Climate science as a social process – history, climatic determinism, CUDOS und post-normality

Hans von Storch

Since ages, the topic of climate – in the sense of "usual weather" - has attracted attention in the western tradition as a possible explanatory factor. Climate, and its purported impact on society, has become an integrated element in western thinking and perception.

In this lecture, the history of ideas about the climatic impact on humans and society, and the emergence of the ideology of climatic determinism. Are sketched. This ideology favored the perception of the westerners being superior to the people in the rest of the world, giving the legitimacy of colonialisms.

In modern time, when natural sciences instituted self-critical processes (repeatability, falsification) and norms (CUDOS @Merton), the traditional host for climate issues, namely geography, lost its grip, and physics took over. This led to a more systematic, critical and rigorous approach of building and testing hypotheses and concepts. This gain in methodical rigor, however, went along with the loss of understanding of climate as culturally being falsely perceived as a key explanatory factor for societal differences and developments.

Consequently, the large segments of the field tacitly und unknowingly adopted the false concept of climatic determinism. Climate science found itself in a "post-normal" condition, which lead to a frequent dominance of political utility over methodical rigor.

that climate science being a social process, conditioned to some extent by pre-scentific concepts, such as climatic determinism.