Ethics and the future generations

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Ethics and the future generations

We cannot talk about the future

without a critical analysis of how we make sense of things today

1 Three ethical challenges to the governance of technological risk

1	Three ethical challenges to the governance of technological risk

1   To care for fairness in the way science advices policy

The fact that the science of technological risk assessment needs to deal with knowledge-related uncertainties and value pluralism implies that science as policy advice cannot deliver factual evidence to the full extent. Fairness starts with both science and politics to become 'reflexive' about this and about the consequences thereof.

2   To care for social justice in risk justification

The involvement of people (citizens) in decision making on issues that may potentially affect them in an adverse way is now seen as an essential criterion of fair decision making itself.

The way this involvement should be organised is still a topic of debate.

3   To make deliberate and accountable but resigned policy choices

Even decision making judged as 'fair' by all concerned needs to accept that one cannot predict if and how the use of a risk-inherent technology will eventually affect us in the future. An attitude of deliberate resignation is that attitude with which we explain why we thought what we did was the best we could do.

2 Risk and social justice

do we need calculation
to support informed consent?
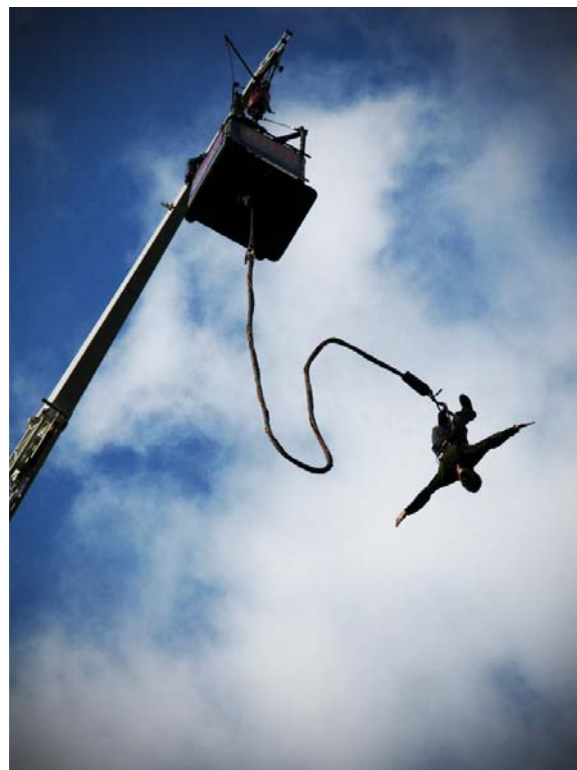
do we need informed consent
to support calculation?

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3 Fair and effective risk assessment: three reflections

3 | Fair and effective risk assessment: three reflections
The assessment of what is an acceptable risk for society is not a matter of science; it is a matter of justice

■ A risk is not a mathematical formula; it is a potential harm that
→ you cannot completely know and
→ you cannot fully control

■ Acceptable risk?
People will accept a risk they cannot completely know and that they cannot fully control simply when they **trust** that its justification is **marked by fairness**.

Fairness: the **possibility of self-determination** ensured by 'the right to be responsible'

risk for society | the right to co-decide   ⟶   from a joint decision follows
  ↑   ↓
the right to be responsible   **the right to be protected**
risk taken by an individual | ↓
the freedom to hurt yourself

■ For any health risk that comes with technological, industrial or medical practices and that has a wider impact on society, 'the right to be responsible' equals 'the right to co-decide'. **Enabling this right is a principle of justice**

3 Fair and effective risk assessment: three reflections
Societal trust in the assessment of what is an acceptable risk for society should be generated 'by method instead of proof'

- No scientific or political authority can determine alone what would be an acceptable risk for society.

- Good science and engineering, open and transparent communication and the 'promises' of a responsible safety and security culture are necessary conditions but can never generate societal trust in themselves.

- The reason is that there will always be essential factors beyond full control: nature, time, human error, misuse of technology, which implies that one always has to deal with **incomplete and speculative knowledge** and **value pluralism** (also in post-accident conditions).

- Confronted with the need to deal with incomplete and speculative knowledge and value pluralism, **the challenge of science** in risk governance is not the production of credible proofs, it **is the construction of credible hypotheses**.

- Fair risk governance is risk governance **of which the method of knowledge generation and decision making is trusted as fair** by society. When the method is trusted as fair, that risk governance **has also the potential to be effective**, as the decision making will be trusted as fair also with those who would have preferred another outcome (the 'democracy principle').

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3	Fair and effective risk assessment: three reflections

A fair dealing with the complexity of risk assessment and justification requires new governance methods

Today, the governance methods we use to make sense of the complexity of technological risk assessment and justification are still too much driven by the doctrine of scientific truth and the strategies of political self-preservation and economic profit.

■ For the assessment of what is an acceptable health risk for society, one would wonder whether these methods

→ really enable 'the right to co-decide' (as a principle of justice);

→ are really able to generate societal trust by way of their very method.

■ There is a need for governance methods for knowledge generation and decision making that enable an **inclusive, open and reflexive dialogue** with respect to the ratio's we use

↘ to defend our interests, hopes, hypotheses, believes and concerns

↘ to relativise our uncertainties and doubts

■ These governance methods have the potential to generate trust on the basis of their method instead of on proclaimed scientific truths or political promises.

| 4 | The real problem (a critical theory of modernity) |

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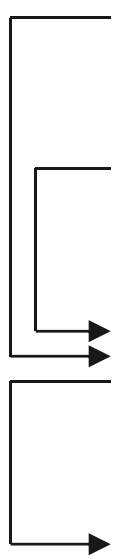
4 | The real problem (a critical theory of modernity)
Energy governance is a 'complex social problem' with technological risk as its central concern

4 The real problem (a critical theory of modernity)
Characteristics of a complex social problem

4 The real problem (a critical theory of modernity)
Characteristics of a complex social problem

1. **diversified impact**

   Individuals and/or groups are affected by the problem in diverse ways (diverse positive or negative, positive versus negative, variable in time, delayed, …).

2. **interdependence**

   The problem is caused and/or influenced by multiple factors (social, economic, technical, natural) and relates itself to other problems. Interdependence can change in time. The context of concern becomes global.

3. **organisational complexity**

   Due to the character of **diversified impact** and **interdependence**, problems need to be tackled 'together' in a coherent and 'holistic' approach.

4. **relative responsibilities**

   Due to the character of **diversified impact** and **interdependence** and the **organisational complexity**, responsibility cannot be assigned to one specific actor. Responsibilities are relative in two ways:
   (1) **mutual**: the possibility for one actor to take responsibility can depend on the responsibility of another actor;
   (2) **collective**: our collective responsibility is relative in the sense that we need to hand over control to a next 'collective' (a new government, the next generations).

4	The real problem (a critical theory of modernity)
	Characteristics of a complex social problem

1. **diversified impact**
2. **interdependence**
3. **organisational complexity**
4. **relative responsibilities**

5. **knowledge problem**

Analysing and 'controlling' the problem (**diversified impact**, **interdependence** and the **organisational complexity**) is complicated by uncertainty due to incomplete, speculative or contradictory knowledge.

6. **evaluation problem**

Evaluation of **diversified impact**, **interdependence** and the **organisational complexity** and of subsequent **relative responsibilities** is complicated due to
(1) the knowledge problem,;
(2) different visions based on different worldviews;
(3) the fact that metavalues (equality, sustainability) cannot be unambiguously translated to practical responsibilities.

7. **authority problem**

The authority of actors who evaluate and judge the problem and rationalise their interests and responsibilities is relative, which gives other actors the opportunity to question the credibility of the judgement and the legitimacy of the authority.

Characteristics

interdependence

diversified impact   } factual complexity

organisational complexity

relative responsibilities

knowledge problem

evaluation problem   } complexity of interpretation

authority problem

4 The real problem (a critical theory of modernity)
The real problem: obsolete but strategically maintained governing methods that hinder the possibility of inclusive, open and reflexive dialogue

■ Today, we have four so-called 'governing methods' concerned with the organisation of our society: representative democracy, the liberal market, science and education.

Representative democracy, the liberal market and science are 'modern' because they can be seen as results of 'modernity as an emancipation process'

↘ Typical for modernity is the fact that these governing methods do not question the legitimacy of their authority, as what they do is tested by some form of 'internal control' (their 'internal logic'):

'representative democracy'
as the search for compromise through organised conflict of opinion between parties representing specific ideologies, and enclosed within the nation state,

'the free and competitive market'
as the self-corrective system of competition that automatically annihilates unsuccesful commercial projects and that serves as the motor for innovation,

'objective science'
in its reliance upon the scientific method and self-control through peer review.

4 The real problem (a critical theory of modernity)
The real problem: obsolete but strategically maintained governing methods that hinder the possibility of inclusive, open and reflexive dialogue

Taking this complexity serious, the idea is that the traditional governing methods of international politics, representative democracy, the market and science are not longer able to grasp the complexity of these social problems.

5 An ethics of care for our modern coexistence

5	An ethics of care for our modern coexistence
	Ethics: judging in absence of evidence

Ethics: As moral agents

being concerned with questions and concepts of 'what ought to be'
↘ right and wrong conduct
↘ rights and responsibilities

in absence of 'evidence' that would facillitate   straightforward judgement,
consensus and
consequent action.

↘ 'what ought to be'   a good society, a fair society
to act responsibly
being good, leading a good life

↘ missing evidence   a convincing scientific proof
a democratically constituted law

a universal principle to guide moral evaluation or action

5   An ethics of care for our modern coexistence
     Normative ethical theories

→   seeking reference in 'universally applicable principles'
     (Kantian) deontology, consequentialism (utilitarianism)

danger   risk of overlooking the particular of specific situations

→   seeking reference in evaluating particular situations
     'particularism'

danger   risk of self-protective relativism (cultural, social, political)

→   seeking reference in virtues ('being good')
     virtue ethics (Aristoteles)

problem   virtues do not (always) unambiguously translate into concrete action

→   seeking reference in the care for human relationships
     ethics of care

problem   works for close relations with known people; unclear how it could work for
     distant relations with strangers

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5	An ethics of care for our modern coexistence

■ The trouble with complex social problems is not their complexity but the formal methods we use to make sense of them
(in politics, science, the market and education).

→ **The idea of complexity enables an ethics of care** that could work for our distant relationships with strangers, **now and in the future**.

5	An ethics of care for our modern coexistence
	The 'fact of complexity' brings along three new characteristics of modern coexistence

connectedness

We are connected with each other 'in complexity'. We cannot any longer escape or avoid it. Fair dealing with each other implies a fair dealing with the complexity that binds us.

vulnerability

In complexity, we became intellectually dependent on each other, while we face our own and each other's 'authority problem'. We should care for the vulnerability of the ignorant and the confused, but also of 'mandated power'.

(sense for) commitment

Our experiences now extend from the local to the global. As intelligent reflective beings, to become involved in deliberating issues of general societal concern became a new source of meaning and moral motivation.

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Bangladesh

China

connectedness

vulnerability

(sense for) commitment
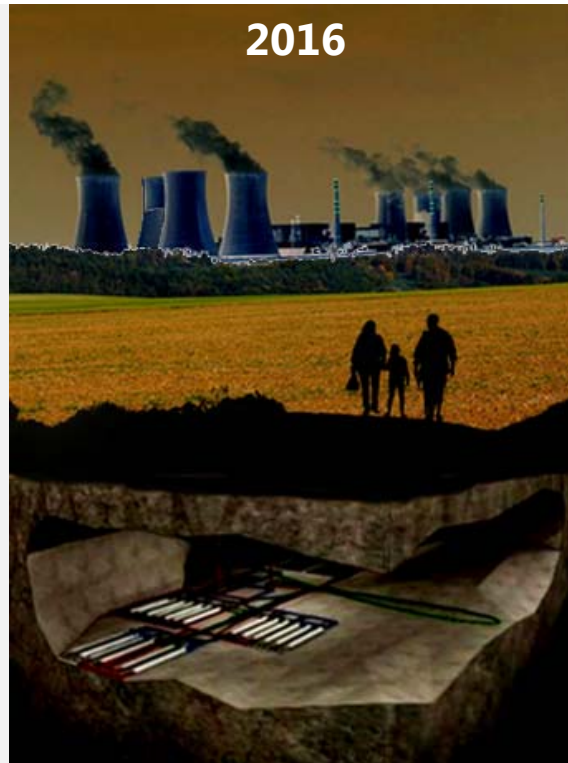
5   An ethics of care for our modern coexistence
The 'fact of complexity' brings along three new characteristics of modern coexistence

connectedness

vulnerability

(sense for) commitment

2016

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| | 5 | An ethics of care for our modern coexistence
The new characteristics of coexistence imply the need to be intellectual solidary in the way we make sense of complexity for social organisation |

intellectual solidarity as an ethical commitment (a joint 'ethical experience')

| **connectedness** | the joint preparedness to enable and participate in intellectual confrontation
with respect to the ratio's we use
to defend our interests, hopes, hypotheses, believes and concerns
to relativise our uncertainties and doubts |

| **vulnerability** | the joint preparedness
to acknowledge each other's authority problem
& the vulnerability of the next generations |

| **(sense for) commitment** | the joint preparedness to enable and support 'intellectual emancipation' of others with the aim to provide every human being with the possibility to develop a (self-)critical sense and to be a (self-)critical actor in society |

5	An ethics of care for our modern coexistence
	Philosophical features of intellectual solidarity as an ethical commitment

- The relativity of autonomy (of moral authority)

  Due to complexity, I cannot be my only source of moral authority, and I need to act on norms I have not chosen myself (↔ Kant).

- The inconvenience of tolerance and practical solidarity

  Tolerance for the otherness of the other or practical solidarity with the other always implies renouncing a bit of my own 'comfort' (but not of my integrity).

- The fundamental of **moral reciprocity**

  The practical of my moral motivation cannot be stimulated 'by myself', but only in reflective moral interaction.
  ('the practicing moral individual does not exist').

- The fundamental of **moral complementarity**

  We can only know, think and evaluate 'together'; if nobody has the truth, then the simple conclusion is that we *need* each other to make sense of (and give meaning to) our society and to our personal life.

5	An ethics of care for our modern coexistence
	A sense for intellectual solidarity implies one common virtue for everyone concerned

→
with respect to

reflexivity as an **ethical attitude** (an **ethical 'experience'**)
the own position, interests, hopes, hypotheses, believes and concerns, and this in any formal role or social position (as scientist, engineer, politician, manager, citizen, civil society representative, activist, ...).

Adopting this attitude requires **reflexivity** as an **intellectual skill** ➤ **seeing the bigger picture and yourself in it** ◄ with your interests, hopes, hypotheses, believes and concerns

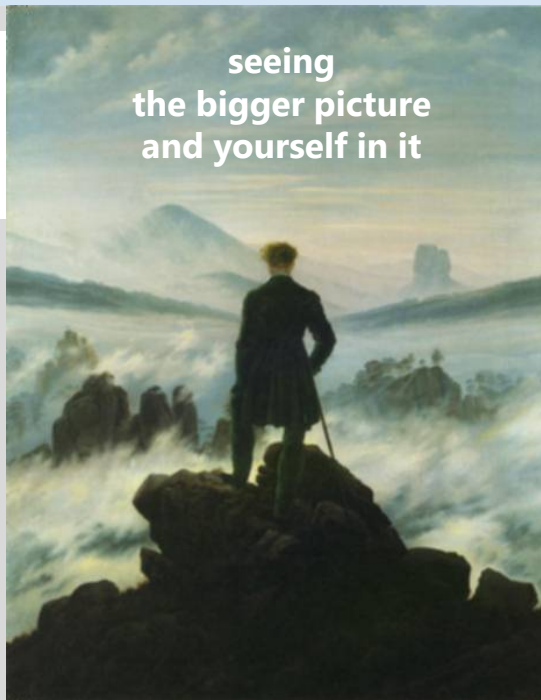| 5	An ethics of care for our modern coexistence
	A sense for intellectual solidarity implies one common virtue for everyone concerned

→ **reflexivity** as an **ethical attitude** (an **ethical 'experience'**)

with respect to the own position, interests, hopes, hypotheses, believes and concerns, and this in any formal role or social position (as scientist, engineer, politician, manager, citizen, civil society representative, activist, ...).

Adopting this attitude requires **reflexivity** as an **intellectual skill**

**seeing
the bigger picture
and yourself in it**

with your interests, hopes, hypotheses, believes and concerns

Caspar David Friedrich
"Wanderer above
the Sea of Fog"
1818

5	An ethics of care for our modern coexistence
	A sense for intellectual solidarity implies one common virtue for everyone concerned

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**seeing
the bigger picture
and yourself in it**

man looking for food
in a dump
(foto exhibit at the
UN World Summit on
Sustainable
Development,
Rio de Janeiro, 2012)

6 An ethics of care towards the future generations

6	An ethics of care towards the future generations
	What is the problem?

■ Traditional questions:

↘ What is our responsibility / accountability towards the next generations?

↘ What is intergenerational equity?

↘ What is intergenerational justice?

6	An ethics of care towards the future generations
	The idea of intergenerational justice

Two features of intergenerational relations

1. there is a lack of direct or 'practical' reciprocity between generations of people who are not contemporaries

2. the permanent asymmetry in power-relations between living people and those who will live in the future.

↘ present generations may be said to exercise power over (remote) future generations when, for example, they create conditions that make it costly for future generations to decide against continuing to pursue present generations' projects.

↘ not only can the present generation influence the conduct of future people by affecting their desires and circumstances, it can also exercise power by setting back the interests of future generations (the risk of having their options reduced)

↘ those presently alive can affect the very existence of future people (whether or not future people will exist), the number of future people (how many future people will exist), and the identity of future people (who will exist).

source http://plato.stanford.edu/entries/justice-intergenerational/

6	An ethics of care towards the future generations
	Traditional theories of justice do not really help us with understanding intergenerational justice

■ Theories of justice applicable to the idea of intergenerational justice with respect to a specific 'good' in society ('good' can be well-being, but also something material, an opportunity or the capacity to fulfil a 'need'):

aggregative   promoting the largest possible aggregated 'good' in society (utilitarianism)

commutative   promoting for every distinct actor the balance between contribution (effort) and reward with respect to the 'good' in society

distributive   promoting distribution of the 'good' in society ('fair', 'equal'), often (but not always) inspired by the argument that the totality of the good is 'fixed' (global commons)

■ We have to conclude that none of the theories are helpful to judge on our responsibilities towards next generations *in the concrete setting of today.*

Common sense tells us that we should not put a burden on next generations, but none of the theories helps us to understand what 'intergenerational justice' means.

→ Therefore: can we learn something from the idea of moral reciprocity in intergenerational justice?

6	An ethics of care towards the future generations
	The idea of reciprocity in our relation with the next generations

problem — Also ethical thinking towards the future generations is **complicated by moral pluralism**. The problem is that it is a 'pluralism among ourselves', while 'they' are missing. As there is no intergenerational practical reciprocity possible, here is an **unavoidable intergenerational democratic deficit**.

↘ that is particularly true for the governance of radioactive waste

questions — open or closed fuel cycle?
retrievable or non-retrievable disposal of radioactive waste?

■ We can overcome the 'moral stalemate' caused by the intergenerational democratic deficit by reformulating the question:

What does a fair dealing with complexity (by enabling intellectual solidarity as an ethical commitment now) mean in our relation to the next generations?

■ Idea of reciprocity *in the now*:

our responsibility towards them / their expectations towards us

■ There is a need to distinct **practical reciprocity** from **moral reciprocity**

6	An ethics of care towards the future generations Moral reciprocity

- As we cannot reason and deliberate with the next generations, there can be no moral reciprocity in interaction with the next generations, at least not in a symmetric sense

↘ our moral responsibility

Our ethical experience can never be a joint experience with those generations.

This implies that we – together – have to think 'Kantian' towards the future generations, from out of an **intragenerational *inevitably autonomous* moral authority**.

Our moral responsibility is in our joint commitment today to deliberate how to minimise burdens on them

↗ their moral responsibility

Their moral responsibility is in their commitment to try to understand why we did what we did (even when it would be clear that we screwed up).

6	An ethics of care towards the future generations
	The idea of intellectual solidarity with the future generations

- In intellectual solidarity with the previous generations,
  we can try to understand what they did (deliberate or not), how and why

- In intellectual solidarity with the future generations,

→ we can 'promise' to carefully deliberate our acts by caring for the precautionary principle, intragenerational intellectual solidarity and the principle of trust in decision making

→ we can reflect on what it implies to leave options open and act accordingly

→ we can give account of our deliberate reflections and consequent actions by explaining them why we thought this was the best we could do

→ we can accept the limits to our own means and power of control (resignation)

- In intellectual solidarity with the next generation, we can educate our children about the complexity of social problems (such as energy governance) and enable them to develop a (self-)critical mind and an ethical sense.

- There is no 'intergenerational continuity' here, as we are at a turning point: as humanity, we are doing this for the first time.

6	An ethics of care towards the future generations
	Practical implications

- Today, we don't live in a world inspired by intellectual solidarity, but we have the capacity to put it into practice and foster it.

6	An ethics of care towards the future generations Practical implications for radioactive waste governance

■ There is a need for formal methods of knowledge generation and political decision making that enable inclusive, open and reflexive dialogue on radioactive waste governance and energy governance.

This require a rethinking of our traditional methods of

science → participatory, transdisciplinary science

democracy → 'deliberative' democracy on local, national and international level

■ Because of complexity (interdependence, diversified impact, organisational complexity), radioactive waste governance can never be isolated from its context (energy governance).

■ The urge to come to 'technical and social solutions' for radioactive waste disposal should not be driven by the motivation to 'prove' that nuclear energy is an acceptable energy technology option.

■ The options of 'waiting' and of retrievability are not explored yet in all their conceptual, ethical and practical meanings and deserve more attention in research and politics.

■ It is important to preserve our dialogues to enable the next generations to understand what we did, how and why.