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Responsible and Relevant Research– Concepts, Methods, Governance

Workshop on Managing Responsible Research and Innovation – Spring Campus, Freie Universität Berlin

Workshop Program

11.00-11.45 Klaus Jacob: Responsible and Relevant Research– Concepts, Methods, Governance

12:00-12:45 Reinhold Leinfelder: „Everything is connected to everything" - Responsible research and innovation for the Anthropocene.

12:45-14:00 Lunch

14:00-14:45: Leonie Dendler: Stakeholder participation in the context of science-based consumer protection - insights from the German Federal Institute for Risk Assessment

15:00-16:00: Katharina Helming: Criteria for socially responsible research processes –a cross-discplinary approach

16.00-16:30 Coffee Break

16:30-17:30 Plenary Discussion: Monitoring and Measuring Responsible in Universities

Key questions

1) What is Responsible Research and Innovation?
2) Why is it necessary and why difficult?
3) In how far could concepts from literature on Governance contribute to implementation of RRI?

Responsibility and Relevance of Research

Responsible Research and Innovation refers to ways of proceedings in Research and Innovation that allow those who initiate and are involved in the process of research and innovation at an early stage (A) to **obtain relevant knowledge** on the consequences of the **outcomes** of their actions and on the range of **options** open to them and (B) to effectively **evaluate** both outcomes and options in terms of **moral values** (including, but not limited to wellbeing, justice, equality, privacy, autonomy, safety, security, sustainability, accountability, democracy and efficiency) and (C) to **use** this considerations under A and B as functional requirements **for design and development** of new research, products and services.

⇒Ethical acceptability

⇒Orientation towards societal needs

(van den Hoeven, Jacob et al 2013)

Qualities of RRI

Anticipatory

Inclusive

Reflexive

Responsive

(Stilgoe et al. 2012)

Challenges to Society and Decision Making

1) Complexity of societal issues: Wicked Problems
2) Risks and side effects of innovation

Expectations on Science:

- Identifying needs for action
- Knowledge on possible societal goals
- Options for their achievement

3) Relevant knowledge:

- Credible
- Legitimate
- Salient

(Cash et al. 2003)

⇒ However: Science dos not lives up to expectations

Why is Responsibility a Problem in Research?

1) It is a characteristics and achievement of modern time that research should be free of constraints from power and driven only by curiousity
2) Limitations justified if individual rights are affected (e.g. testing of medicine, data protection)
3) Beyond these immediate impacts, science is expected to create options: for business as well as for society.
4) Expectations from funding agencies: Knowledge based economy, creation of growth, policy relevant science, meeting the grand societal challenges, …
5) Resulting in requirements to demonstrate the impact of research funding and in a variety of concepts of responsible research: post normal science, sustainability science, etc.
6) But: expectations are not met, because:
   - No rewards for responsibility in scientific careers
   - Lack of training
   - Academic and market opportunities prevail in the assessment of research
   - Stakeholder consultation in research is not rewarded

(van den Hoeven, Jacob et al 2013)

Why is Responsibility a Problem in Innovation?

1) Contested innovation: technical and economic feasible, large investments undertaken, but contested on the basis of security, social, privacy, ethical concerns
2) Successful innovation: serving societal needs, solving problems and opening market opportunities
3) Unattendend fields of innovation: No immediate economic return, but social needs

Why:

- Dominance of price signals and economic incentives for innovation and their evaluation
- Lack of training
- Rare involvement of stakeholder in the innovation process

(van den Hoeven, Jacob et al 2013)

Actors and their responsibilities

- Funding agencies (Europe, Member States, private funders): seeking legitimacy for their funding, funding awarded for excellent research or profitable innovation
- Individual researcher: achieving publications, citations, promotion in scientific careers
- Researchers associations: defining criteria for evaluation and promotion
- Universities: promotion of researcher, teaching of young scientists and engineers
- Public and private research organisations: Strategic planning of research, promotion of researcher
- Firms: investing in profitable innovation

⇒ Across different levels

⇒ High degree of fragmentation and individual responsibility

⇒ Top down problem solving not an option

Governance

⇒ Steering, regulating individual behaviour and provision of public goods by means of collective action not only from Government but also from private sector and civil society

⇒ Narrow understanding of governance: inclusion of non-state actors in regulation

⇒ Wide understanding: any kind of political regulation/ management of interdependencies regardless of type of actor.

⇒ Refers to structures and process of rule making

- ⇒ Including non state actors (government with society)
- ⇒ Development of structures for regulation in international relations (governance without government)
- ⇒ Increasing importance of multilevel systems (multilevel governance)

⇒ New modes of governance: Policy making without legislation

- ⇒ Self regulation
- ⇒ Co-design of regulation
- ⇒ Delegated regulation
- ⇒ Open Method of Coordination: Implementation by publication, reputation mechanisms and learning

Benz et al. 2008; Mayntz 2004; Schuppert and Zürn 2009
Knill and Lehmkuhl 2002, Jordan et al 2005

Governance: Potentials, Principles and Problems

Potentials:

- Efficiency and Effectiveness
- Utilizing top down regulation, markets and networks and their combinations
- Regaining capabilities for action

Principles:

- Responsibility
- Accountability
- Transparency
- Fairness

Problems:

- Risk of capture
- Dominance of market conform solutions

Governance of Responsibility: Discourses

Framing the discourse and scoping the challenge:

- Problem and its drivers
- Responsible actors
- Potential solutions

Problems:

- Ethical aspects are insufficiently considered because of lack of training

Vs.

- Research is geared either towards excellence or marketability, neglecting (non-marketed) societal needs which is reflected in the evaluation of research, innovation and the promotion of individual researcher.

Actors and solutions:

- Researchers, their associations and universities: training, checklists, additional funding

Vs.

- Systems of research and systems of innovation: development of a third objective of research and innovation: mainstreaming

Governance of Responsibility: Structures

Top Down:

- Additional Funding
- Further specification of impact criteria and strengthening implementation

Market based:

- Developing a norm for innovation management with explicit consideration of ethical aspects/societal needs
- Voluntary codes of conduct

Networks:

- Platform for research policies
- Platform for funders + public funded research organisations
- Delegation to researchers associations
- Standards for transdisciplinarity

Governance of Responsibility: Processes

Coordination of research policies: Reports on/assessment of:

- Focus of RRI
- Focal point for government accountability on RRI
- National policies on RRI: objectives, principles, guidelines for reporting/compliance, standards, roadmaps/action plans, indicators
- Publications and other forms of dissemination
- Funding schemes

Evaluation of research:

- Integration in evaluation of research programs and performance of research organisations

Inclusion of stakeholder:

- In research programming
- In research projects
- In processes of innovation

Pittfalls of Processes

Integration of Society in Science:

Resources, language, timing, diversity and capture

Alternatives:

- Analysis of contexts
- Knowledge Brokerage
- Transdisciplinary Research

(Guske and Jacob 2017)

Governance of Responsibility: The Demand side

Expectations and preferences of society:

- Gadgets
- Uniformity of science
- Plurality of values
- Opportunities, willingness and abilities to become engaged in scientific inquiries

Expectations and preferences of decision makers:

- Speaking truth to power
- Diversity of science
- Constraints in terms of time, budgets, openness to alternatives

⇒ Demand side RRI policies needed?