Installing Visualization in Science-Policy Interfaces

Greg McInerny, g.mcinerny@warwick.ac.uk
1 Centre for Interdisciplinary Methodologies, Department of Social Sciences, University of Warwick, Coventry, CV4 7AL, UK
2 EcoViz, Tansley Working Group - https://ecoviz.wordpress.com/

Science-policy interfaces such as the IPCC, MEA and IPBES* have rarely engaged with Information visualization. This is despite the fundamental roles it plays within data analysis and communication. Elsewhere information visualization has reshaped work practices and the structure of organizations; for example in journalism, NGOs, Government Organizations and Technology firms. So why not science and policy?
(* IPCC = Intergovernmental Panel on Climate Change; MEA = Millennium Ecosystem Assessment; IPBES = Intergovernmental Platform on Biodiversity and Ecosystem Services)

It may be because visualization is a relatively new subject and set of methods, which is yet to be integrated into all areas which could benefit from visualization. Or perhaps, visualization is too often seen as an end-product and technical issue, omitting a broader understanding of what this subject and set of methods entails. Or, maybe it is just because visualization has not been part of previous Science-Policy Interfaces (SPIs), and new SPIs are based on the old model. Thus, whilst a tremendous wealth of visualization expertise, knowledge and technologies exists, so does a significant disconnect with the work of SPIs.

I will consider a 'Policy for Visualization in Science-Policy Interfaces' that could allow SPIs to install visualization in their work. The policy must in some ways be disruptive, by articulating the challenges to SPIs alongside a plan and strategies to address those challenges. For example, a policy would need strategies and tactics to 1) develop guidelines for authors, 2) embed new expertise in SPIs, 3) enable re-use and re-design of SPIs' outputs, and 4) develop appropriate review, publishing and evaluation processes. As a whole, the policy would set out to communicate the nature of visualization (as a subject, methods, technologies and communities which spans computer science, design, statistics, perceptual & cognitive sciences, journalism all the way to the arts). If it is ignored, the policy could direct provide a road map for 'guerrilla' visualization activities to work outside of SPIs official processes.