Expertise, Scientification, and the Authority of Science


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The problem of the role of experts in society may seem to be a topic marginal to the main concerns of sociology, but it is in fact deeply rooted in the sociological project itself. Sociologists and social thinkers have long been concerned with the problem of the role of knowledge in society. Certain enlightenment thinkers, notably Turgot and Condorcet, believed that social progress depended on the advance of knowledge and the wider dispersion of knowledge in society. But Condorcet especially recognized that this idea had complex political implications. On the one hand, it required science, which for him included social science, to be supported by the state yet retain independence or self-governance in order to advance without political interference. On the other hand he recognized that social advance required that the most enlightened be the rulers, and that this conflicted with the ideas of democracy and equality.

Condorcet’s solution to this problem was education. But he also recognized that even the educated citizen would never be the equal of the scientist. Thus his conception of the role of the expert in politics depended on the hope that a more educated citizenry would defer politically to the most enlightened, thus bringing about de facto expert rule through democratic means. Saint-Simon extended this reasoning, but it was made into a sociological system by Comte, and, in the course of doing so, Comte created the term “sociology.”

Comte’s central idea was the law of three stages, which held that every science goes through the successive stages of theological, metaphysical, and positive. He argued that sociology was to be the last science to reach the positive stage, and that this law itself was the first and most fundamental positive law of sociology. Comte also believed that consensus was a central requirement for order and orderly progress in society and looked to science to provide the intellectual basis for this consensus.

Comte regarded freedom of opinion as inappropriate to an age of knowledge. If the facts of a social life could be reduced to science, the principles of this science should be the basis of state action rather than the misguided views of citizens, who, if they disagreed with the principles, were merely ignorant and needed education rather than the right to voice their ignorance. Expertise thus would correct the anarchy of opinion of liberal discussion. The authority of science was to be the basis of state authority. This posed the problem of education, to which Comte had an authoritarian solution: the lessons of sociology should be inculcated in the masses through the same kind of techniques that the Catholic Church in the past had used so effectively to inculcate religious dogma.

His critics, such as John Stuart Mill, saw in this a kind of authoritarianism but acknowledged the logic of his position. Later thinkers such as Karl Pearson defended similar views about the necessary role of experts. These ideas in turn influenced such movements as Fabianism in Britain, technocracy in the United States, and the social relations of science movement of the nineteen-thirties, whose ideas were a precursor to the modern sociology of science. The social relations of science movement was dominated by Communists, and Communism itself may be understood as a form of expert rule in which experts direct social life.
“scientifically” (through planning) on behalf of the people rather than as their instructed representative.

In the nineteen-forties and fifties the sociology of science concerned itself with the related problem of the authority of science. Robert Merton was particularly concerned with conflicts between science and democracy. In some of his later writings he discussed what he called the ambivalence of ordinary citizens to science and expertise. Later sociologists of science, influenced by social constructionism in the study of the generation of scientific facts, turned their attention to expertise as well. They identified specific mechanisms, such as “boundary objects,” through which scientific or expert claims were constructed into a form of “fact” that was usable by the public, and considered issues about the construction of the appearance of expert knowledge and the kind of citizenship education that might be required in the face of a politics in which expert claims played a large role. Some influential research in this tradition concentrated on failures of expertise and the problem of integrating relevant lay knowledge with expert opinion, one of the sources of failure in the application of expert knowledge in concrete situations.

Other research focused on the social and organizational roles of experts, the place of expert knowledge in the law, judges’ construction of expert knowledge, and the implicit conception of science which is assumed in legal decision-making about scientific questions. This literature deals with such issues as the gap between the law’s treatment of scientific results and scientists’ view of them.

Another body of research related strategies came from the professionalization literature in American sociology in the mid 20th century and focused on the professionalization of domains of practice and the consequent transformation of these domains into subjects governed by expert knowledge. An important example of this is the medicalization of issues, such as behavioral issues, which had previously been regarded as matters that could appropriately be dealt with by lay knowledge. Many forms of social behavior, such as child abuse and alcoholism, were transformed in this way. Subsequently a social constructionist literature grew up discussing the process by which these transformations occurred.

These discussions had the effect of questioning the concept of expert knowledge itself, and pointing to the difficulties of judging expertise. Experts may have specialized knowledge, but they are not universal experts. They often do not have the local knowledge necessary to apply this knowledge correctly, and are often unaware of the limitations of their own knowledge. Lay people also may have specialized forms of knowledge that need to be integrated into decision-making in order for knowledge to be effectively used. Thus, there is a problem of aggregating or bringing expert knowledge and other forms of knowledge together. Similar issues arise when experts from different fields must co-operate in decision-making. Experts in one field become lay people when faced with expertise in another field, and must make non-expert judgments about the validity, relevance, and significance of the expert claims made by other experts.

The issues raised by Condorcet about the conflict between expert knowledge and democracy are still relevant today. They point to a fundamental conflict between a participatory model of democracy and the undeniable fact that many of the issues that face modern states are understandable only by experts. The newer literature on expertise points to the fact that expert knowledge, and the “facts” which citizens accept as matters of expertise and act on, are the product of complex processes of social construction, and thus of a kind of politics.
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REFERENCES AND SUGGESTED READINGS


