Policy responses to “Open the Social Sciences”? Mixed messages for the academic community

Prof Catherine Lyall
What seems to be called for is less an attempt to transform organizational frontiers than to amplify the organization of intellectual activity without attention to current disciplinary boundaries

(OSS, 1996 p.98)
II-FP5 Interdisciplinary Integration in the Fifth Framework Programme (Bruce et al. 2004)

Evaluation of Research Development Grant

Evaluations of ESRC-NERC and ESRC-MRC schemes;
ESRC Researcher Development Initiative: ISSTI
Interdisciplinary Masterclasses (Lyall & Meagher 2012)

Quest: Capturing Lessons for Interdisciplinarity
(Lyall et al. 2013)

International good practice in the peer review of interdisciplinary research (Lyall & King 2013)

HEA: Interdisciplinary provision in higher education: current & future challenges (Lyall et al. 2014)
Interdisciplinarity in policy discourses since 1996?

• described as “vital” for universities (Commission to the Council and the European Parliament, 2006)

• recognised as a global research phenomenon (Global Research Council, 2016)
What does "interdisciplinarity" actually mean? Gabriele Bammer argues lumping interdisciplinary work together may be prohibiting an effective evaluation of how this kind of research is faring. A much more intuitive approach is needed to distinguishing between aspects of diverse research practices. Furthermore, developing effective professional organisations is also a key task for moving interdisciplinary research forward.

"...interdisciplinarity has now become a catch-all term, used loosely by a wide range of researchers to cover an array of very different research practices."

– Gabriele Bammer
The word ‘interdisciplinary’ clearly denotes a spectrum of experience ....

“Well, which approach shall we try this year?”
...the ways that the historical trajectory of the institutionalization of the social sciences led to some major exclusions of reality (OSS, p.95)
UK research policy context

Although much effort must be made to sustain the health of individual disciplines, the social scientist’s value is increasingly realised in **interdisciplinary** work

(Foreword ESRC Strategic Plan 2009-14)
Over £40M pledged in new bid to tackle global challenges

12/05/2016

Five UK Research Councils have announced the first joint interdisciplinary calls from the new £1.5Bn Global Challenges Research Fund (GCRF) unveiled by the Government in last year’s spending review.

Worth over £40M, the new calls are in non-communicable diseases, global infection and agriculture and food systems. They aim to leverage the UK’s world-class research base to help provide solutions to reduce and prevent diseases in humans and farmed animals, ensure a safe, nutritious and sustainable supply of food for a growing population and improve the life-long health of billions of people in low and middle income countries.

This funding from the Biotechnology and Biological Sciences Research Council (BBSRC) and the Medical Research Council (MRC), with support from the Arts and Humanities Research Council (AHRC), the Economic and Social Research Council (ESRC) and the Natural Environment Research Council (NERC) reflects the complexity of the challenges we face and the need for all disciplines to contribute to achieve international development goals.

These initial three calls aim to rapidly stimulate and enhance the research and partnerships needed to pave the way for ambitious GCRF programmes, while global challenges will also continue to be supported through other funding opportunities offered by the Research Councils.

Given the UK’s world leading reputation, research is a highly effective way to achieve international development goals, tackle multifaceted global challenges and improve the social, economic and health outcomes for people in developing countries, as well as benefiting the UK.

Over the next five years, the Research Councils and the National Academies will deliver the GCRF to ensure the excellent UK research base takes a leading role in addressing the problems faced by developing countries and to build resilience and tackle major world challenges
In an analysis of the impact case studies submitted for assessment to the 2014 Research Excellence Framework (REF), nearly two-thirds of the cases submitted drew on research from multiple disciplines “providing compelling evidence that disciplinary diversity delivers impact.”

Steven Hill, Head of Policy Higher Education Funding Council for England
There remain concerns that the REF provides a barrier to work that spans disciplinary boundaries:

“a lower than expected volume of interdisciplinary research articles were submitted”

Steven Hill, Head of Policy
Higher Education Funding Council for England
How might the REF be further refined or used by Government to incentivise constructive and creative behaviours such as promoting interdisciplinary research, collaboration between universities, and/or collaboration between universities and other public or private sector bodies?
But...IDR still not mainstream

Despite years of interdisciplinary rhetoric, it is still difficult to find people who are able to move easily between social and environmental sciences

(Living with Environmental Change 2012)
Well-documented challenges

Interdisciplinary research also depends upon a supportive institutional context. Unfortunately, in the main, scientific institutions are poorly set-up for enabling interdisciplinary research.

(Lowe et al. 2013)
The role of research funders

Decisions that funders make ...have a major impact on how interdisciplinary research is shaped, the extent of integration, and ultimately its effectiveness

(Lyall et al. 2013)
Interdisciplinary peer review

Research Councils look for the single disciplinary weakness rather than the interdisciplinary strength

(Quote from one of my collaborators)
Improving ID peer review

• composition and management of review processes (e.g. training for funders, selection of evaluators)

• quality criteria

• end-of-award evaluation: acknowledge less tangible indicators of added value

(Lyall and King 2013)

Reality of IDR requires greater leadership from research funders
...the multiplication of interdisciplinary programs of training and research

(OSS p.95)
ID education is a ‘live’ topic in the UK

• More ID UG & PGT programmes

But different views on what is driving this:

• professional needs, graduate employability (university leaders)
• alignment with complex societal issues, the interests of individual academics, research-led teaching (university teachers)

(Lyall et al 2014)
Challenges of interdisciplinary education

• Level of preparedness and skills of staff
• Exposing students to different disciplinary perspectives without disadvantaging them
• Assessment and external examiners
• Willingness of students to take modules outside home department
Conservatism?

• Demand, or not?
  – parents?
  – employers?
  – university management?

_I was thinking more, we’d like to be just behind the wave_

(Interviewee quoting his Dean)
Interdisciplinary pioneers

Individuals who develop interdisciplinary teaching provision seen as pioneering champions often working against the status quo:

“There is a small group of (academics) who are the innovators, who think interdisciplinarity is exciting, ....really devoted to undergraduate students and think interdisciplinarity is a part of their education” (ProgDir interviewee)
Issues for university leadership

• Clarity of purpose
  – different types of ‘interdisciplinarity’ require different competences

• A whole institution approach
  – cultural change: institutional structures & incentives
  – administrative barriers: teaching credit, finances, timetabling

• Adequate resources
  – interdisciplinary integration takes extra effort
The reality of interdisciplinary PhDs?
Despite increase in ID teaching provision, challenges remain

Multidisciplinary research ‘career suicide’ for junior academics

However, director of the Oxford Martin School says 'disciplinary silos' were one factor contributing to 2008 financial crisis

May 3, 2016

By Ellie Bothwell Twitter: @elliebothwell
The sense of safety in disciplines

(OSS, p.97)
Risks for established researchers: ID has its detractors

problem-based knowledge is insufficiently abstract to survive in competition with problem-portable knowledge

(Abbott 2001)
Our roles in ID collaborations

Calls for social researchers to be involved in problem-framing and agenda-setting of IDR  
(Webster 2016)

The subordination-service role  
(Barry et al. 2008)

The representative of the public  
(Balmer et al. 2015)

Doing public engagement  
(Lyall & King 2016)
Foundations may give grants to imaginative groups of scholars but departments decide on promotions or course curricula

(OSS, p.97)
Implications for capacity building

• IDR - a help or a hindrance to academic careers?
  – poorer career structures, discrimination by referees

• concern that review processes disadvantage younger ID researchers e.g. shifting peer groups

(Pfirman and Begg, Science, April 06, 2012)
Institutional challenges

• Academic recognition (e.g. promotion, prizes, membership of professional bodies) predominantly comes from established disciplines

• Majority of world-leading, research-intensive universities still organised along disciplinary lines for both research and teaching

➤ Academic identities irrefutably discipline focused
...muddling through expecting that somehow things will improve and work themselves out

(OSS p.96)
Mixed messages

e.g. The British Academy urges its constituency to develop an academic home and remain attached to it even while being encouraged to engage with those working in different disciplines

(British Academy 2016)
Postponing interdisciplinary work to the time a researcher is well established means that such research is generally pursued as a side activity....this means that the inventiveness and creativity of younger scholars is discouraged from going into interdisciplinary work, slowing down this work, making it intellectually and practically less attractive

(Sperber, 2003)
The ‘paradox of interdisciplinarity’

20 years on, interdisciplinary research is often encouraged at policy level but poorly rewarded by funding instruments and academic structures

e.g. the greater the degree of interdisciplinarity, the lower the probability of being funded

(Nature June 2016, data from Australian Research Council)

➢ Still muddling through
Building an interdisciplinary future

• Share experiences, intelligence and resources to foster organisational learning
• Address the administrative barriers and disincentives, within our own institutions and more broadly
• Contribute to evaluation
• Provide training, mentoring and institutional support for ID researchers, teachers and leaders
New PhD Funding

“Disruptive influence? The role of interdisciplinarity in training the next generation of researchers”

4 year PhD project with funding for fees (UK/EU rate) plus stipend (approx 16,000 euro p.a.)
Closing date 28 February 2017
Contact c.lyall@ed.ac.uk
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