Elizabeth Shove Workshop, 9 March 2006, Abingdon

Introduction

Not easy to comment on discussions without having been there, although the set of accompanying papers from each workshop are really helpful. I want to tackle my tasks (interdisciplinarity and programmes) in light of the discussion of communities of practice in the background paper for this meeting, based on the following three observations:

1. Enormously sympathetic to this perspective on innovation and knowledge creation (book with Cohendet and DIME project -http://www.dime-eu.org/). But, important to distinguish between networks of strong ties (CoPs) that rely on common skills and expertise, building community, trust and sociality, from expert or epistemic groupings that are project-driven, individual reputation driven, and knit together through professional standards, problem-orientation, and plural but weak ties in many social networks. The former, which include artisan and workplace communities develop exploitative knowledge, while the latter which include scientific and research communities, tend to be geared towards exploratory knowledge. I think we are concerned with the latter, while Duguid and other literature on CoPs are largely about the former.

2. It is crucial to distinguish between different networks of situated practice in any discussion of implications for research policy. For example, the risk of closure and going native that Elizabeth and Paul mention at the end of the background paper is especially strong in CoPs (potentially a real danger of closed community in long-funded Centres),. However, in expert/epistemic communities I am not sure if it is 'fragmentation, fleeting encounters, shallow rather than deep exchange of ideas … and a *bedrock* of shared practice' that underpin success, but a combination of deep exchange of ideas around given projects and problems, strong moral, reputation, and career incentives to participate, considerable ego and individual rivalry but also shared practices that grow out of common purpose (if carefully structured and managed), the heterogeneity of actors and competences (expert and non-expert) and their loose ties with many other feeder networks of contact and know-how. Heterogeneity, plural connectivity, shared focus, and individual motivation and personality seem to be the crucial factors for creativity and emergence (do centres and programmes have enough of this?).

3. In terms of evaluating the innovative content of knowledge produced from cross-disciplinary or academic-practitioner engagement, I consider this distinction between different types of knowledge community to be crucial. Put differently, I think we *ought* to be interested in those dynamics of interaction that are capable of sparking frontier knowledge at and beyond the boundaries of disciplines (i.e. path-breaking), rather than aggregating and disseminating largely path-following knowledge through interdisciplinary interaction. I am not sure how far this interest in the quality of knowledge produced guided the workshops, even though it is raised in the accompanying discussion paper. While I accept that there may be some overlap between

networks producing exploratory and exploitative knowledge[1], the organizational imperatives are very different. For example, exploratory interdisciplinary networks need to organize for emergence, canonical rupture, and experimentation at the design and set-up stages, sustain this through the research process, but then consolidate and enrol multiple actors for the breakthroughs in order to have impact and influence, before regrouping in order to innovate again. I will return to this in the discussion on programmes.

Interdisciplinarity

So, on the basis of these observations, let me make some quick comments on the paper and workshop on interdisciplinarity:

1. The exploitation/exploration dimension should be one core criteria by which the worth of interdisciplinary research should be measured. If 'frontier' knowledge is produced by individuals and groups within disciplines, sparked by curiosity, external stimulus or pressure, and a general outward orientation within a given subject (e.g. geography, sociology, business studies, but not economics) this is of more value than 'slow and expensive' interdisciplinary interaction that reduces understanding to the lowest common denominator, largely only shares rather than creates new knowledge, and generates new public agendas and/or new interdisciplinary fields that lack intellectual rigour or creative spark.

2. High creativity interdisciplinarity is rare and needs careful 'stewardship' (Wenger) to make sure that people from different backgrounds work in new ways with each other to unlock creativity out of cognitive distance. I am not convinced that large interdisciplinary research programmes, research institutes, and courses achieve this, unless they deliberately engineer specialist contact and friction. Smaller and limited life, project-based or problem-oriented, multidisciplinary teams held together by a variety of tools for creative engagement (office or laboratory lay-out, expert intermediaries, thematic orientation, experimental play and simulation) seem better equipped. Or, paradoxically, even the opportunity to hold lightly specified fellowships in think tanks and IASs together with people from different backgrounds might provide the desired spark through reflexive interaction.

3. With these comments in mind, it is worth asking what the benefits of institutionalizing interdisciplinarity might be, if almost by definition this comes with the risk of killing off creativity. Is it not enough to ensure a constant supply of temporary coalitions?

Programmes

My observations on the papers public sector programmes, too, are shaped by the distinction I made earlier between low creativity CoPs and high creativity expert/epistemic communities. I agree with most of the critical insight offered by Chris and Elizabeth concerning the coherence and impact of ESRC programmes, their

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[1] For example, publicity for existing bits of knowledge brought together by a major research programme could spark exploratory research by a second generation of research funding.

impact as instruments of research policy, and the different way in which public policy programming works. I would, however, like to add three qualifications:

1. I wonder if the tightly knit and coherent government policy networks – based on the DfoE example – are particularly effective in bringing together existing knowledge to address pressing policy concerns, but less so in fashioning new policy issues through newly generated collective knowledge. Are these high creativity networks? If not, what would be the appropriate mechanisms to ensure that interactively-based public policy research is of a blue-skies and scenario-building nature? Is there a risk that cohesiveness becomes a closed shop, with the usual suspects – academic and expert - driving the agenda?

2. I accept the point made in the paper that some ESRC programmes have produced novelty through serendipity and the possibilities they offer to a previously invisible or disjointed community. I also accept the 'generative and generational' points made, relating to the impact of some programmes in raising public consciousness around particular themes, launching a new community of specialist researchers and a new research domain, and influencing public policy direction (e.g. global environmental change, medical technologies). I wonder, though, if a large, expensive, and lengthy model, relying on serendipity and informal interaction as a stimulus for generating frontier knowledge, is the most efficient way of producing these outcomes.

3. I am not convinced, however, by the ESRC's decision to make more selective use of programmes on grounds of directors facing multiple demands and on grounds of having to please a heterogeneous research community. I think it is entirely legitimate for the principal social science research council to try to fashion a new generation of research by being highly selective at every stage of the research process. It has to do this if it wants to provide strategic direction as well as ensure that UK social science is able to generate path-breaking funded research.

   - I believe that programmes – commissioned and organized in ways suggested by the literature on high creativity communities – can play a surer and more cost/time-effective role with added high profile public and policy impact. How the commissioning process is organized is of crucial significance. During my 4 years on the RPB I was always amazed by the length, excessive cautiousness, and linearity of this process, involving, for up to a two year period, the sequence of appointing a consultant who has to please everyone, RPB modifications, appointing a director, a programme outline with too many themes and aims, applications evaluated on the basis of tons of references, decision by a composite panel that represents varied interests and has to reach highly delicate final decisions, a frustrated director, and finally projects that start a lot later and still do their own thing. Transparent and democratic, yes. Strategic, focussed, coherent, and path-breaking, no.
   - Another model would be to provide seed-corn money to a number of experimental communities that have deliberately come together to develop an innovative programme; evaluate them within the strategic priorities board on a competitive basis for their innovativeness and ability to mobilize cognitive distance, create new community, and develop frontier knowledge through joint work; and then turn the most

promising ventures into tightly knit and manageable programmes that receive staged funding, are run by the originators, and include advertised and commissioned projects evaluated by a combination of the programme management board and trusted ESRC experts. The down side is that not everybody gets in and that the selection process is much more top-down. The up side is that finally we get programmes that really push the frontiers through genuinely joint work addressing new questions.