

In Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Scott McClintock

Will defend his dissertation

Challenges of Advocacy for Sustainability Scientists

Abstract

Without scientific expertise, society may make catastrophically poor choices when faced with problems such as climate change. However, scientists who engage society with normative questions face tension between advocacy and the social norms of science that call for objectivity and neutrality. Policy established in 2011 by the Intergovernmental Panel on Climate Change (IPCC) required their communication to be objective and neutral and this research comprised a qualitative analysis of IPCC reports to consider how much of their communication is strictly factual (Objective), and value-free (Neutral), and to consider how their communication had changed from 1990 to 2013. Further research comprised a qualitative analysis of structured interviews with scientists and non-scientists who were professionally engaged in climate science communication, to consider practitioner views on advocacy. The literature and the structured interviews revealed a conflicting range of definitions for advocacy versus objectivity and neutrality. The practitioners that were interviewed struggled to separate objective and neutral science from attempts to persuade, and the IPCC reports contained a substantial amount of communication that was not strictly factual and value-free. This research found that science communication often blurred the distinction between facts and values, imbuing the subjective with the authority and credibility of science, and thereby damaging the foundation for scientific credibility. This research proposes a strict definition for factual and value-free as a means to separate science from advocacy, to better protect the credibility of science, and better prepare scientists to negotiate contentious science-based policy issues. The normative dimension of sustainability will likely entangle scientists in advocacy or the appearance of it, and this research may be generalizable to sustainability.

Friday, February 20th, 2015
10:00 a.m.
Fulton, 4211

Faculty, students, and the general public are invited.

Supervisory Committee:

Sander Van Der Leeuw
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