if there is an overlap with empiricism, there is also common ground with American pragmatism, which had a similar preference for experience, verifiability, antirealism, and operationalism. This common ground largely explains why the logical positivists were accorded such a favorable reception in the United States following their flight from Nazi Europe in the 1930s.

It is noticeable, though, that the resonances of positivism, as well as its variety, are now often ignored. The term frequently signifies what is regarded as an exaggerated respect for the natural sciences and is inevitably associated with quantification. Moreover, it is usually assumed that positivists believed in a determinate reality and in the possibility of a correspondence between that reality and representations of it. This image of positivism, approaching a caricature, has been boosted by postmodernism, which portrays it as a reactionary force, committed to oppressive universal truths, a chimerical objectivity, and foundational narratives. In this guise, it is a convenient foil for a great deal of recent writing on social scientific methodology.

Positivism and Social Science

In contemporary methodological writing, positivism is apparently dead, yet it still receives constant criticism; it is significant that the most influential examples of modern social theory, such as critical realism, constructivism, hermeneutics, and structuration theory, take a critique of positivism as their premise. Recently, however, it has become clear that positivism is still a pervasive influence—although this influence is more marked in some social scientific disciplines than it is in others—to the extent that comments have been made about its surprising longevity. It is a visible force in American sociology and political science, has dominated the American history profession until the 1980s, and survives in various guises in economics. The record in sociology is particularly interesting, with a marked difference between the British and American sociological communities being evident, according to recent research by David Gartrell and John Gartrell. From the 1960s to the 1990s, British journals

became less positivistic, so the evidence suggests, while the American journals became more so. There appears to be something of a discrepancy, then, between the pronouncements of social theorists and sociological research practice, at least in the United States.

Can Qualitative Research Be Positivist?

The study just referred to takes as its criterion for positivism an emphasis on measurement, the testing of generalizations, and the determining of relationships between variables using statistical analysis. So it [p. 649 ↓] would seem that qualitative research, by definition, cannot be positivistic. This definition does appear to be one use of the term reflected in the familiar claim that qualitative and quantitative research represent different paradigms, with the quantitative paradigm often identified with positivism. The justification for this claim, where it is not simply derived from the assumption that positivism equals numbers, is that doing quantitative research entails commitment to a particular ontology and, specifically, to a belief in a single, objective reality that can be described by universal laws. In contrast, it is suggested that qualitative researchers, almost *ex officio*, do not share this belief: They see the universe as inherently subjective, socially constructed, more subtle and complex than mathematics can accommodate, and comprising multiple realities. On the other hand, those who are skeptical of this position ask why the use of quantitative methods, or any other technique, should presuppose beliefs about the universe at all. They point out that tools and instruments are not usually regarded as having philosophical views built into them: using a spoon, for example, does not commit one to the claim that the world consists entirely of fluids and small particles. So why should the use of specific research methods, for specific purposes, commit one to the claim that the universe is subjective or objective, multiple or singular?

The alternative is to take the distinction between positivist and nonpositivist as independent of the distinction between quantitative and qualitative, with the consequence that qualitative research can be positivist. Given this view, the various inquiry paradigms—positivism, postpositivism, critical theory, constructivism, the participatory–cooperative paradigm, and so on—can all be mapped onto qualitative

research, each with its distinctive ontology, epistemology, methodology, and values and each manifested in a particular way of conducting qualitative studies.

Paradigm Tables

This mapping is evident in the tables that have become a familiar feature of qualitative methodological writing, especially by authors who draw on the work of Yvonna Lincoln and Egon Guba. Typically, the paradigms are represented in the columns while the rows represent inquiry issues on which different stands can be taken. For example, the positivist account of the nature of knowledge might be verified hypotheses established as facts or laws; the postpositivist version might be nonfalsified hypotheses that are probable facts or laws; the critical realist view might refer to structural–historical insights; the constructivist position might involve individual reconstructions coalescing around consensus; and so on.

One unfortunate feature of these tables, irrespective of the intentions of the authors, is that they imply a certain rigidity in the idea of a paradigm. It can appear, at least to the novice, that each column is a vertical tramline from which there is no prospect of escape. Acceptance of what positivism says about one of the inquiry issues irrevocably commits one to accepting what it has to say about all the others because every paradigm is in effect a package deal. Accept realism, for example, and one is thereby committed to accepting dualism, reductionism, absolute truth, certainty, correspondence, knowledge by accumulation, and an extrinsic ethic “tilting toward deception.” Once the positivist column has been entered, there seems to be no way out. It is a little like getting married and finding oneself stuck with an entire family. Yet it is clear from the history of positivism that there is no such rigid structure, that it is possible to be a positivist without being a realist and without believing in correspondence, dualism, or certainty. To this extent, paradigm tables oversimplify the philosophical issues they try to elucidate and demand that one embrace or reject in its entirety something misleadingly called positivism.

Parallels between Positivism and Qualitative Methods

In fact, there are several positivist ideas that sit comfortably with the claims of other paradigms and with the convictions of some qualitative researchers. For example, the positivist's instinct is to stick with the observable phenomena and to distrust any theory that purports to give an account of reality. This instinct is quite consonant with what qualitative methodologists recommend, whether they are grounded theorists (who say that theory must be semantically tied to data), phenomenologists (who aim at an atheoretical description of phenomena), or constructivists (who present multivocal accounts, building toward the achievement of consensus rather than a theoretical evaluation). In all these cases, there is a preference for not going too far beyond the data and for not invoking theoretical, but unobservable, social forces such as class, power, socialization, or culture. Even the multiple [p. 650 ↓] realities favored by constructivists are not too distant from the position arrived at by some logical positivists. Rudolf Carnap's mature view, for example, was that there are a number of different linguistic frameworks in terms of which the world can be described and that the choice between them is conventional and pragmatic, a matter of what is suited to a particular purpose. Consequently, all standards of correctness, validity, and truth are relativized to the rules and principles associated with whichever framework has been adopted. This view is not one that constructivists should find uncongenial.

Conclusion

This is not, of course, to deny that other positivist instincts, such as the preference for quantification and formalism, are at odds with those of qualitative researchers. But this is part of the point. There is no single thesis that counts as positivism, no single criterion that defines it; and of the variously assorted claims that belong to the positivist family, some are compatible with alternative paradigms such as constructivism, while others are not. To this extent, the concept of a paradigm, the concept of an encapsulated and rather rigid set of ontological, epistemological, methodological, and ethical beliefs, is

itself a social construction, and (arguably) not a particularly helpful one. Instead of a fluid, historical, evolving, and internally contested discourse—which is what positivism is—it creates the image of a coherent, unified, and highly inflexible creed. Conceivably, however, the recent reexamination, and partial rehabilitation, of positivist thinkers will serve to unsettle this image, and will prompt qualitative researchers to discover what they can learn from positivism, however unlikely that may currently seem.

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See also

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