Responsible Research and Innovation: technocratic guiding principle or a mean for democratization of innovation?

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Simple example – responsibility while innovating

- Litter-box as collector for bottles
Simple example – responsibility while innovating

- Litter-box as rubbish chute
Simple example – responsibility while innovating

- Litter-box as rubbish chute and collector for bottles
RRI – the new promise

The emergence of a new principle: promises for better innovation

Proposed working definition in the EU (von Schomberg 2013): RRI is a „transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products.“

Quality criteria for identifying RRI (Wickson/Carew 2014): socially relevant & solution oriented, sustainability centered & future scanning, diverse & deliberative, reflexive & responsive, rigorous & robust, creative & elegant, honest & accountable
Outline

- RRI – experiences
- RRI – self-restriction
- Looking at REACH: not labelled as RRI but seemingly is
- Conclusion
RRI – experiences

A short report from the water gauge

Strategic goals (van den Hoven et al. 2013: 14):

“A policy for RRI would bring together (...) efforts by the Member States and provide a comprehensive framework for improved governance. (...)”

A) To obtain relevant knowledge on the consequences (...)”

B) To effectively evaluate both outcomes and options (...)”

C) To use these considerations (under A and B) as functional requirements for design and development of new research, products and services. (...)”

Anticipating and measuring the costs of stranded research and innovation (R&I) public investments in case of induced social unrest, ethical controversy and weak or non-existent demand will be beneficial in times of increasingly limited financial means but is also very difficult.”
RRI – experiences

- A short report from the water gauge
- Thesis: a lot of activities but only a sparse conceptual consolidation
- Examples:
  - Running Projects: RRI Tools, Responsible Industry, RRI in South-East-Europe (and many others) -> Implementation
  - Calls for 2nd round of H2020 projects are mainly dedicated to implementation
  - The guiding elements in the AREA structure (Anticipate, Reflect, Engage, Act) are present in quite any activity
RRI – experiences

- A short report from the water gauge

- Observations:
  - Implementation is not bad per se as it offers to open up spaces of learning and experimenting
  - Top-down realisation with a technocratic notion of controllability
  - Implication that RRI is applicable to different technologies as well as different fields of innovation
  - Responsibility works like an empty signifier in this discourse
  - The yet established practices are self-undermining the intention.
RRI – self-restriction

- RRI is the answer, but the question is … ?
  - Structural changes in knowledge societies and rearranging responsibility
  - Importance of political questions: Re-arrangement of responsibility in democratic knowledge societies
  - With RRI the specific political questions are not addressed
  - RRI is a form of politicizing responsibility in a de-politicized fashion
RRI – self-restriction

- RRI is the answer, but the question is … ?

- General support of innovation processes: mean of effectiveness and legitimacy

- While focusing on innovation and therefore on products, the phase of invention and therefore desirability of specific tools is underestimated

- But: Focus on the phase of invention would avoid specific blockades in the later process. This is by mobilizing context knowledge, values etc. in advance.
RRI – self-restriction

- Does this matter? --- YES

- First: Tension between guiding principle to be translated into political goals of action and tool boxes which has to be build on a consensus about such goals.

- Second: There is an obvious lack of thinking about institutional architectures. Discourse about responsibility is not the solution for lags of responsibility.

- Third: In the worst case RRI works as a discursive tool to prevent the building-up of institutions to regulate responsibility.

- Fourth: Tension within RRI: technocratic <-> democratic
REACH – not labelled as RRI but seemingly is

- Chemicals in the environment, that’s a complex problem, different views on it, and therefore fragile structure of knowledge:
  - Up to 2006 the state was completely responsible for the knowledge
  - Since REACH (2006), there is a new form of shared responsibility for the risk-relevant knowledge

- REACH 2007: Change in the EU Policy from damage-based to precaution-oriented politics. Stimuli:
  - Low Doses, High Stakes?
  - Generalisation of the Precautionary Principle
  - Limitation of the full-test strategy
REACH – not labelled as RRI but seemingly is

- White Paper 2001:
  - time limits for discharge of hazardous substances
  - producers responsibility
  - guidelines for the application of PP
  - PBT- in analogy to CMR-substances
  - costs of risk assessment to industry

- Important innovations in REACH:
  - Division of work: responsibility to industry to fulfil the data requirements – data controlling by ECHA
  - Chain of risk-knowledge-production: manufacturing chain from producers to downstream-users for generating risk-knowledge
REACH – not labelled as RRI but seemingly is

- Limitations in the re-arrangement of responsibility (Hoffmann-Riehm 2014; Führ 2014), nevertheless a success!

- Restrictions of ECHA:
  - Single-case decision versus standardized testing
  - Flexibility with limited transparency

- Restrictions within the chain of risk-knowledge production
  - Collected data are not sufficient
  - Collected data are not supportive

- Institutionalisation as re-arrangement of responsibility. RRI in a strong sense means: reflexive institutionalisation
Conclusion

Two understandings of RRI

- Weak understanding: RRI as discursive mean for softening of innovation imbalances
- Strong understanding: RRI as an instruction for rearranging institutionalized responsibility

Two practical tactics for avoiding weaknesses

- Rigorous contextualization (with regard to specific technologies)
- Rigorous institutionalization (with regard to specific responsibilities)
Thank you for your attention!