

Compelling Knowledge: What Makes Science Useful to Policy?

Sheila Jasanoff
Cornell University, U.S.A.

How does scientific knowledge contribute to public policy? In one dominant account, politics always takes precedence over science. The second account sees scientists as repositories of a distinctive form of knowledge that has the power to sway political action. A more sophisticated version of this latter account recognizes that scientific knowledge is not by itself a variable that can adequately explain policy results. The literature on epistemic communities correctly perceives that scientists themselves become a significant part of the decision making process when their knowledge is enlisted in policy formulation. Accordingly, the role of scientific communities in disseminating knowledge and ensuring its acceptance by those in power has received some attention, particularly in the context of international treaty negotiations. Despite its acknowledgement of process variables, however, this line of analysis generally holds that epistemic communities gain their influence from their ideas about the natural world: it is these scientific ideas that ultimately drive political action.

The focus on epistemic communities accords too much respect to the autonomous power of scientific ideas. There is, for example, considerable evidence in the policy literature that science, when harnessed to policy, is influenced by a variety of cultural factors. There is also mounting evidence that much of what passes for “science” in the policy process acquires this status simply because it has been done by scientists.

In order to influence public policy, science needs to acquire moral as well as cognitive authority. For science to achieve authoritative status, it needs to harmonize itself with a moral regime within which cognitive claims gain persuasive power: understanding how this happens should be central to the analysis of science policy. Furthermore, when policy issues cut across cultural and political lines, as in most international environmental regimes, scientists cannot as readily find established institutions or shared discursive practices with which they can ally themselves. It is possible, particularly in the case of a seemingly finite environmental resource, that the resource itself confers authority on those who claim to know it best. Scientists, in this context, become the guardians of “local knowledge” of the resource in question, and gain a kind of custodial right to speak compellingly on its behalf.