

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 !