

Can we develop a manual to assist the responsible generation and use of science as policy advice?

Gaston Meskens

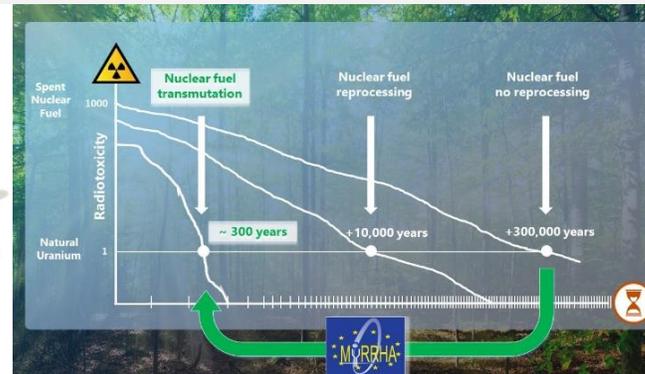
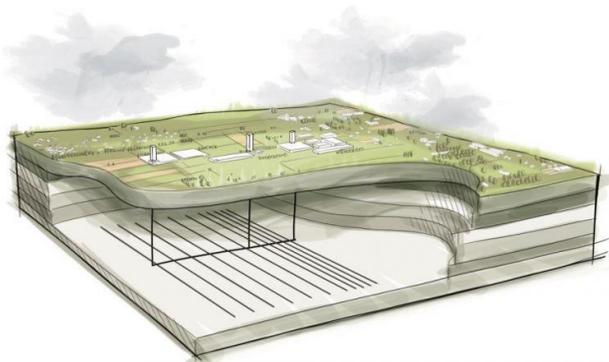
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RICOMET 2022, Utrecht, 12 May 2022

The logo for RICOMET 2022 features the text "RICOMET 2022" in a bold, orange, sans-serif font. The text is centered within a white rectangular box. This box is framed by a thick orange border at the top and bottom, and a thin olive-green border on the left and right sides.

RICOMET 2022

4 ethical challenges at the science-policy interface *dealing with 'complex problems'*



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constructing credible hypotheses

with regard to the feasibility and reliability of specific technological 'solutions'

dealing with moral pluralism today

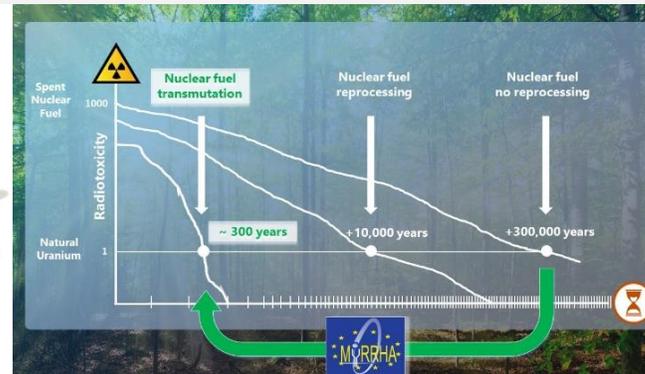
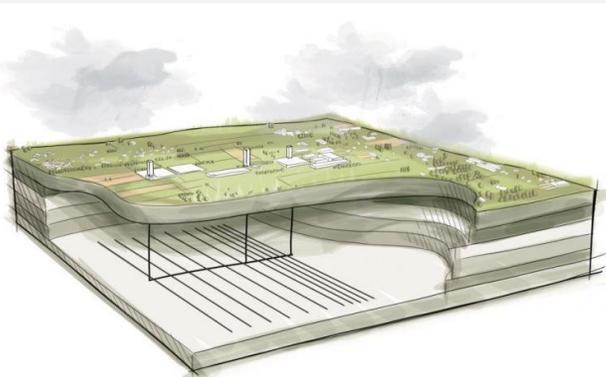
with regard to the technological choices we need to make

dealing with pressure from politics and the market to deliver evidence

that cannot (always) be delivered (yet)

dealing with moral authority over the next generations

because we cannot communicate and reason with them



Theoretical approaches

aiming to address these ethical challenges

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→ concepts, dynamics, paradigms and fashions of 'advanced knowledge generation'

participatory technology assessment (PTA) / transdisciplinarity (TD) / postnormal science (PNS)

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→ concepts, dynamics, paradigms and fashions of 'advanced knowledge generation'

participatory technology assessment (PTA) / transdisciplinarity (TD) / postnormal science (PNS)

- ☐ all have in common that they start from the recognition that
 - 'traditional science' relying on techno-scientific methods, models and numbers alone cannot longer do the job
 - science as policy advice should also be inspired by **ethical reflection** and that it should integrate (through social sciences and humanities approaches) recognition of **uncertainties, value-based arguments** and interests of various **stakeholders** and the **future generations**
- ☐ emerged post 1970's on, also stimulated by ecological awareness and sustainability and social justice thinking
 - no paradigm shift, but a slow push-pull process

Theoretical approaches

*aiming to address these ethical challenges **put in practice***

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what 'is' participatory technology assessment, transdisciplinarity or post-normal science?

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what 'is' participatory technology assessment, transdisciplinarity or post-normal science?

→ Participatory technology assessment, transdisciplinarity or post-normal science put in practice is simply people with different interests, expertise and backgrounds engaging in **a dialogue that would never happen in traditional science and policy settings** and that generates new knowledge and insights **that would otherwise never have existed**

☐ The **preparedness** of each of them **to engage in that dialogue** is motivated by the insight that this dialogue will serve a common goal: **effectively dealing with a complex problem** that affects us all

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however The **possibility** and **effectiveness** of these advanced approaches of knowledge generation not only depend on the preparedness of the scientific community, stakeholders, citizens and policy makers to engage in that dialogue, but also **on their possibilities and capabilities to do so**

Theoretical approaches

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What do we have already?

there is growing awareness of the need for and added value of **public participation** (of informed civil society & citizens) in decision making, **although one has to acknowledge that the possibility of participation still depends on the goodwill of political power holders**

growing awareness of the need and added value of **doing science differently** (through PTA/TD/PNS), **although still mainly only among those social sciences and humanities researchers concerned with the issue**

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do we need ? manuals ? checklists ? rulebooks that can inspire and assist **putting PTA / TD / PNS in practice ?**

SSH research has inquired into and proposed various practical approaches, and puts them in practice for the sake of its own research and at the service of policy advice

ref UNU Participatory Methods Toolkit (emphasis on participation, not on advanced science methods)

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But ... what's the use of a manual for someone who doesn't understand / sees the need of / feels threatened by the machine?

The importance of perceiving practical approaches
from an ethical capability-possibility framework

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→ Re-interpretation & 'extension' of the capability approach (Sen – Nussbaum)

capability approach [1]:

- *the freedom to achieve well-being is of primary moral importance*
- *well-being should be understood in terms of people's capabilities and functionings*

[1] <https://plato.stanford.edu/entries/capability-approach/>

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participation The **possibility** to contribute to the social dialogue (as a 'democratic right')

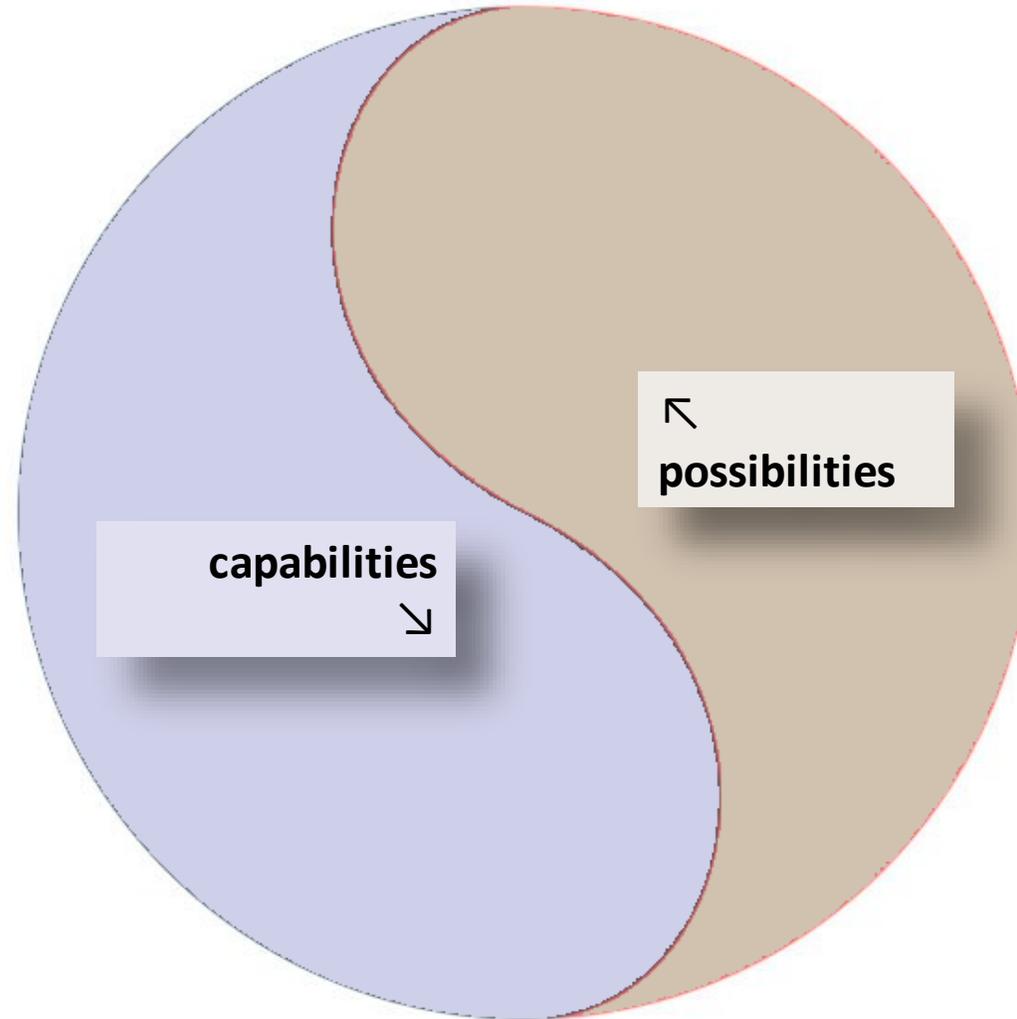
The **capability** to contribute to the social dialogue (as a right to learn)

capability to gain insight and think critical
to be vocal, raise concerns, formulate ideas
to care for precaution and other ethical values

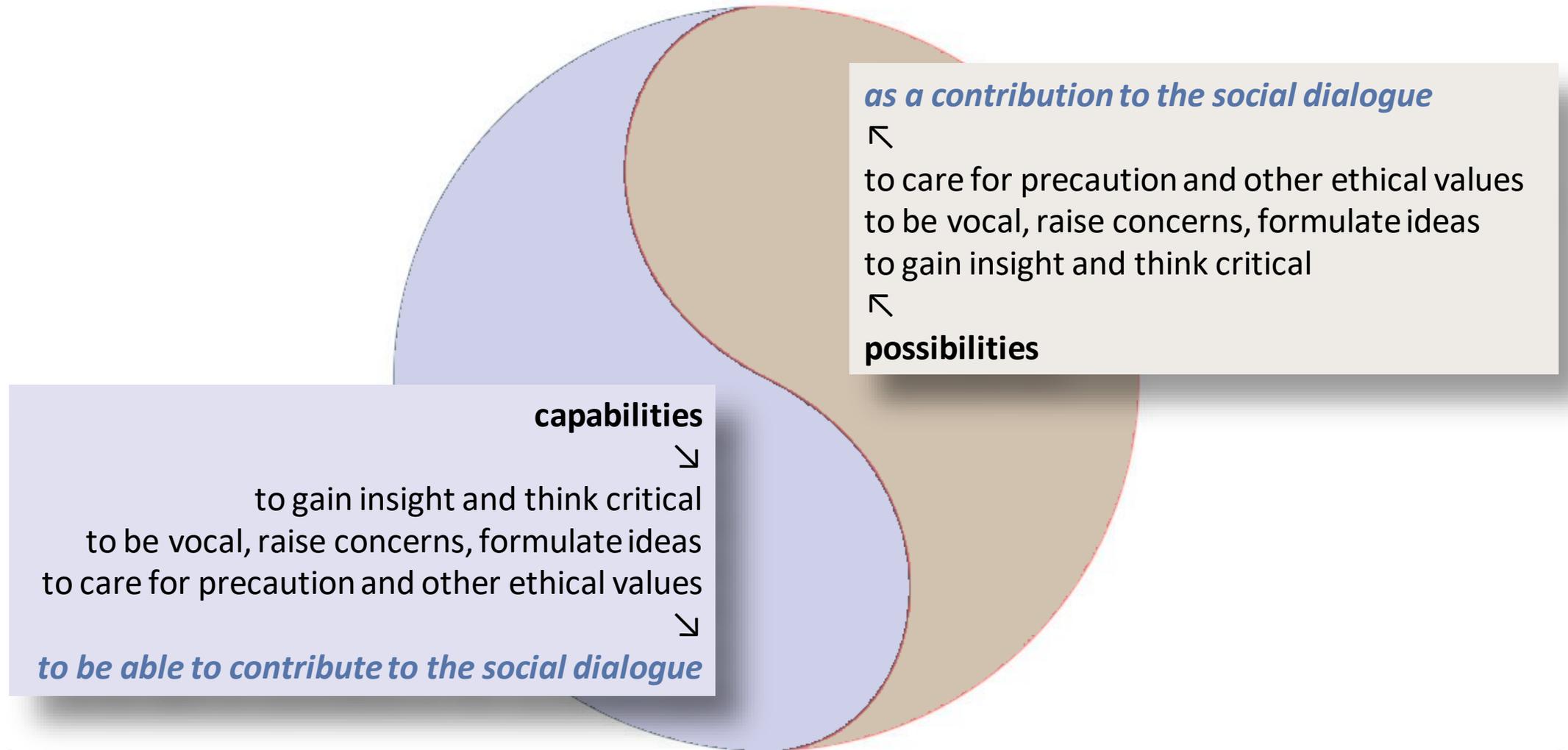
☐ Possibilities and capabilities are no unrelated concerns that should be addressed separately

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→ applicable to

political decision making
science for policy advice
education

as a contribution to the social dialogue



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possibilities

capabilities

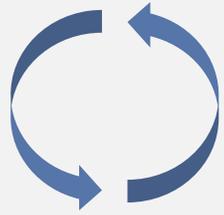


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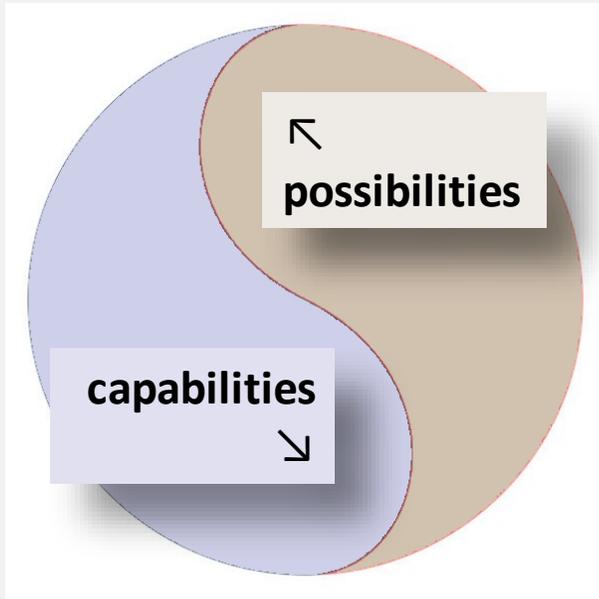


to be able to contribute to the social dialogue

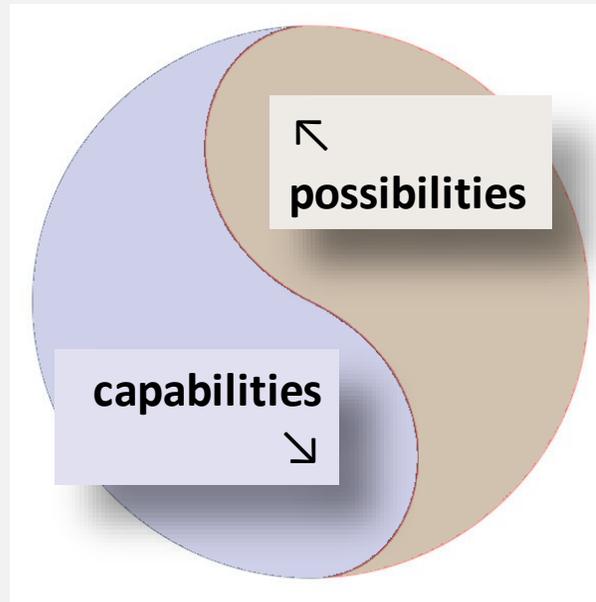
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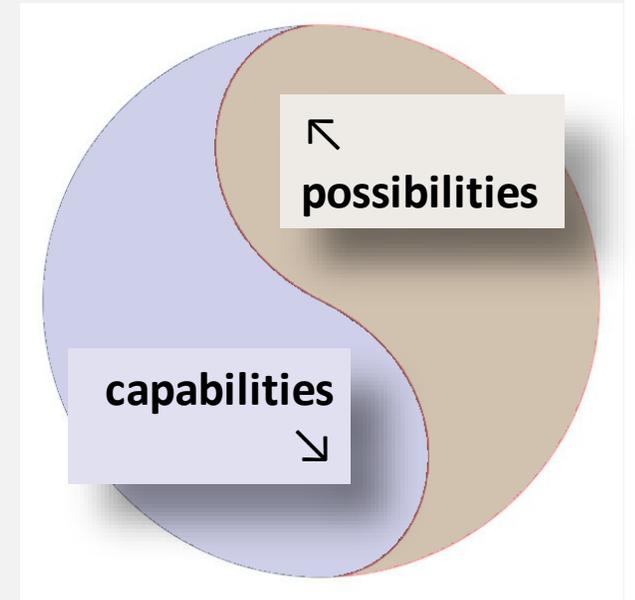
reflexive (self)learning processes
that can feed into and inspire each other



education

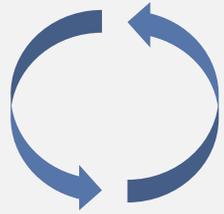


science

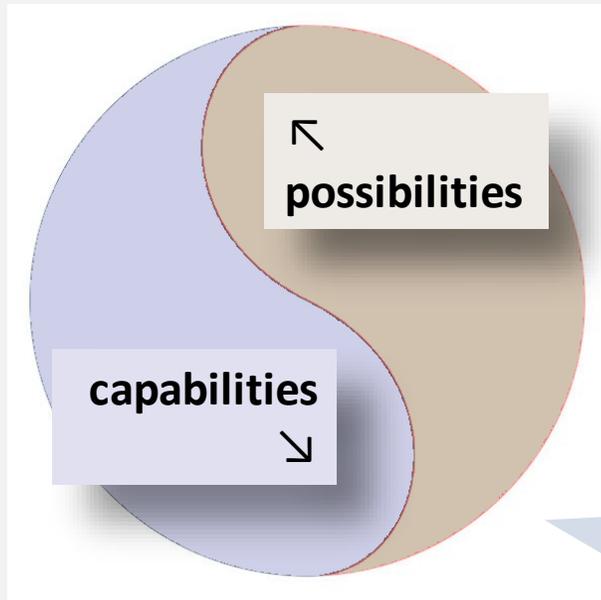


politics

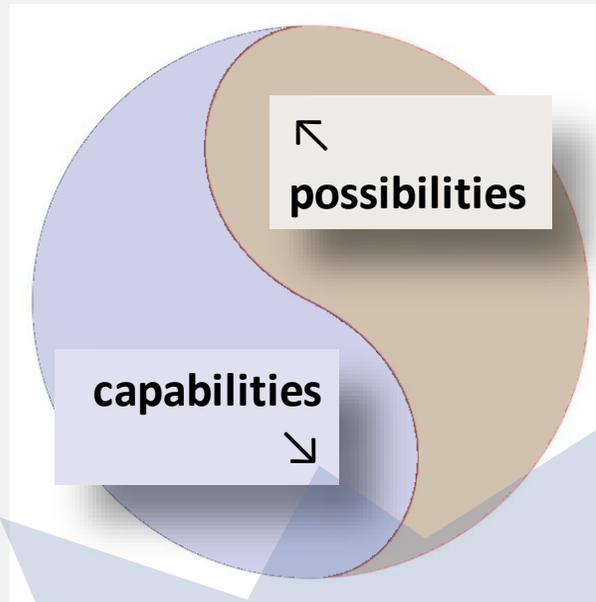
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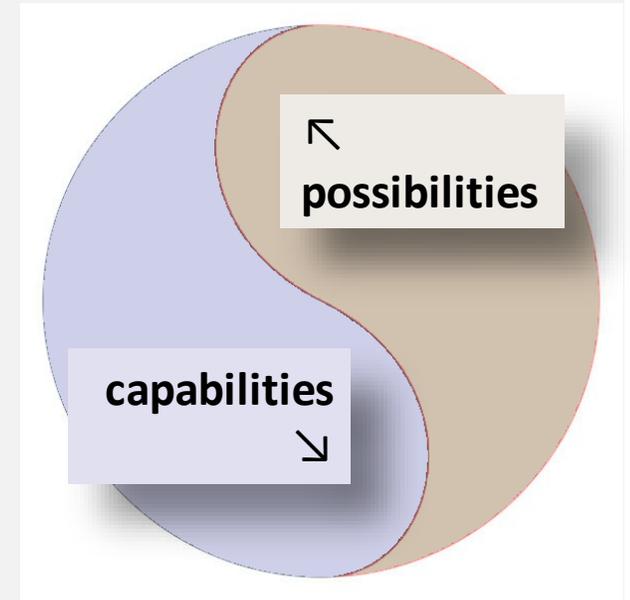


education



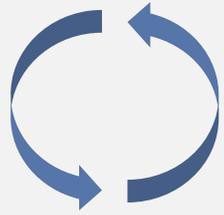
science
↑

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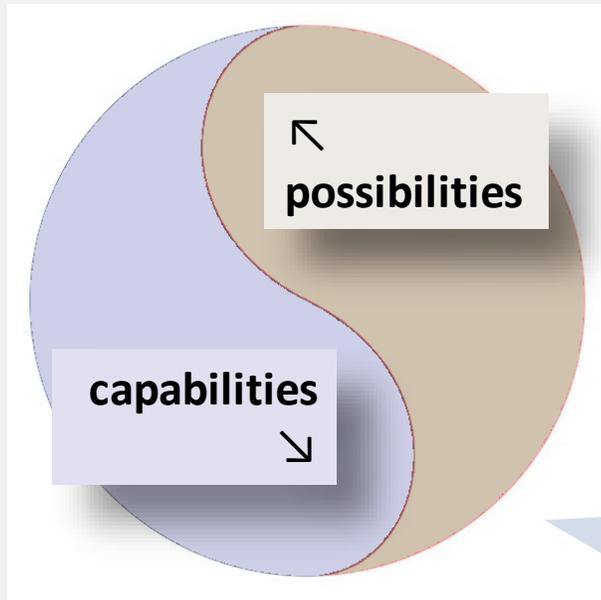


politics

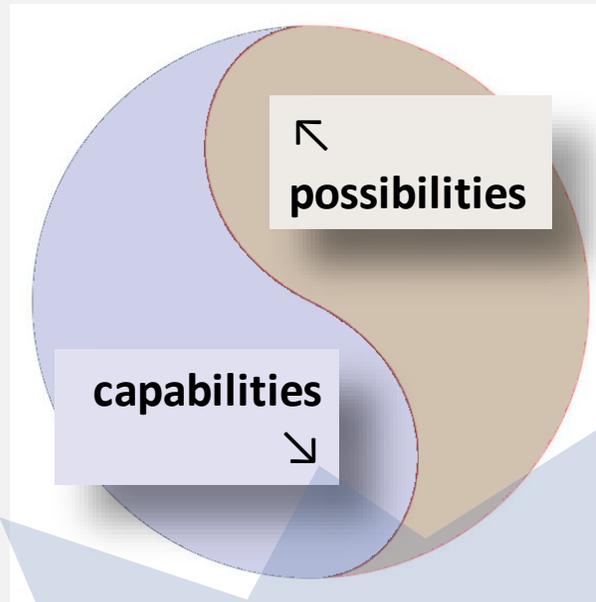
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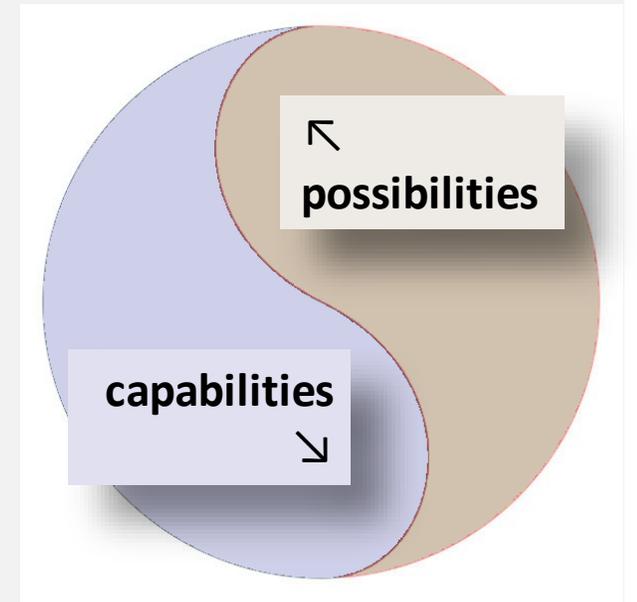


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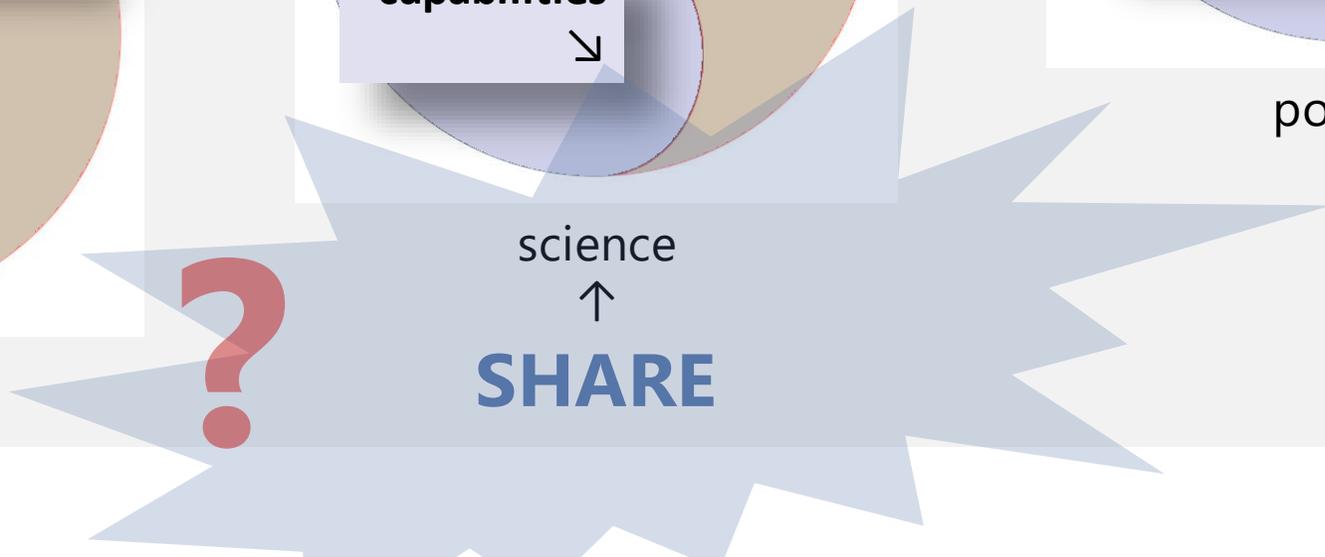


science
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SHARE



politics



The importance of perceiving practical approaches
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- There is a need to focus on a care for capabilities and possibilities in science education
in the general interest of better dealing with complex problems
in the specific interest of 'successful' advanced knowledge generation (PTA, TD, PNS) for policy advice, taking into account the 4 ethical challenges

constructing credible hypotheses
dealing with moral pluralism today
dealing with pressure from politics and the market to deliver evidence
dealing with moral authority over the next generations

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- ☑ Only then manuals for advanced knowledge generation can be made together
- ☑ The social science and humanities and ethics research community is **the best breeding ground** for reflections on **the why and how of possible reform of education** in that sense
- ☑ An invitation to SHARE to consider its possible role in this