Coherence at a crossroad: examining the normative implications of resilience science

Michele-Lee Moore*¹, Manjana Milkoreit*², Chanda Meek³, and Michael Schoon²

¹Department of Geography, University of Victoria – Canada
²Arizona State University – United States
³University of Alaska Fairbanks – United States

Abstract

Since the beginning of the 20th century, the relationship between science and policy-making has altered significantly from one that separated the ‘truth seeking’ domain of science to one that has closely integrated science into the domain of politics, complete with contested values and opinions. In the social sciences, “post-normal” science, in which the researcher situates his or her own research as bounded by particular biases, has gained adherents, but many scientists, both social and natural, remain uncomfortable acknowledging the role that values play in their translation of science to policy. Resilience scientists, those drawing on the social-ecological resilience theories of Holling (1973) and others, have only recently entered this discussion but a coherent approach to institutional design and policy still remains elusive, despite core theoretical concepts focusing on the scale and ‘fit’ of governance institutions for complex social-ecological systems. The recent debate around whether or not Earth has biophysical “boundaries” or critical thresholds at a planetary scale and the appropriate policy response underlines a number of compelling questions about the role of scientists in shaping policy and institutional design. Questions include: what is the role of a scientific movement, or individual scientists, in policy-making and institutional design? With increasing challenges to science as a privileged source of authority in society, how can or should scientists promote their ideas? Do resilience concepts and frameworks place certain obligations or duties upon resilience scientists compared to scientists from other paradigms? Does the resilience paradigm have something unique to say about the general role of science in policy-making? To the extent that values play a role, how should they be acknowledged and addressed? While the appropriateness of value-driven science is highly contested across all scientific fields, this paper argues that articulating a coherent position is of particular relevance for resilience scientists and others, who use a theoretical framework that is infused with a specific value-set, such as ecosystem and species protection, conservation, inclusiveness and participatory governance processes.

Keywords: Governance, science studies, decision, making, resilience

*Speaker

sciencesconf.org/resilience2014:25467