

Evaluation of productive interactions between science and society - Introduction -

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Science in society

Two apparently antithetic truisms:

- Scientific research, based on methodological systematic, is in the first place a **creative enterprise**, often fed by serendipity, its processes and its impact on society and economy are elusive and hardly to control. **Pushing** for effective impact would **undermine** the very working of science.
- **Without requests** from society/government and economy from science and without their investments in frontier research there was **no organised, sustainable science** – hence there is good reason to expect and control for useful and effective science impact.

Evaluating relevance of science: dilemmas

Established evaluation procedures are challenged:

- Many **research fields require own criteria** and procedures, to do justice to their research practices: medical and health research, technical sciences, humanities, social sciences; multi-, inter- and transdisciplinary research;
- Governments and administrators, from their responsibility for research output and societal goals tend to look for **simple indicators** to make (allocation) decisions.

Dimensions of science impact

<i>Main domains of impact of public spending</i>	<i>Direct positive impacts</i>		<i>Indirect positive impacts</i>	
	<i>Short-term</i>	<i>Long-term</i>	<i>Short-term</i>	<i>Long-term</i>
Science ("Wissenschaft") Typical impacts	scientific findings	knowledge	improved teaching	industrial spill-overs
Economy and society Typical impacts	improved technology	improved technical know-how	increased productivity	improved competitiveness
Policy Typical impacts	improved understanding	problem-solving	increased problem awareness	increased general satisfaction

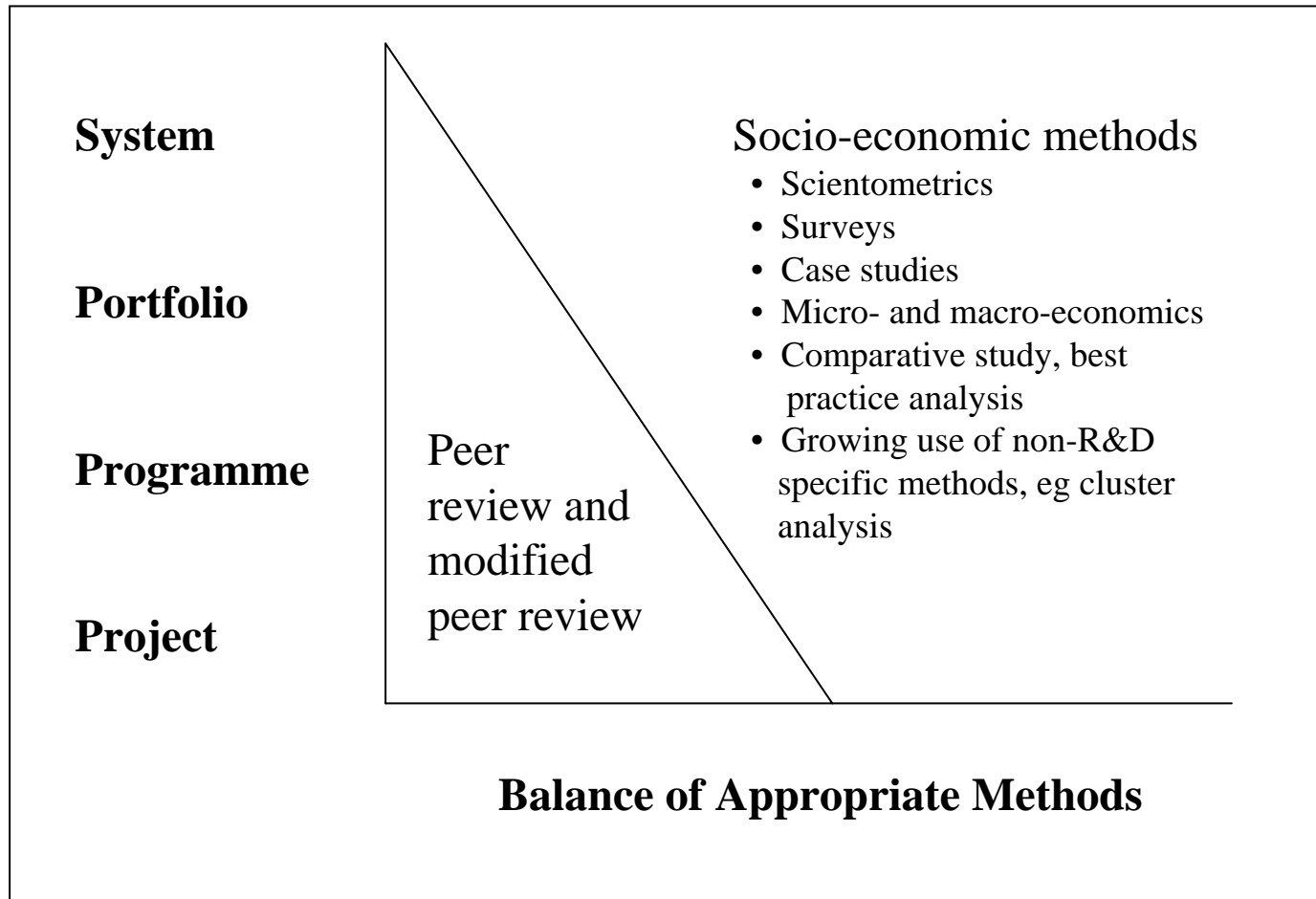
Also: Unintended impacts, positive or negative

Source:
Airaghi et al. 1999

“Productive interactions between science and society” ?

- Commercialisation/valorisation of research findings
- Research contributions to ‘public goods’
- Research in context with ‘constructive technology assessment’
- Science-related stimulation of public debate
- Expert work for society and politics
- Research-related ‘Forum’ with stakeholders
- Measures towards ‘public understanding of science’
- ...

Evaluation methods at different system levels



Source: Arnold 2003

Evaluation of ‘productive interactions’ - two dimensions

- “What?” Identification of (potential) relevance of science for society and economy
 - Dimensions, methods, indicators
- “How?” Organisation of productive evaluation
 - Institutionalisation, agency, measures, procedures

Programme

09.30 - 11.00: Setting the Stage: *Research evaluation in a policy context*

09.40-10.15: STS-perspective: Innovative evaluation methods in the MIT complex
(Julie Thompson-Klein)

10.15-10.50: Policy Perspective: The Politics of Evaluating Science Impact
(Claire Donovan)

10.50-11.00: ERiC: the next step (Jack Spaapen)

11.00 - 11.30: Break

11.30 - 13.00: The Practice: *7 examples from evaluation practice*

13.00 – 14.00: Lunch

14.00 – 15.30: The Way Forward: *Different levels of the research system*

Research group / program level (moderator: Barend van der Meulen)

Disciplinary level (moderator: Jordi Molas Gallart)

National level (moderator: Peter van den Besselaar)

15.30 – 16.00: Break

16.00 - 17.00: New Horizons: *How can we make progress*

Reports from break out groups; discussion about the deliverables; formulate a closing statement.

17.00: Drinks