Abstract

Why social scientists should engage with natural scientists

Philip Lowe*, Jeremy Phillipson* and Katy Wilkinson*

*School of Agriculture, Food and Rural Development, Newcastle University, Newcastle upon Tyne, UK;
Faculty of Social Sciences, University of Warwick, Warwick, UK

It has become part of the mantra of contemporary science policy that the resolution of besetting problems calls for the active engagement of a wide range of sciences. The paper reviews some of the key challenges for those striving for a more impactful social science by engaging strategically with natural scientists. It argues that effective engagement depends upon overcoming basic assumptions that have structured past interactions: particularly, the casting of social science in an end-of-pipe role in relation to scientific and technological developments. These structurings arise from epistemological assumptions about the underlying permanence of the natural world and the role of science in uncovering its fundamental order and properties. While the impermanence of the social world has always put the social sciences on shakier foundations, twenty-first century concerns about the instability of the natural world pose different epistemological assumptions that summon a more equal, immediate and intense interaction between field and intervention oriented social and natural scientists. The paper examines a major research programme that has exemplified these alternative epistemological assumptions. Drawing on a survey of researchers and other sources it seeks to draw out the lessons for social/natural science cross-disciplinary engagement.

(Contemporary Social Science: Journal of the Academy of Social Sciences, Received 19 November 2012; final version received 21 January 2013)

Keywords: interdisciplinary research; roles of social science; ecology; climate change; social shaping of technology; intervention studies