

# VARIETIES OF POSSIBILITY: HOW ITERATED MODALITIES SOLVE A METHODOLOGICAL DILEMMA OF SIMULATING UNDER UNCERTAINTY

Betz, Gregor (2009) VARIETIES OF POSSIBILITY:  
HOW ITERATED MODALITIES SOLVE A METHODOLOGICAL DILEMMA OF SIMULATING UNDER  
UNCERTAINTY . In *[2009] Models and Simulations 3 (Charlottesville, Virginia; March 5-7, 2009)*.

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## Abstract

This paper sketched a conceptual framework for expressing uncertain, possibilistic knowledge. A framework which allows to express our foreknow-ledge in a more nuanced way than simply by labelling some statements about the future as possible. I suggested that we should adopt this framework for stat-ing and communicating scientific results in the epistemic mode of uncertainty. This avoids the methodological dilemma between modal inductivism and mo-dal falsificationism. The framework's conceptual variety of possibilities trig-gers a methodological variety, a plurality of modal methods. Some of these rely on traditional virtues of scientific reasoning, others don't. In some disci-plines, computer simulations might, surprisingly, be most profitably applied in and contribute to the creative methods, rather than the strict and formal ones.

**Keywords:** simulation, climate change, prediction, limits of science, possibility, scenario

**Subjects:** [General Issues: Decision Theory](#)  
[General Issues: Models and Idealization](#)  
[Specific Sciences: Earth Sciences](#)  
[General Issues: Values In Science](#)

**Conferences and Volumes:** [\[2009\] Models and Simulations 3 \(Charlottesville, Virginia; March 5-7, 2009\)](#)

**ID Code:** 4490

**Deposited By:** [Betz, Gregor](#)

**Deposited On:** 05 March 2009