Hans von Storch:

Climate Services under Post-Normal Conditions

After climate science has left the ivory tower for good, knowledge about climate, climate change and climate impact has become an important staple for the decision and planning process among stakeholders. Such knowledge is asked for for determining and preparing response options for both adaptations to climate risks and for mitigation of global and local climate change. Providing such knowledge to stakeholders and the public is one of the tasks of **Climate Services**. Another task is the determination of questions among stakeholders and the public about climate issues as input for the scientific agenda.

In general, this may be a relatively simple effort of a straight forward exchange of technical details, and it is often seen in scientific quarters as such, which may be confronted with some minor mainly pedagogical obstacles. When facts and interrelations are properly explained, an uneducated audience will eventually understand the issues, the significance and draw the "right conclusions".

This "linear model" has been found inadequate. In particular in post-normal situations, the communication task amounts to a major challenge, because of the omnipresence of interest-led and culturally based competing knowledge claims. These claims are not only communicated by interested parties directly to stakeholders and the public; they are often also part of, and consistent with, culturally hold views about climate, its impact and causes for change — not only in the public but also in the scientifically educated population. The effect is not only that some scientists adopt advocate positions, but also that the communication of scientific findings, which have passed something like the traditional Mertonian rules of credibility, finds a reluctant and skeptical audience, while explanations by advocates are more welcome.

Of course, it is not really possible to separate "scientifically" and "culturally constructed" knowledge claims. Most scientific results are based to some extent on cultural constructions. The influence of culture is ubiquitous, also in scientific circles. A science in a post-normal phase is well advised to have mechanisms for self-reflection in place, to allow scientific actors being aware of the social dynamics, of which they are part of, and possibly limit the influence of alternative knowledge claims in their scientific practice.

Thus, climate services under post-normal conditions must guard itself against the intrusion of scientifically contested but culturally favored knowledge claims — which will be unavoidable to some extent — but in its communication practice deal with alternative knowledge claims, which are present among stakeholders and the public. Climate Service is a service to both, stakeholders and the public on one side, and the scientific community on the other side.