Climate science and social values

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The Future Earth, a currently operating international platform of sustainability science, calls for trans-disciplinarity, meaning co-designing and co-producing science with various non-academic stakeholders in the society. The need of trans-disciplinarity is justified from three perspectives: the logic of accountability, the logic of impact and the logic of humility (van der Hel, 2016). The logic of humility, which is often overlooked, essentially means that scientists should reflect on their own perceptions and values, which may be biased in various ways, and should appreciate diverse values of various stakeholders in the society.

For example, when we observe climate debates in the society, different opinions based on different values over risk perceptions of climate change or various mitigation options can be identified. The climate issue is inevitably value-laden and climate science cannot be free from values as well. Observational research might look relatively value free, but what to measure and where to measure, for example, already involve some kind of value judgment. Also, continuous measurement needs stable fund, which leads to a situation that research might be influenced by the values of funders.

Typologies and recommendations on how scientists behave in such value-laden research environment have been discussed by social scientists (e.g., Honest Broker, Pielke, 2003). Here I present the idea of Reflective Advocacy (Asayama et al., 2017), which is characterized by transparency, anticipation, reflection, deliberation and responsiveness.

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