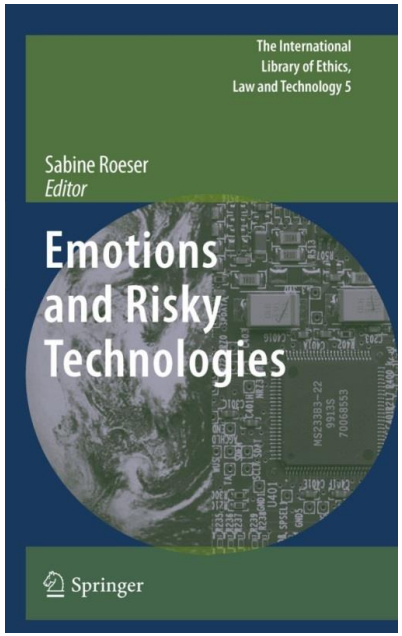
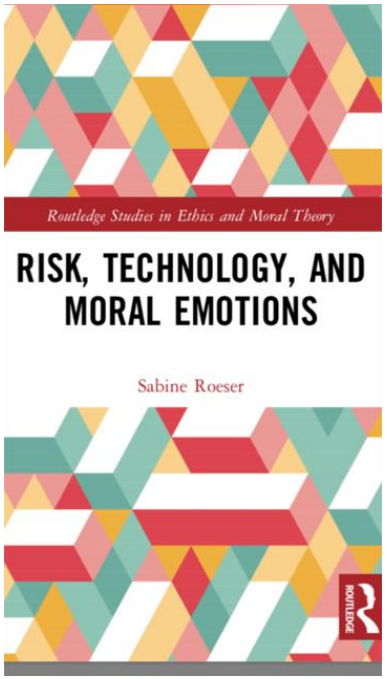
Moral Emotions and Risky Technologies





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Ethics and Philosophy of Technology

How to decide about risky technologies?

- Emotional debates
- Stalemates pro/con
- experts vs laypeople
- 'low probabilities' vs 'unacceptable outcomes'
- What to do with *emotions*?

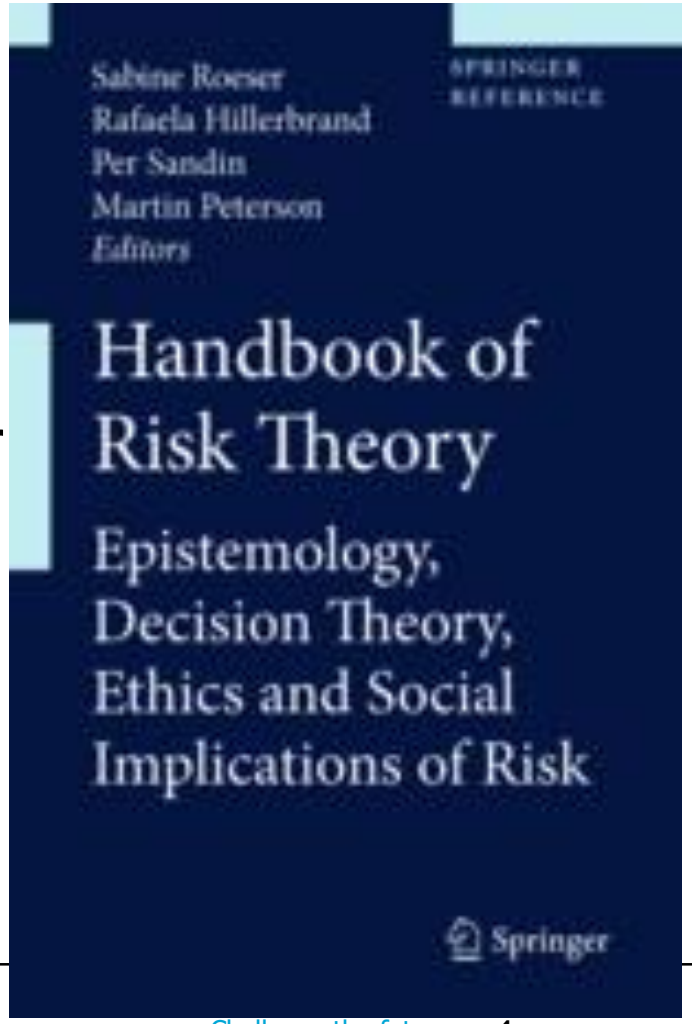
Technocratic vs populist pitfall

Technocratic pitfall:
- Base risk policy solely on formal, quantitative methods

Populist pitfall:
- Using 'irrational emotions' to create support for risky technologies

Conventional risk management

- Risk = probability x unwanted effect
- Eg. Annual fatalities as consequence of a technology
- Cost/benefit-analysis and
- formal models in order to decide whether a technology is implemented
- 'Rational, objective, value neutral methods'- ???



Risk Perception and Risk Ethics

- Paul Slovic on public risk perception:
- Takes other considerations into account in determining whether a risk is acceptable.
- Same concerns are shared by risk ethicists:
- Justice, fairness, equity, autonomy…
- C/B-analysis / formal models far from value neutral

Affect in Decision Making under Uncertainty

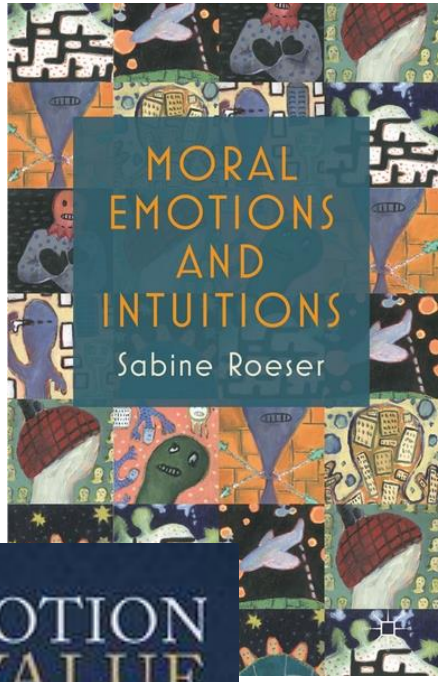
- Dual Process Theory (DPT):
- Emotions and rationality are distinct sources of insight that have opposite tasks
- System 1 is emotional, affective, spontaneous and evolutionary prior.
- System 2 is rational, analytical, reflective and occurred later in our evolution.
- System 2 normatively superior to system 1.
- Similar to common dichotomy emotion vs reason

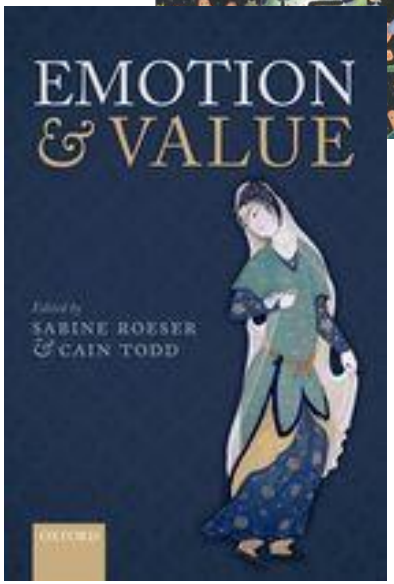
An alternative view about emotions

- Emotions are needed for practical rationality (Aristotle, Damasio 1994, Frijda, Nussbaum, Solomon, Roberts etc)
- Emotions are affective and cognitive at the same time
- I.e. they involve propositional attitudes and care about the object of the proposition
- 'I feel guilty' means:
- Feeling the 'pangs of guilt'
- But also having the judgment/cognition that one did something wrong
- → Features of system 1 and system 2
- → emotions fall into both systems or neither ('system 3'?)

Moral emotions and intuitions

- My own theory of moral emotions and intuitions:
- Emotions and intuitions indispensable source of ethical insight
- Direct moral perception.
- Attention for specific context:
- 'Fingerspitzengefuehl'.
- Help us to assess different cases.

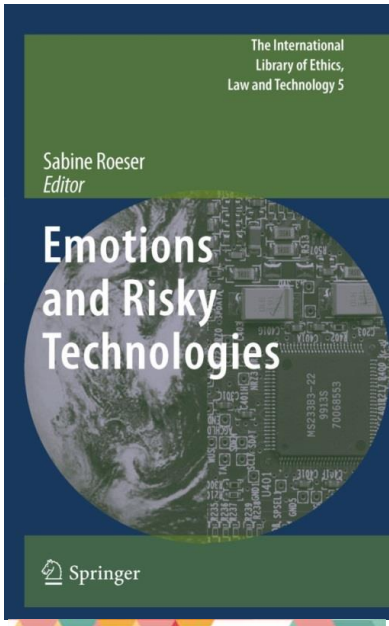


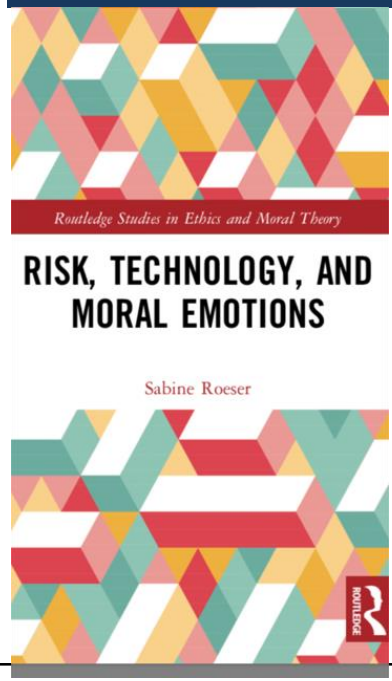


Moral emotions and risk decisions

- Sympathy, fear, indignation, enthousiasm
- Point to morally salient aspects of technologies
- Such as risks, benefits, autonomy, fairness

- In order to avoid e.g. 'probability neglect' (Sunstein 2005):
- → Moral emotions about risk have to be informed by science and statistics
- However, in order to avoid 'complexity neglect':
- → Decisions about risk have to be informed by moral emotions





Emotions as missing link in climate change communication

- Emotions missing link in communication about climate change:
- they lead us to more awareness of the problems and
- to being motivated to do something about climate change.

Sabine Roeser (2012), 'Risk Communication, Public Engagement, and Climate Change: A Role for Emotions', *Risk Analysis* 32, 1033-1040

Emotional deliberation on risk

- Emotional deliberation approach to risk
- Requires different approach to debates about risk
- Revise existing PRA (participatory risk assessment) approaches
- By including emotions
- Take emotions as *starting point* of discussion
- Avoid the 2 pitfalls

Roeser, Sabine and Udo Pesch (2016), 'An Emotional Deliberation Approach to Risk', *Science, Technology and Human Values*

Emotional reflection on risk

- E.g. let experts and laypeople co-develop scenarios for morally acceptable technologies
- Dashboard to facilitate engaged reflection on energy policy
- Room for technical expertise
- But also for emotional and moral concerns

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- Puts experts and laypeople on equal footing
- Takes away polarization
- Opens way for genuine dialogue

- E.g. New Dutch risk policy 2014:
- Takes into account emotions and values as important source of insight