



The slippery slope(s) in geoenvironmental research

Geoenvironmental, lock-in and path dependence workshop

Stefan Schäfer

1. What is a slippery slope?
2. What are the slippery slopes in geoengineering?
3. What can we do?

- There are two ways of thinking about slippery slopes
 - Positivist approach
 - A slippery slope is a situation in which decision A, which you might find appealing, increases the probability of decision B, which you oppose (Voloikh 2003)
 - Interpretive approach
 - A slippery slope is an argument that can be used strategically to support or attack a position in a discourse

What are the slippery slopes in geoengineering?



- R&D slippery slope (slippage towards deployment)
- Less mitigation slippery slope (slippage towards carbon lock-in)

- R&D slippery slope (slippage towards deployment)

Mechanisms:

- Vested interests
 - Community of researchers functions as an interest group
 - Commercial interests
- Political momentum
 - Research programs in the tradition of big science become too big to fail
- Emergency framing shields CE from competition for funding
- Attitude change
- Small change tolerance

- Less mitigation slippery slope (slippage towards carbon lock-in)

Mechanisms:

- Carbon is already quite locked in (geoengineering might be the final nail in the coffin of alternatives to carbon-intensive development)
- Geoengineering discourages large upfront investments in clean energy sources
- Prevents attitude change

- Slippery slope inefficiency: a desirable A is not pursued out of fear that this will increase the probability of an undesirable B coming about
 - **“How can we make it less likely that A will lead to B, so that we can reach agreement on A despite some people's concern about B?”** (Voloikh 2003)

- Suggestions from the literature
 - To prevent slippage from R&D to deployment
 - Technical thresholds
 - Separation of powers
 - Establish transparency
 - To prevent slippage from R&D to carbon lock-in
 - Link geoengineering R&D to emission reductions
 - Slippage from R&D to emission reductions – “negative moral hazard”??

- Is a positivist / empirical analysis of slippery slopes useful / even possible?
- Thinking about slippery slopes comes from a desire to make change possible