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Laudable aims and problematic consequences, or: the 'flow' of knowledge is not neutral

Marilyn Strathern

Abstract

This is a comment on how environments apparently favourable to open-ended and exploratory research, as across disciplines, can turn out to be rather otherwise. Social anthropology is the discipline in question here, and the current rhetoric of interdisciplinarity the source of some (new) problems.

Keywords: research policy; social anthropology; interdisciplinarity; ethnography; experts.

I want to ask if it is simply an idiosyncratic perception of mine, or of more general import, that one bureaucratic form of interdisciplinarity seems already, quietly and unremarked, to be shaping my own discipline. It is compounded by an interdisciplinary migration that has been going on for so long that to draw attention to it has become a cliché of territorialism; bureaucratically speaking, however, it has renewed consequences for practitioners.

The discipline in question is social anthropology. The issue may well be of moment beyond anthropology, but is in any case worth pursuing in the context of how the knowledge economy, as it is called, is shaping production and consumption (including distribution) alike. Let me set the scene. And add a

Marilyn Strathern, Department of Social Anthropology, University of Cambridge, Free School Lane, Cambridge CB2 3RF, UK, E-mail: ms10026@cam.ac.uk.

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caveat that some of what I say may in fact be unfounded, or at least one could hope that is the case; parts are also speculative.

Common understanding[1]

An illuminating starting place is an on-line discussion organized from the CNRS (Centre National de la Recherche Scientifique, Paris) and impelled forward by Nowotny's (2003) original piece on scientific knowledge production. Her preferred term is 'transdisciplinarity', which rests on 'a common theoretical understanding' and a 'mutual interpenetration of disciplinary epistemologies' (Gibbons *et al*. 1994: 29). It disrespects disciplinary and institutional boundaries alike,[2] and its reach into core disciplinary practices carries the expectation of new theoretical models and new institutional forms. However I stick to 'interdisciplinarity' as a shorthand for a field that is not always defined so radically – it covers the more widespread invocation of a common framework to be shared across disciplines and to which each contributes their bit, bringing disciplines together in contexts where new approaches arise out of the interaction between them. This is rather more than simply the alignment of different skills ('multidisciplinarity') as so many perspectives on a problem.[3]

Nowotny's point is that what is happening in disciplines is also happening in society at large – a breakdown of functional differences between separate domains of social life, and the emergence of multi-tasking skills, diversified companies and, in the form of bodies such as NGOs, 'ways in which various kinds of stakeholders organise in shaping social reality' (Nowotny 2003: 3). Yet what initially appears as an analogy then takes the form of an organic dovetailing – of convergence or co-evolution, in her words. For the society that is also changing becomes itself a factor in the production of knowledge and its interventions form one of the platforms for the new applications of knowledge. Engaging thus with society creates a 'context of application', with the rider that 'the context speaks back' (Gibbons 1999; Nowotny *et al*. 2001). And, Nowotny adds, the 'context of implication', with the rider that questions about the (social) implications of, say, scientific practice must first be asked in scientific laboratories, recognizing that the question will be answered in multiple ways. This is one way in which 'society' is imagined as drawn into the academic enterprise (Strathern forthcoming).

Now the involvement of society, whoever its representatives (Callon 1986), is signalled in a diagnostic feature of the new knowledge production. The feature is summed up in one word: accountability. Accountability, as she spells out, is not just a matter of personal responsibilities; it is a formal process of 'institutional responsibility', and one of the forms it takes is acknowledging the interests of users. What is being acknowledged is the user's right to know what is going in the very organization of knowledge production. 'You know to whom you are accountable. There are certain procedures to make

things visible that are otherwise invisible' (Nowotny 2003: 3). In other words, institutional responsibility for output flows into responsibility for (visible) self-management as a (responsible) institution. Taking all that into account demands that society, no longer simply the recipient of knowledge, has an input of sorts into it.

What Nowotny analyses as new forms of knowledge production are acted out, as we shall see, in evolving expectations surrounding research policy in the UK and elsewhere. Here we find an interesting rhetorical confluence. Reaching beyond academia somehow merges with reaching beyond disciplines. They appear commensurate virtues. For in either case the key on the academics' side is to *manage* knowledge (output) in such a way as to make it disseminatable, whoever the users are. Clarity of purpose in dissemination is the first step towards accountability. Dissemination orients the scientific enterprise as an outgoing one: the communicable act moves into prominence relations with others, 'stakeholders' of diverse kinds, those 'for whom' the research is being done, and in the case of other disciplines 'with whom'.

There is a kind of generalized accounting, then, that is served by bringing in outsiders, whether from other disciplines – scientific or non-scientific – or from the public, who in terms of communicational functionality all have parity of sorts. (Models of communication suggest two way as well as one-way flows.)[3] At the same time, partnerships require the conservation of distinctness, even if everyone mingles their knowledge in. When it is partnership 'with society' that is at issue, the distinctness requires special marking. A conjunction familiar to anthropologists emerges: accountability is envisaged as the outcome of a transaction (the new social contract, Gibbons 1999), and it is the transaction itself – science's engagement with society's representatives – that keeps the two sides separate.

If accountability crystallizes as the motivation for science taking society into account, it becomes an index of 'society' accounted for. So accountability appears as at once a moral stance towards the wider world (the 'context' now invited to speak back) and a set of procedures for verifying effort in this direction. Greater visibility appears to answer both. What is verified is enacted effort or performance (Munro 1999), and what must then be monitored are systems of performance measurement. Here I want to pick up two small strands from the iconic status that cross-disciplinary work – whether avowedly multidisciplinary or interdisciplinary – has come to assume as a performative in contemporary research policy. I hazard a view as to how, at this particular point in time, they might be re-moulding social anthropology's understanding of itself as a discipline.

Compulsory comprehensiveness

Let me first give an example of that iconic status, which is also an example of explicit, top-down, efforts to ensure appropriate performance. In 2003, the

Advisory Council for Science and Technology Policy in The Hague published a report on promoting interdisciplinary research, called *One plus One is More than Two* (AWT 2003).[4] Although it clearly covers interdisciplinarity, their preferred term is multidisciplinarity, which I reproduce. Beginning by saying that the Netherlands is not really lagging behind in the field, it lays out ways in which the government might intervene by funding more interaction, building up networks, developing comprehensive multi-area research questions, identifying thematic areas where multidisciplinarity will flourish, and so forth. It sees bringing in society as crucial to this activity, largely in terms of highlighting societal problems as problems that only multidisciplinary approaches can address. And it takes the rhetorical steps I have been describing.

It advocates an increased flow of knowledge between universities and non-university thematic research institutes; second, networking between universities and the 'outside world' should be strengthened (by, in its phrase, building up social capital in personal networks); third, it is important to create 'a clear front-office function' for societal issues – problem-based and demand-oriented. It adds a number of suggestions as to how one could manage the situation, through secondment, selective funding and so forth. But they are rather more than suggestions. For example: at bullet point 5 (out of 8) under the heading, 'Several alternatives for developing more comprehensive research questions', we find: 'Incorporate compulsory mechanisms into the funding conditions that will ensure that comprehensive research questions are actually formulated and maintained.' Compulsory mechanisms? While (*pace* Schlecker and Hirsch 2001) an anthropologist can only applaud the initiative to take wider contexts into account, and particularly the recognition that crucial social dimensions to issues should not be overlooked, this is not a trouble-free road to TU (Total Understanding). Note the outcome of managing the situation through policy measures. The next bullet point recommends that policy workers (at a high level – not delegated to juniors) should be *trained* 'to develop comprehensive research questions'. It looks as though research questions will be driven by the desire for the ensuing research to be, and visibly so, multidisciplinary.

The Dutch Council found universities a major problem. Universities are lagging behind non-university research institutes when it comes to multidisciplinarity (AWT 2003: 17).[5] Much of this is laid at the door of the standard university structure that separates disciplines from one another.[6] – Incidentally it identifies peer review as another such 'bottleneck'. – Its focus on 'themes' is a focus on problem-oriented, task-specific research-to-find-solutions types of *questions* that then become 'comprehensive' by virtue of the many disciplines brought to bear. ('The council advocates an approach that facilitates the development of integrated questions. The parties involved should seek each other out at an early stage and formulate the key questions together' (AWT 2003: 28).) It means it when it says that ensuring questions really are comprehensive will have to be monitored.

Not quite so prescriptive in the UK, interdisciplinarity has nonetheless been high on the agenda of some research councils for some time, and is now enjoined for all (DTI 2001). However, we do not have to wait for plans to mature and funding to appear. The Dutch blueprint for compulsory, top-down, comprehensiveness is a good foil for reflecting on the effects of certain bottom-up practices already in circulation so far as the UK is concerned. An interdisciplinary migration of ideas, one that most anthropologists are aware of but ignore, is already propping up a bureaucratic form of interdisciplinarity that is shaping the practice of anthropology itself, and how it might think of its research questions. These are the two strands I want to pursue.

In taking them in turn, I would not want to be read as buying into the military metaphors that mean to be under attack is invariably harmful. Nor do I want to defend disciplines as such. But what has been going on, generally unregarded in UK research funding, at least as it affects social anthropologists, prompts the question as to what kinds of enquiries might get swept away in similar desires to be 'comprehensive'.

Migrating questions

The first strand. Anthropologists have been commenting for years on one form of interdisciplinary migration, in a rather bemused but not particularly defensive way, and not really taken as a challenge to themselves. In fact, they tend to be a bit apologetic about their own territorialism here. I refer to the appropriation of the concept of 'ethnography' by other disciplines.[7] It is often watered down to mean nothing more than talking with people. In that form it may be rightly disparaged as non-rigorous and undefined. The problem for anthropology comes when anthropologists want to deploy it, and find themselves in a competitive context such as research grant applications in the UK. The anthropologist applicant who uses the term is likely to assume an informed readership which realizes what a complex and involved processes 'ethnographic method' stands for, how packed the phrase is. But its now debased currency means that it may well be read quite differently by scrutineers from other disciplines. One can imagine the day when anthropological applications would get knocked back for espousing ethnographic methods. The method simply does not carry weight, precisely to the extent that bowdlerization of ethnography renders it trivial.

There are bureaucratic implications to such conceptual drift. The deliberately interdisciplinary tenor of the research councils may well breed new suspicions of disciplines that keep themselves to themselves (nothing is taken on trust and all should be accessible to all). Social science research methods are supposed to be broadly recognizable to everyone, with a dash of specialism where needed. In such a climate one would not be surprised to find that everyone supposedly knows what 'ethnography' means.

The second strand. I see that as arising from a marriage between the need for relevance, advocated off and on since the 1970s, and the deliberate fostering of interdisciplinary research groupings which has resulted in a huge burgeoning of research centres, networks and so forth over the last two decades.[8] An adjunct here is the perception of increasing need: global interventions get more dire, ethics committees blossom with unthinkable issues, the fragility of the techno-industrial infrastructure is not just a matter of sewers crumbling but of self-cancelling power grids and poverty spirals, and world health appears the most precarious goal of all. No surprise to see the world full of problems that require interdisciplinary solutions (e.g. Barnett 2000; Callon 1998).[9] The surprise is the epistemic shift. For the issue today is not just a matter of being relevant and certainly not just a matter of doing applied work or helping solve things. There is something quite close to a new formalism, orthodoxy almost, in relation to what constitutes a research question as such, and along with this a reformulation as to why disciplines can be justified: they offer expertise.

It is important to appreciate that expertise carries a high value, and can be counted as a resource that contributes to the national economy. Research councils flourish insofar as they can be shown to be fostering UK capacity. All I add is that the momentum has an epistemological push towards assimilating *all* research questions to 'problems' requiring expert solutions.

I suspect that many UK colleagues in social anthropology may well regard such developments as extra to the kind of projects they are involved in, get excited (as I do) when the opportunity for cross-disciplinary collaboration arises, are relieved/pleased to be seen to be making a practical contribution to human well-being, will take an interdisciplinary research proposal as meeting current expectations, but otherwise will not worry too much. They may have some sense of anthropology being disadvantaged when judged by other disciplines because of its peculiar methods, but may well think that otherwise things continue as usual. Indeed so they might when the research councils state that, regardless of research priorities and current themes, they also remain committed to funding 'blue skies' projects, value scholarly independence and ring-fence response-mode grant funding. Certainly a small but definite stream of recognizably 'anthropological' projects gets off the ground. It sounds churlish to suggest that this very welcome commitment is part of the problem.

Without wishing to sound churlish, then, here is a sequence that takes us from a hyper-definition of disciplines to their all but disappearance in five quick steps. While the trajectory that follows is fantasy, individual components are drawn from real life.

1. Social anthropology is appreciated for its specialist knowledge in certain areas. It is regarded as particularly good for various types of enquiry that everyone knows about: overseas, first nations, small communities, religious cults and so forth. 'Blue skies' ventures are encouraged.

2. This appreciation is the pre-condition for re-moulding disciplines as 'sources of expertise'. We are all (only exist as) experts.[10] Anthropology can find its seat at the table – and, in relation to a particular problem, the kind of 'expert' advice an anthropologist can offer will be weighed up against other sources of expert advice.
3. It is assumed that expertise is 'recognizable', although this has its costs. By way of example, an anthropologist in the best disciplinary tradition may be searching for a context in which to situate a problem, but it may look to colleagues as if the anthropologist is simply facing in another direction, off beam, introducing unnecessary complexity. For disciplines become judged by how well their expertise matches the problems. (The fit is supposed to be relatively transparent; the 'problem' already defined (Green, pers. comm., March 2004).)
4. Disciplines are also judged by how well their own expertise matches their *own* research questions. Perhaps other expertise ('research capacity') is already there. Queries raised against anthropological appearing to venture into 'occupied' areas may have little to do with hard territorialism – I deliberately introduced the anthropologists' musings about the abuse of ethnography as an example – but everything to do with soft territorialism. Adjudicators from other disciplines simply become puzzled as to how social anthropology expects to add anything, for example, to political science or international law, when there are professional experts around. So an anthropologist wanting to study organizations might be disqualified because people in management policy or organizational behaviour are already doing so. At its extreme, anthropological 'ignorance' about what is happening elsewhere in social science disqualifies practitioners from turning certain topics into research objects. These are 'interdisciplinary judgements'.
5. Anthropologists start finding it difficult to get backing to explore certain new fields, for engagement in other fields *for the sake of the discipline* carries little weight. The notion that it might be of advantage to the development of social anthropology as such that it ventures into new terrain, regardless of who is already occupying it, simply has no purchase. Incidentally, blue skies research has to take exotic forms – venturing where other experts already exist cannot be blue skies. In short, if it ever became obvious that a would-be researcher was not going to get funding for a project because it was directed primarily to enriching or enhancing or broadening his or her discipline, disciplines would have vanished.[11]

If there is something of general import here, beyond anthropology, then I cannot do better than quote a colleague's words on the way the vaunting of society and of (social) relevance 'actually domesticates and probably limits the ambitions of social science' (pers. comm., Osborne, August 2003). Otherwise put, as Edwards and Stöckl have argued (ASA conference, 2004; see

acknowledgements), the problem is a surfeit of 'society', and especially of those conceptualizations of 'the social' that are drawn from social science. The more such concepts acquire energy through circulation, the less their disciplinary origins matter. This may or may not be a good thing. But something often repeated must be repeatedly the same. So the social (as in 'social implications of' x or y) takes, is domesticated into, a repertoire of familiar forms. What is ubiquitous needs no special understanding.

Let me conclude with a brief structural comment. When comprehensiveness requires the application of (several) expertise(s) it comes to exist less plausibly at the level of the individual discipline; here instead pretensions to comprehensiveness come to seem pretentious. Arguably, that is exactly how disciplines were once imagined: the totalizing binding together of theory, method and data. It is not the kind of comprehensiveness that is going to perform the engagement and accountability so sought after at the moment.

Afterword

I do not mean to accord 'expertise' (cf. Barry 2000) any special stability.

Edwards (2001) has questioned the relationship between the kind of scientific literacy that lay participants in the flow of scientific knowledge could be expected to acquire and the often acute non-scientific commentary of a social and political kind that they are prepared to offer – in observations about interest groups, access to resources, government regulation and so forth. These are people who, in her words, for the most part profess to know little about science but who clearly know a great deal about the place of science in the contemporary world in which they participate.

This is a good antidote for the ILP, the Imagined Lay Person (Maranta *et al*. 2003). A group of researchers, familiar with the agenda of Nowotny and her colleagues,[12] have cast a critical eye over the notion of the public, people and lay persons that is invoked in appeals to communicate findings (in this case scientific ones) not only across disciplines but across the expert–lay divide in society. (They also critique the idea of the expert.) We have encountered one such invocation. The Dutch Report recommended setting up 'meeting places' for face-to-face interaction, the intention of communicating with the public thereby concretized or made material as a matter of developing person-to-person relations, or creating spaces where minds can 'meet'.[13] Yet the *agora* that Nowotny *et al*. (2001) call the public space in which society 'speaks back' to science is primarily a conceptual, or epistemic, space.[14] That is, it exists in the allowances that people make for certain kinds of views. If this is so, then its inhabitants are primarily conceptual persons.

The authors coin the acronym ILP (Imagined Lay Person) to underline the fact that the voices of lay people enter the agora 'as conceptions in the mind of the scientist' (Maranta *et al*. 2003: 152). They are ascribed certain selective characteristics: 'the ILP is not a sociologically comprehensive representation of

lay persons but rather an action in the knowledge production which ascribes epistemic and functional competences to lay persons' (2003: 154). What are these competencies? Experts who include 'lay persons' in their strategies may be construing them as a 'concerned' electorate, as 'users' of knowledge, as conservers of values, as waiting only to be educated, as Luddites and so forth. Lay persons in the flesh, however, do not always perform their ascribed attributes. Their materialization can be awkward – as in one case of a 'focus group' brought in to enrich environmental scientists' research findings on the climate with their (the group's) political and practical concerns. In other words, their epistemic status included political competence. Only, as it happened, their practical concerns turned out to be an intense interest in the *scientists'* politics.

One might say (the authors do not) that the lay person is likely to be doing the same in relation to the expert, creating a conceptual expert. For example, the authors argue that 'ignorance' can be seen as an epistemic competence of sorts. Quoting Michael (1996), they point out that ignorance can work as the mark of authority of the lay person who draws boundaries round his or her knowledge: it implies a practical, collaborative, functionality with the expert.

The purpose of their paper is to ask what role the ILP plays in scientific knowledge-making. In the course of the enquiry, they identify three kinds of ILPs, individualized (people motivated to pursue particular objectives such as reading a scientific magazine), representative (participants standing for some segment of society) and generalized (an aggregate such as citizens or consumers). That in turn leads them to define the conditions under which expertise may be successful. Despite my comment about how 'experts' are in turn imagined by lay people, as Edwards' interlocutors were doing, the authors' interest is asymmetrically focused on the experts' constructions. But I just wonder whether we could not also develop a reciprocal model.

Borrowing from Maranta *et al*.'s brilliant depiction of ILPs, perhaps we could begin asking more systematically than we do about IDEs (Imagined Disciplinary Experts). The aim would not be to unmask disciplinary stereotypes (awestruck or insulting) or assumptions about what other people do (idealized or misguided). Rather, the aim would be to see if one could ask questions about disciplines that presumed an enduring functional utility. In this new appeal to comprehensiveness, how do disciplines exist in relation to one another? What job does the idea (say) of 'anthropology', or its hallmark 'ethnography', do in an economist's or sociologist's or accountant's scheme of things, and vice versa? 'Disciplines' would thus be understood as inhabiting conceptual spaces, as occupying diverse epistemic niches in the diverse views of others. In fact I would almost be tempted to develop a research proposal to follow this through. Only I fear that (before the work was done) existing space would already be taken up by 'knowledge workers' or by experts in 'interdisciplinary management'. Who would consider a social anthropologist had any special expertise in the matter?

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Notes

1 The argument that follows is adapted from Strathern (2004).

2 And Nowotny sees the 'trans' of transdisciplinarity as resonating with the 'trans' of transgressive. An alternative/overlapping set of definitions informs the AWT 2003 Report (see below): in their language, multidisciplinarity refers to all possible forms of research between scientists from different disciplines; interdisciplinarity points to the degree to which working methods and research results are integrated; while transdisciplinarity 'focuses on the degree of cooperation between scientists and representatives of other sectors, such as public authorities, the business community and users' (AWT 2003: 14).

3 Nowotny (2003: 7–8) writes: 'in order to [ful]fill the potential of transdisciplinarity, the notion of users must be extended. If knowledge is transgressive, then the whole range of reverse communications must be opened.' The question of why research should be done 'for' anyone in the first place arises – in part, but an important part – from the need to justify public expenditure.

4 For a copy of the report, my thanks to Emma Rothschild; Rothschild led the UK's Council for Science and Technology sub-group on the Arts and Humanities in relation to Science and Technology (CST 2001). The report specifically aligns itself with thinking that is going on in 'many countries', and indeed traverses ground that will be familiar from more than one milieu.

5 Many non-university research institutes 'have a clear, thematic [viz. problem-oriented] approach and offer an environment in which multidisciplinary research can flourish. . . . The situation is very different in the universities, where there are many forces at work that inhibit the development of multidisciplinary research' (AWT 2003: 17).

6 Though it goes out its way to say that there should also be room for 'monodisciplinary research'. (Note that discipline-based research now becomes marked as just one kind of research.)

7 The extent of anthropology's priority here is a matter of some contention (see Atkinson 1990; Atkinson and Hammersley 1994, among others). A fascinating

and far from trivial account of the explicit adoption of 'ethnography' from anthropology (in this case by STS and media studies) is given by Schlecker and Hirsch (2001).
8 Gibbons *et al*. (1994)'s Mode 2 knowledge production. Hill and Turpin (1995) describe the phenomenon of 'centres'; a decade on, Rhoten (2003). On formalized 'networks', see the example in Strathern (2004: 69–70).
9 Note the way the need may be stated, but then disappears in the realization that things are happening anyway, only to reappear when disciplines are listed (so disciplines are useful for monitoring interdisciplinarity).

> There is a growing need for multidisciplinary research. Scientific, social and technological issues have become so complex that most cannot be answered from a single perspective. . . . Genomics, proteomics, speech technology and nanotechnology are just a few of the fields that are developing like wildfire because they bring insights from different disciplines together.
>
> Societal issues, too, increasingly require input from a range of disciplines. The problems in the health care system cannot be dealt with exclusively by producing more medical technology. Sociological, demographical, psychological, ethnological and administrative research. . .are equally important.
>
> (AWT 2003: 11)

10 One of the outcomes of interdisciplinary committees is the inevitably *representative* status given to those who are the sole members of a discipline or subdiscipline.
11 It will be appreciated that I am telling a tale about disciplines, not about what people manage to do. If one looks at what anthropologists study these days, and the huge range of unorthodox situations in which they find themselves, there is a heady sense that everything is open.
12 Members of Helga Nowotny's research group at the Collegium Helveticum, ETH Zürich. My warm thanks to her for sending me the paper.
13 In the 1990s various 'community' experiments with ICT tried to make provision for interactions, using long-range technology to engineer simulations of face-to-face encounters, whether with neighbours or with providers of services.
14 'Agora' describes 'the new public space where science and society, the market and politics, co-mingle' (Nowotny *et al*. 2001: 203). They go on to say that it is populated by the products of an enlightened educational system (and, we add, is media informed), and is made up of 'multiple publics' and 'plural institutions'.

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Marilyn Strathern is Professor of Social Anthropology, University of Cambridge. Her ethnographic interests are divided between Melanesia and Britain, and latterly between the new reproductive technologies, intellectual and cultural property, and interdisciplinarity. The edited collection, *Audit Cultures,* subtitled 'Anthropological studies in accountability, ethics and the academy', contributes towards a critique of good practice.