



Institute for Advanced Sustainability Studies IASS in Potsdam

Governance of Systemic Risk: Challenges and Potential Solutions

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Interdisciplinary Risk Research

"The beginning of wisdom is to call things by their proper name."
Confucius



- „Risk is uncertainty about and severity of the consequences (or outcomes) of an activity with respect to something that humans value.“ (Aven and Renn 2008: 1)
- The term systemic risk describes the extent to which a risk is embedded in the larger contexts of societal processes (Renn et al 2011).
- Systemic risk refers to the “risk or probability of breakdowns in an entire system, as opposed to breakdowns in individual parts or components, and is evidenced by co-movements (correlation) among most or all parts” (Kaufmann and Scott 2003: 372).

- Risk Society and Reflexive Modernization (Beck 1986, 1999)
- Risk Paradox (Renn 2014)
- Philosophical Concepts of Participation
 - **Functionalist** (Malinowski, Parsons, Merton): enhancement of effectiveness and legitimacy of decision-making
 - **Neo-liberal** (Scottish moral philosophy; Smith): focus on negotiation, trade-offs, finding win-win situations
 - **Deliberative** (Habermas): rational competition of arguments, consensus
 - **Anthropological** (pragmatism; Pierce, Dewey): reflection of social values and norms in public policy making
 - **Emancipatory** ((Neo)-Marxism): empowerment, transformation of society
 - **Post-modern** (Foucault): illustration of the diversity of factual claims, opinions and values in society

Characteristics and Challenges



Characteristics of Systemic Risks



- Epistemological Challenges
 - Complexity
 - Uncertainty
 - Ambiguity
- Transboundary hazards
- Transgression of system boundaries
- Non-linear development

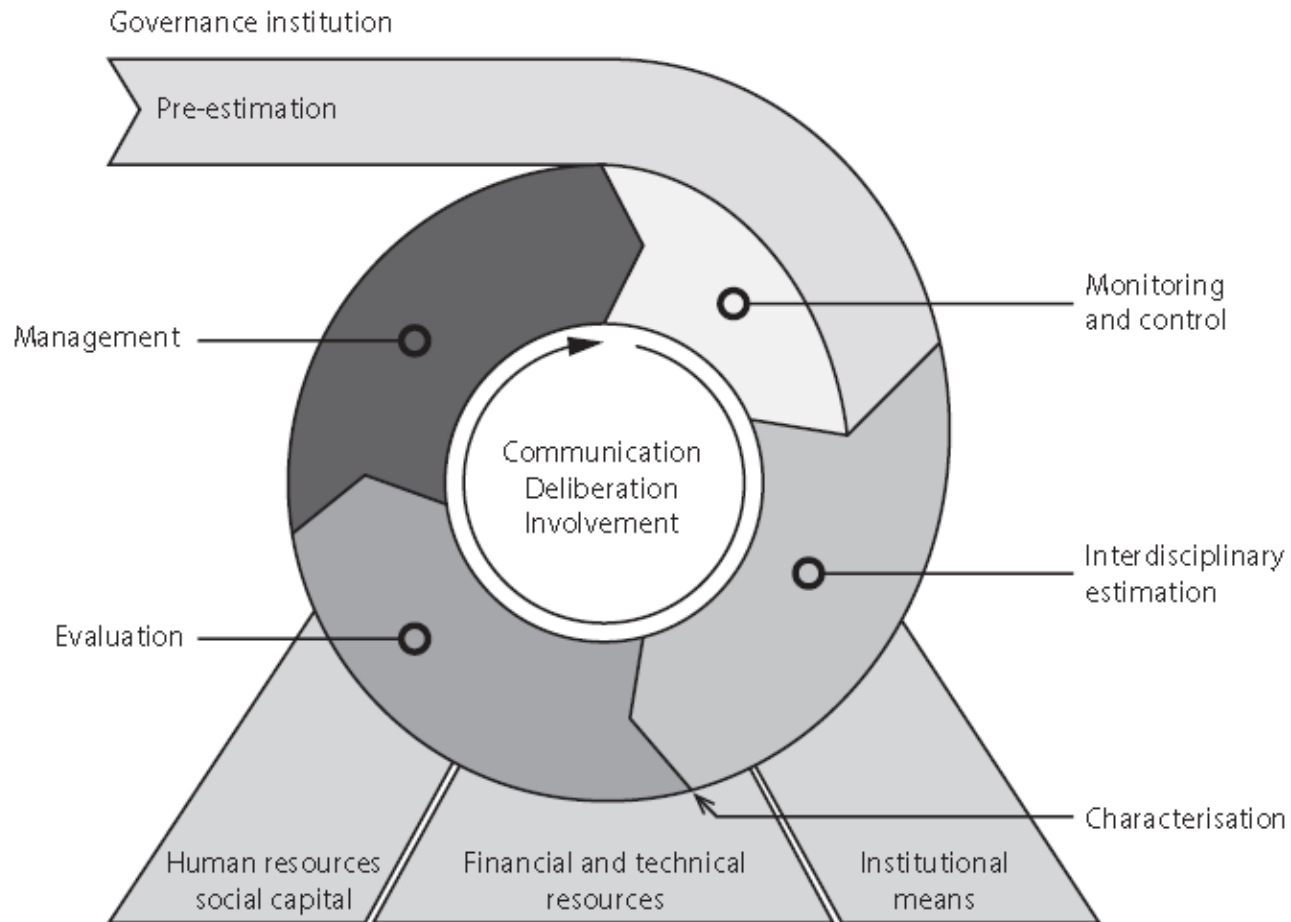
“Post-factual” society

- “Perception is reality.” Lee Atwater
- Lack of trust in politics, science and governance institutions
- Plurality of values and diversity of risk
- Digitalization of society and ubiquity of information
- Multi-level Governance
- Lacking acceptability of governance decisions

IRGC Risk Governance Framework Revisited

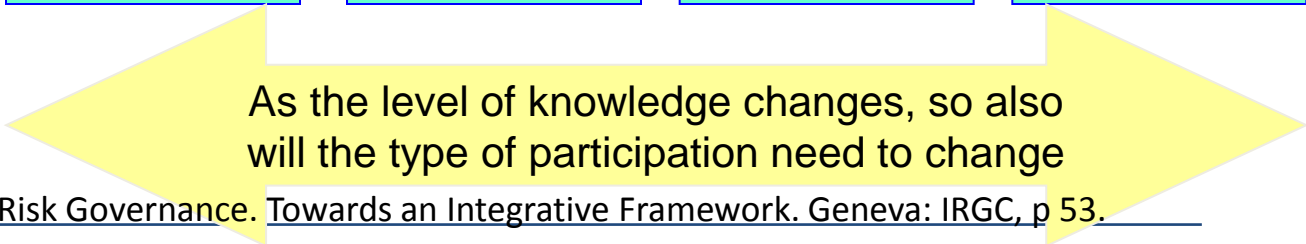


Inclusive Risk Governance: A Platform for Social Learning Processes



Renn/Klinke 2012:, S. 58.

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Elements of an Interdisciplinary and Transdisciplinary Governance Approach



- Complexity
 - Epistemological discourse
 - Characterization of forms of knowledge
- Uncertainty
 - Reflective discourse
 - Weighing trade-offs between too little and too much precaution
 - Investment in building resilience of the system (How much are we willing to spend?)
- Ambiguity
 - Participatory discourse
 - Ethical and moral deliberation
 - Finding agreement on guiding principles

Analytic Advantages of IRGC's Risk Governance Framework



- Support of analysts and risk managers in anticipating systemic risks
- Differentiation of categories of knowledge relevant for risk governance processes:
 - System knowledge
 - Knowledge for orientation
 - Agency knowledge
 - Knowledge for transformation
- Potential of initiation of social learning processes and co-creation of knowledge
- Provision of guidelines for handling complexity, uncertainty and ambiguity of systemic risks
- Conceptualizes the transboundary nature of systemic risks and the causes of ripples effects

- Inclusive Governance of systemic risks based on multidisciplinary modeling and characterization
 - Institutionalized assessment of future social and technological developments (foresight and early warning signals)
 - Implementation of a risk governance culture based on inclusion of science based risk analysis and ethical/moral deliberation
- Foster trust in science, politics and governance institutions
- Enhance adaptive capacity of the system

Thank you very much!

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