Changing institutions and arrangements, and the elusiveness of relevance

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Research Relevance?

• Of research in universities and public research institutes
• Cannot be about impacts, in the sense of identifiable wealth creation and contribution to quality of life.
• If these occur, they cannot simply be attributed to research (let alone to university research)
• No linear-causal link
• So: elusiveness of relevance
Ongoing changes

• Still, a desire – and a pressure – for relevance
• (And different ideas about relevance; for whom, for what? Also by whom – division of labour?)
• Changing modes of knowledge production and institutional arrangements, towards “more” relevance (cf. Forum Discussion Paper)
• Incl. combination of excellence and relevance (more than Pasteur’s Quadrant! (Stokes 1977))
<table>
<thead>
<tr>
<th>Consideration</th>
<th>of use?</th>
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<tbody>
<tr>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Pure basic research (Bohr)</td>
<td>Use-inspired basic research (Pasteur)</td>
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<tr>
<td>Yes</td>
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<td>Yes</td>
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<td>Pure applied research (Edison)</td>
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<td>No</td>
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<td>fundamental understanding</td>
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Comments

• Fourth quadrant (run-of-the-mill science, with lots of useful results) was not filled in, focus is on the “heroes” on the main diagonal
• And these are old guys...
• While outcomes (“relevance”) depend on many people, and interactions
• So instead, take “strategic research” (as in the case of Pasteur and his co-workers) as the general situation (particularly recently), with ‘Bohr’ and ‘Edison’ as extremes.
Strategic research – the new category that bridges the gap between excellence and relevance

• Basic research carried out with the expectation
• that it will produce a broad base of knowledge
• likely to form the background
• to the solution of recognized current or future practical problems

Irvine & Martin 1984
A regime of Strategic Science?

• Thus, a distance is created between ongoing research and the eventual uptake of its results by emphasizing expectations, the production of a ‘base of knowledge’, and the provision of a background to problem solving rather than offering solutions.

• This is what happens anyway, and different institutional arrangements are emerging

• Some institutions bridge the distance internally
Articulation of promises, options & selection (in the form of projects and programmes)

Anticipations and feedbacks

Process of realization of research products, some communication and dissemination

Knowledge reservoirs, "grabbing" by users

Co-production of eventual impacts and effects

Up to hype (and subsequent disappointment)

Guided by resource mobilisation strategies

Links with prospective users, support from mediating actors (e.g. liaison offices)

This is out of the hands of the primary research producers

Not predictable, and not ‘manageable’ from a central point
Developed to evaluate research performance of institutions on their own terms.

Can be used to monitor how far the [de facto] mission is achieved.

Balancing the different components requires a strategic choice.

(Łarédo et al.)
Overall picture: institutions

• The old division of labour between fundamental and applied or problem-oriented research has almost disappeared, and with it, the functional distinctions between universities, public labs and private research.

• This is part of the regime of Strategic Science.

• Universities have responded by becoming more entrepreneurial, in combination with New Public Management approaches.

• Is at best partly adequate
Recent changes


• the dilemma of research management: how to harness "all that creative energy" of researchers in order to maximise the university's position - in other words, how to 'make the butterflies fly in formation'.

• in a competitive higher education system, research (among other things) has become a means of defining value and excellence; it is a primary source of institutional prestige and income

• no university drives the management of research explicitly from above: this would be construed as a "frontal attack" on the tradition of collegiality, directly challenging the integrity of the disciplines.

• but research management is becoming more comprehensive and indicator-driven, and (also in older universities) traditional research practices are seen as obstacles to be overcome

• the need for new organisational modes of decision-making ("control structures") so as to respond more effectively to the external imperatives of industry and government
But more changes!

- For universities, the key challenge is to diversify and recombine, both cognitively and institutionally, into what I call a post-modern university – indications of it are visible.
- This includes overlaps and alliances with Centres (of Excellence and Relevance), public labs and various private organisations.
- Ambidexterity becomes an important skill (of academics) and an organizational competence.
- So a ‘university complex’:
R&D entities on or near campus

Centres of Excellence and Relevance

sports facilities

teaching and learning activities

a university “complex”

a holding company
Larger changes

- Universities lose their monopoly on research training (e.g. MOOCs)
- A “market” for strategic research
- Abstract (symbolic) sponsors of research (INDUSTRY, SUSTAINABILITY)
- New constellations of actors:
  - Changing roles of research funding organizations (+ requirement of societal impact statement)
  - Increasing role of private foundations as funders and orchestrators of research
  - CSOs: not merely interlocutors in a diffuse “dialogue with society”, but engaged in choices in research and some knowledge production
Addressing Grand Challenges

• To some extent just fashionable discourse?
• New category of ‘challenge-oriented research’ (rather than mission-oriented research)
• Requires changes in institutional arrangements, cf. new constellations of actors
• Concertation is important, with government facilitating rather than organising and selecting

Kuhlmann and Rip 2014, Report to ERIAB (European Research and Innovation Area Board)
Responsible Research and Innovation

• Another fashionable discourse
• Is about process: being responsive, or at least transparent
• EU Competitiveness Council, Dec 2014:
  “Responsible research and innovation is a process for better aligning research and innovation with the values, needs and expectations of society. It implies close cooperation between all stakeholders in various strands comprising: science education, definition of research agendas, access to research results and the application of new knowledge in full compliance with gender and ethics considerations.”
System-level dynamics and policies

• Notion of national research and innovation system, important in Ireland:
• First phase of broad capacity building, second phase of focused priorities, now a third phase?
• Report on Research prioritization Ireland (2012)
• “build on strength, create critical mass in areas that link more precisely to current and likely future societal and economic needs” (p. 8)
There may be a bias:

• A language of **contributions**: to the economy, and to a lesser extent to quality of life and to quality of policy making

• Net effect has been to see national research and innovation systems (and institutions within them, like the HE sector) as **input-output machines**.

• That is a strong reduction of complexity.
Is it a productive reduction of complexity?

• Almost unavoidable when one wants to assess the value of research and compare it, in order to make selection decisions.
• But assumption of linear-causal relations between inputs and outputs – which are the exception rather than the rule (my earlier point).
• It also assumes that the gears and internal connections of the machine are in place and continue to function.
• Instead, national research and innovation systems are patchworks, and evolve in response to tensions and challenges.
Prioritization Report (2012)

• Recognizes evolving patchwork, e.g. by talking about “links”, but uses the machine-that-contributes language (e.g. p. 13):
  • “STI system to be more focused on outcomes and impacts”
  • “clear goals and metrics”
• Instead, think in terms of nudging and growing (strategic niche management), and concertation of evolving constellations
Re-defining Research Relevance?

• It is not a matter of defining, say of criteria for relevance that should then be met, somehow.
• It is a matter of understanding what is happening already, and why, and what further possibilities might be.
• That’s why I discussed institutions and arrangements
• Making the challenge of relevance less elusive
My message then:

• The prevalence of strategic research (also related notions like “finalisation”, technoscience, post-normal science), with supply as well as demand

• In such a quasi-market (incl. expectations), relevance is operationalised – the way to go?

• The combination of excellence and relevance, in research and in research institutions, with the rise of Centres (of Excellence and Relevance) as an indicator