Changing institutions and arrangements, and the elusiveness of relevance

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Higher Education Authority Forward-Look Forum, Dublin, 15 April 2015

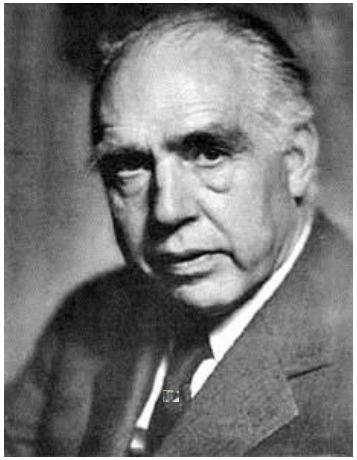
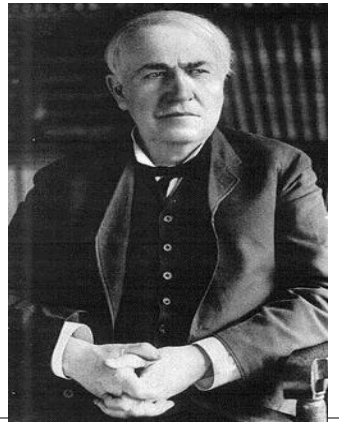
*I'm grateful to Stefan Kuhlmann for helpful discussions

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))

Quest for fundamental understanding	Consideration of use? No	Yes
Yes	Pure basic research (Bohr) 	Use-inspired basic research (Pasteur) 
No		Pure applied research (Edison) 

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

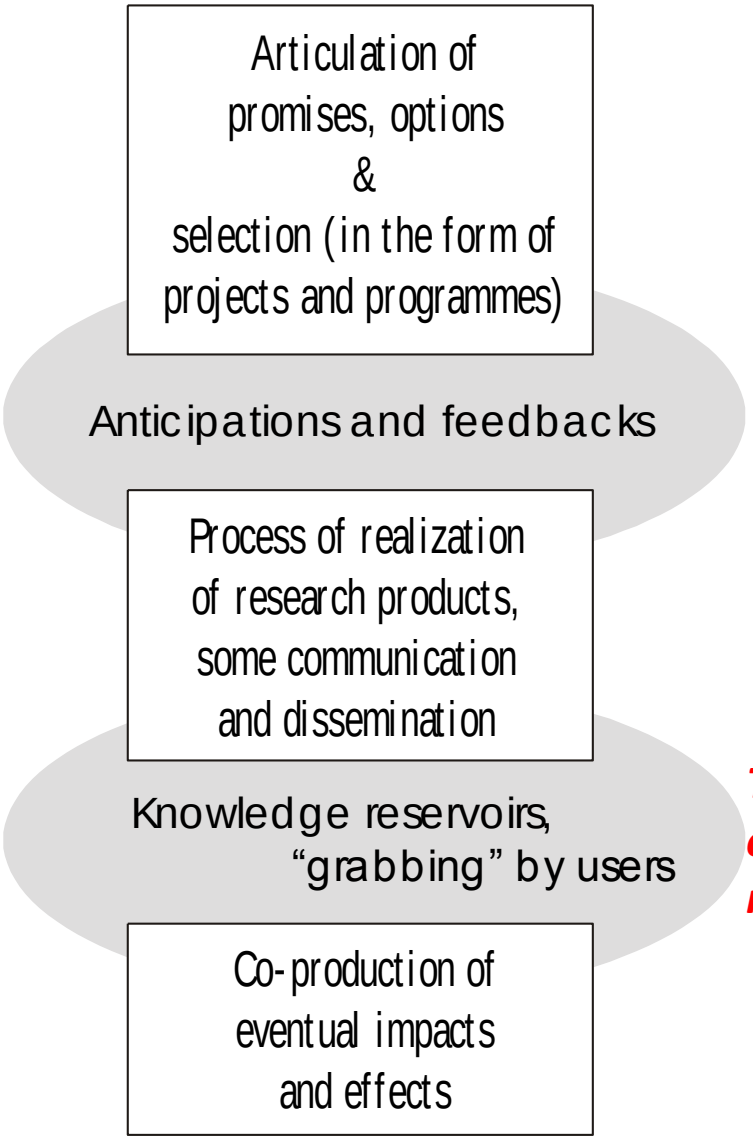
- Basic research carried out with the expectation
- that it will produce a broad base of knowledge
- likely to form the background
- to the solution of recognized current or future practical problems

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

Guided by resource mobilisation strategies



Up to hype (and subsequent disappointment)

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

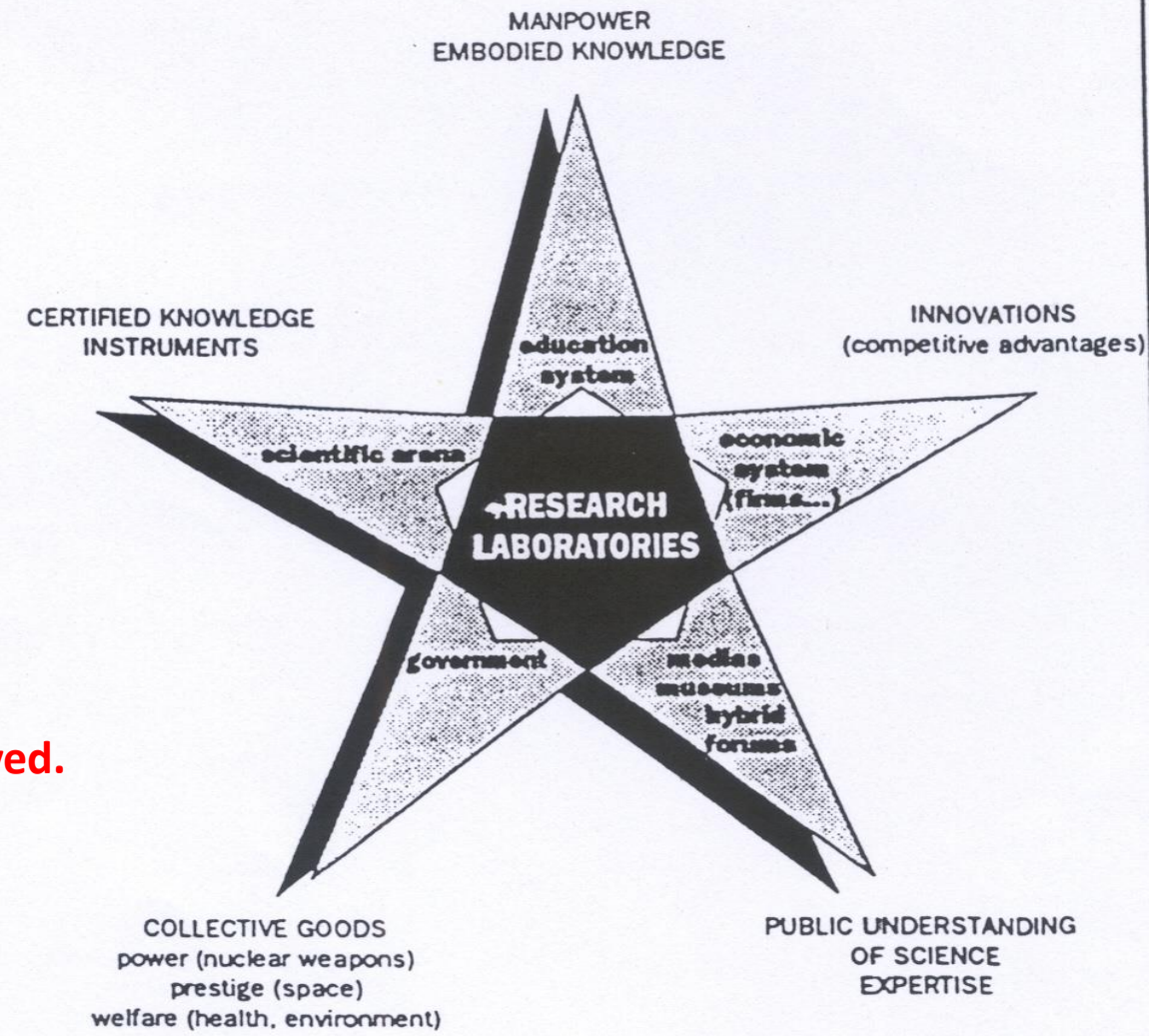
This is out of the hands of the primary research producers

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.



the research compass card

(Larédo 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

- *[Marginson, S. & Considine, M. (2000) The Enterprise University: Power, Governance and Reinvention in Australia. Cambridge: Cambridge University Press, p. 133 ff]*

- 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

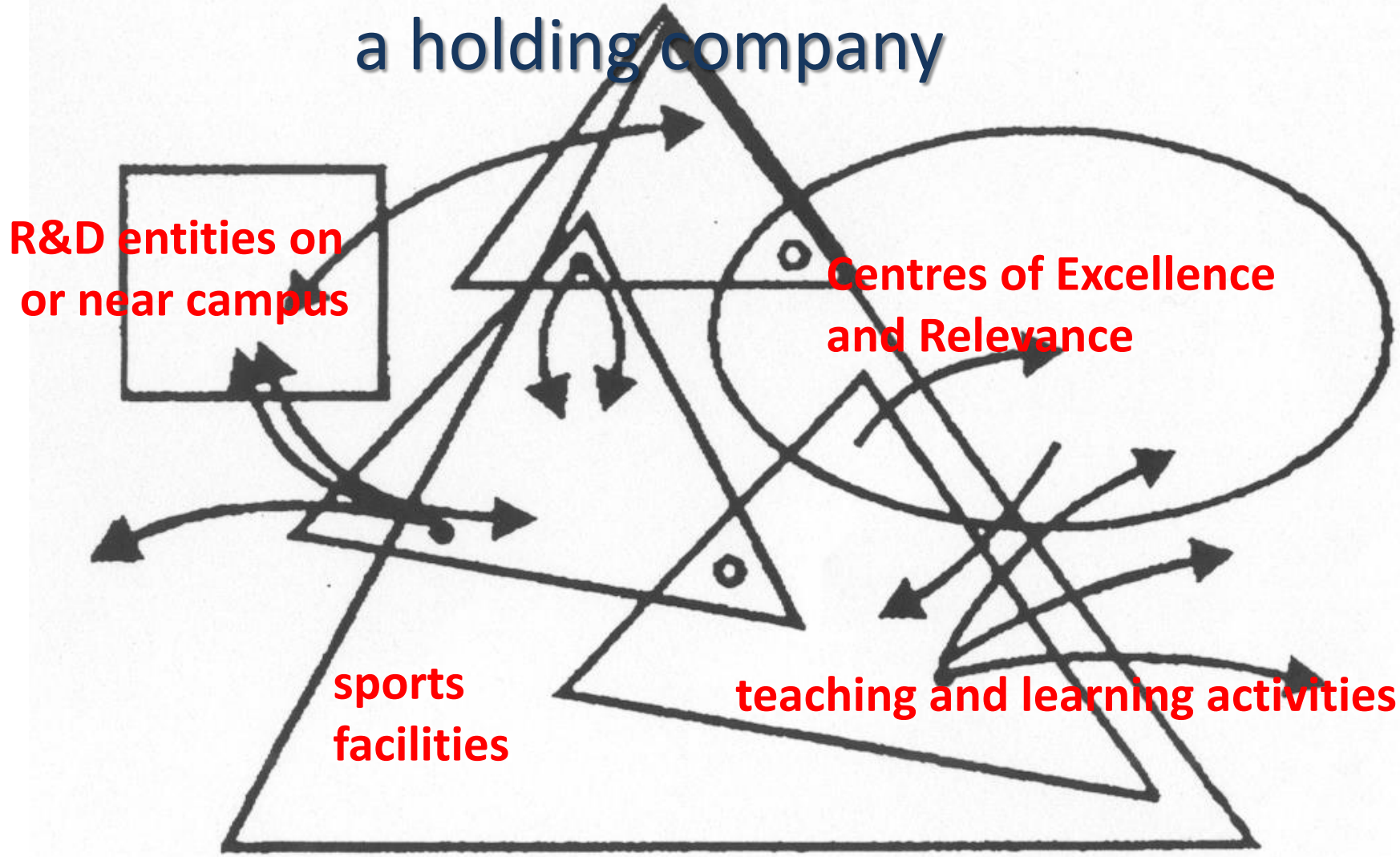
- no university drives the management of research explicitly from above: this would be construed as a "frontal attack" on the tradition of collegiality, directly challenging the integrity of the disciplines.
- but research management is becoming more comprehensive and indicator-driven, and (also in older 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’:

a holding company



a university “complex”

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

VERA Policy Brief April 2015

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