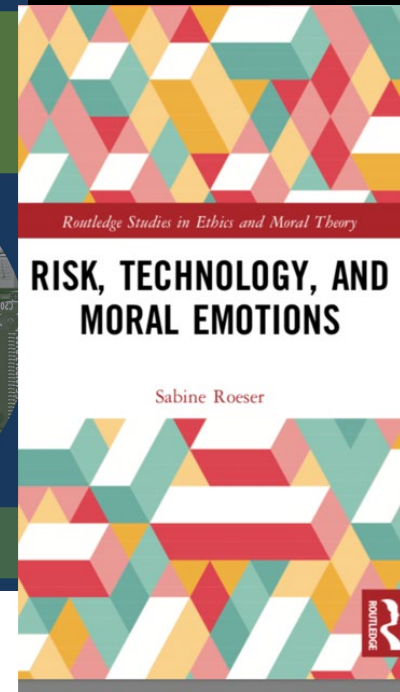
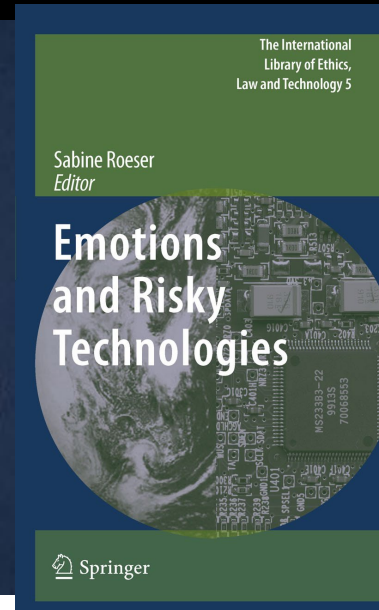
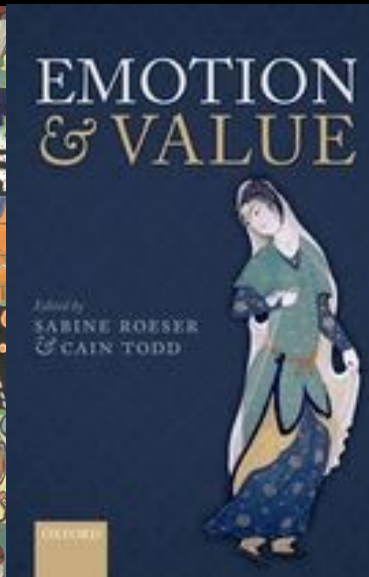
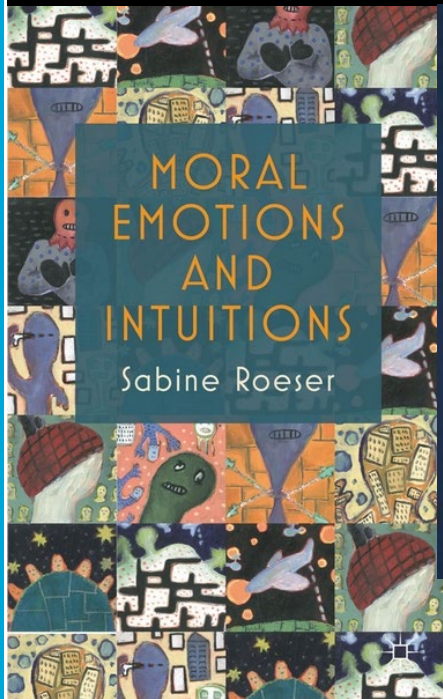


Emotions, Ethics, and Risky Technologies



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The dichotomy between reason and emotion

- Common view:
- Opposition between reason and emotion
- Emotions as ‘gut reactions’

- eg
- Dual Process Theory (DPT) (eg Kahneman 2011)
- System 1 vs system 2

Risk and emotion: 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
- Both approaches based on narrow understanding of risk and emotions
- No explicit deliberation on values that are also always at stake in complex decision situations such as about risky technologies

Reason and Emotion in philosophy

Pro reason:

- Immanuel Kant: ethics is objective and based on rationality

Pro emotion:

- David Hume: ethics is based on emotions and subjective

Against this reason emotion dichotomy:

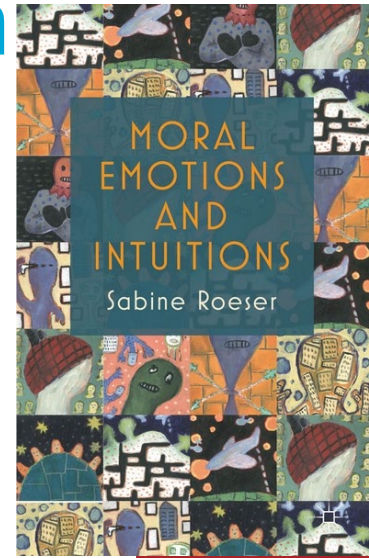
- Mencius, Aristotle, Martha Nussbaum, feminist ethics etc:
- Emotions are not opposed to rationality
- Care, sympathy, compassion etc crucial for moral knowledge and development

- Antonio Damasio, neuropsychology:
- Brain damage to amygdala: loss of emotions -> loss of practical and moral judgment

- Emotion as source of practical rationality

Emotional Deliberation

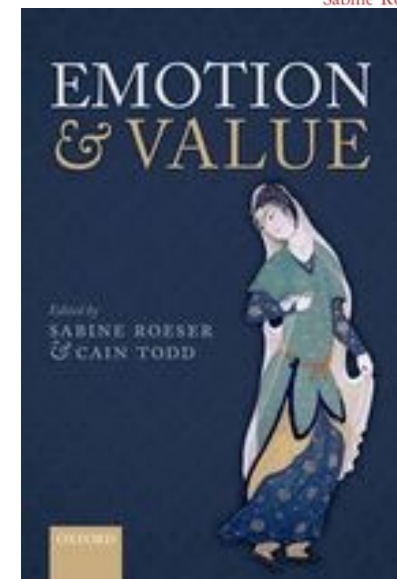
- Based on cognitive theories of emotions I argue:
 - Emotions are cognitive and affective at the same time
 - Emotions as moral perceptions
 - Take emotions as *starting point* of discussion
- > Emotional deliberation**
- (eg Roeser and Pesch 2016)



Routledge Studies in Ethics and Moral Theory

**RISK, TECHNOLOGY, AND
MORAL EMOTIONS**

Sabine Roeser



The power of art to invoke moral emotions

- Art can play a very important role in this:
- Narratives can broaden our perspective
- They can let us sympathize with others
- They can lead us to formative experience
- Literature, film etc as arenas to train and expand our moral emotions

Emotional deliberation on controversial topics, such as risks and technologies

- Eg nuclear energy, climate policy, biotechnology, public health policies etc
- Can have huge impacts on people's values
- Eg safety, sustainability, justice, autonomy, solidarity

- Talk about emotions and underlying values can help to:
 - put people on equal footing
 - create mutual understanding
 - overcome stalemates
 - find new and creative solutions together

The Emotional Deliberation Approach

to Risk & Technology



How to make encounters between lay people, policy makers & experts more democratic, fair & fruitful

PART I - CONTENTS

1. Talk about the emotions that people experience



2. Talk about the values that underly these emotions



3. Ask questions that invite sharing personal experiences and digging deeper



4. Use art to appeal to people's imagination



5. Stimulate co-creation of scenarios for responsible innovation



The Emotional Deliberation Approach to Risk & Technology



How to make encounters between lay people, policy makers & experts more democratic, fair & fruitful

PART II - PROCESS

6. Engage in symmetrical communication, instead of experts just 'sending' information



7. Create a set-up / environment that places people on equal footing to support this



8. Communicate in a respectful way, reflecting people's equal status as citizen



9. Have lay people respond to each other, instead of putting expert opinions central



10. Have a clear procedure: what happens with people's input, when and how



The Emotional Deliberation Approach to Risk & Technology



How to make encounters between lay people, policy makers & experts more democratic, fair & fruitful

Example questions for recommendation 3 (digging deeper)

General questions

- Do you find the technical information about the technology clear? Transparent? Trustworthy?
- If not, why not?

Regarding negative emotions

- What are you afraid of?
- What do you think could happen?
- Why does that worry you?
- Under what conditions would you be less worried?

Regarding positive emotions

- Why are you enthusiastic about this technology?
- How can it be used to everybody's advantage?
- How can possible negative aspects be addressed?

To engage people's imagination & reflection

- Can you understand the viewpoint of the person from the other group? If not, can you try to place yourself in their shoes by listening to their story?
- What problem do you think this technology has been developed for as a solution?
- Do you think there is a simple solution to this problem?
- Can we solve the problem by not using this technology? Or does that give rise to other problems?
- Can you try to imagine scenarios with and without this and/or other technologies?
- Can we solve the problems stated by designing the technology in a different way?
- If you were in charge, how would you solve this problem?