Science policy overcultured

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**Designs on Nature:
Science and Democracy in Europe
and the United States**
by Sheila Jasanoff
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Among her colleagues in science and technology studies (STS), Sheila Jasanoff is known as one of the leading institution builders in the field, and is undoubtedly the leader in the USA. If STS eventually becomes a widely recognized academic discipline not beholden to scientists, Jasanoff will have played a major role. To the wider scientific and policy communities, she is known for what she calls in *Designs on Nature* 'multi-sited ethnographies' of the increasingly complex interactions among scientists, policymakers, lawyers and special interest groups, especially on matters relating to health and the environment.

Designs on Nature can be evaluated in two ways. The first is as an informed, reliable and comprehensive guide to the shifting entanglements of scientific expertise and political practice over the past 25 years, especially in relation to recent developments in the biomedical sciences. Jasanoff has been blessed with excellent networks, a connoisseur's eye for the telling detail and a talent for encapsulation. This unique combination makes the book essential reading for anyone wishing to conceptualize what Jeremy Rifkin has called our 'biotech century'. For example, Jasanoff observes that an ironic consequence of scientists' demand

for government regulation of biotechnology has been for politicians to restrict the input of scientists to that of 'experts' on technical matters. Thus, the scientists' desire to have their hands tied by politicians only served to expand the politicians' own discretion, thereby amplifying the effective uncertainty of the new biotechnology.

By contrast, as a guide for the improvement of science policy, *Designs on Nature* fails. Jasanoff is transfixed by the twists and turns of actual policy environments. Her methodological proclivities—all too common among STS researchers—ensure that policy questions cannot be addressed. When one studies, as Jasanoff has done, sites of science policymaking in the USA, the UK and Germany, one is naturally cautious not to prematurely generalize from surface similarities that may mask deep underlying differences. At the same time, there is no principled reason for refusing to generalize from such similarities, given the amount of mutual awareness and communication among scientists and policymakers who deal with many of the same emerging problems at the same time. Indeed, this fact gives hope that internationally binding agreements may one day be reached on the regulation of biotechnology. However, Jasanoff harks back to an earlier ethnological—more than ethnographic—era that exaggerates cultural differences, thereby dampening hopes for such agreements.

A striking case of this unhelpful attitude appears in an otherwise well informed chapter on bioethics. For the past three decades, Peter Singer has been an indefatigable advocate of species egalitarianism: the philosophy that underwrites both the animal rights' movement and more liberal attitudes toward the termination of human life. Jasanoff would have us believe that Singer's failure to gain a receptive audience in the German-speaking world is due to his incomprehension, as an Anglo-Saxon 'utilitarian' theorist, of the 'deontological' basis of the German ethical standpoint. Jasanoff's intended contrast is between Germans who value human life as what Kant called an 'end in itself', and Anglo-Saxons who value life according to their capacity to satisfy self-chosen ends.

Jasanoff's analysis makes both too much and too little of the resistance to Singer. It overestimates the philosophical rhetoric in which such disputes are couched, while downplaying the genuinely empirical disagreement between Singer and his German interlocutors over the anticipated consequences of absorbing the human condition into a more comprehensive welfare function that ranges across all of nature. Singer is relatively sanguine that animals can be morally upgraded without the degradation of humanity. His opponents, recalling Nazi precedents, fear a general levelling of moral sentiment, perhaps the final stage in what Max Weber called 'the disenchantment of the world'.

Singer's opponents may well be right. In any case, their disagreement with him turns on a matter of prediction, which is in principle testable and, of course, contestable. Talk of 'deep' differences in worldview that need to be 'understood' merely mystifies the impasse. STS researchers should be in a position to help resolve such conflicts of intuitions, the significance of which lies not in the relatively separate traditions from which they came, but in the alternative common futures that they project. Unfortunately, the one methodological lesson that Jasanoff repeatedly stresses in *Designs on Nature* is that understanding confounds prediction, where 'prediction' is taken rather broadly to include any generalized policy prescription.

As a veteran of the science-policy circuit, Jasanoff is justifiably sceptical of the 'policy scientist' who is eager to oblige politicians with predictions based on an arbitrary mix of prejudice and evidence. However, this does not warrant the opposite position, where politicians can always count on the STS researcher to complicate any policy context, therefore (once again) leaving them with maximum discretion for action.

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