*Progress in Human Geography* 30, 6 (2006) pp. 747–782

*Forum*

# Research assessment and the production of geographical knowledge

Organizing editor: Noel Castree*

Contributors: Richard Aspinall, Lawrence D. Berg, Hans-Georg Bohle, Keith Hoggart, Rob Kitchin, Dorothea Kleine, Elmar Kulke, Richard Munton, Eric Pawson, Joe Powell, Eric Sheppard and Jan van Weesep

**Abstract:** This Forum examines the research assessment systems (RASs) that affect professional human geography, and offers perspectives on the whole idea of formal research assessment. The Forum aims to assist professional geographers in their reflections on present and future research assessment in their own countries. It comprises two parts. The first offers highly succinct and detailed descriptions of the RASs currently in place in a range of countries – be they highly centralized, standardized and formal systems, or devolved and relatively informal ones. Many professional geographers know little about the assessment procedures outside their own countries and the first part allows a comparative understanding to be developed. The second part ('Whither research assessment?') offers reflections on the whole notion of research assessment beyond the 'normal' assessment offered by peer review of papers, books and chapters; considers whether actually existing systems of research assessment in one or more countries embody the values conducive to an 'appropriate' form of research assessment; and it also considers the actual or probable impacts on the content and form of geographical knowledge of real or possible RASs.

**Key words:** academic freedom, geographical knowledge, neoliberalization, research assessment, universities.

## Introduction

While professional geographers are not the only producers of geographical knowledge – think, for example, of the mass media's key role in shaping geographic imaginaries – our efforts are distinctive in a number of obvious ways. First, willingly or not, we are perceived as 'experts' in the wider society: people equipped to produce sophisticated cognitive, technical, moral and/or aesthetic understandings of material and representational geographies. Even though the 'capes and bays' image of Geography doubtless dies hard among many national publics, there is nonetheless a long-standing recognition abroad that university geographers are more than simply

*Email: noel.castree@manchester.ac.uk

 10.1177/0309132506071518

gazetteers or cartographers. Second, and relatedly, most of us probably see ourselves as seekers after the truth when all is said and done, even as we are nowadays wont to insist on the provisional and small-t nature of 'truth'. Even if we did not see ourselves thus, members of the wider society still tend to perceive academics as 'objective' analysts to be trusted more than most, if never absolutely. Finally, the sociology and politics whereby we produce geographical knowledges – as researchers, teachers, consultants, activists or what-have-you – is distinctive relative to other knowledge producers (like think tanks or research NGOs). Academia, in many countries, has been self-governing for decades. However, in recent years self-governance has either been eroded in many national university systems, or been reworked in order to intensify and modify the academic labour process. For some, this represents a convergence with how knowledge production is governed in the wider world (courtesy of 'globalization', 'corporatization' or 'neoliberalization'). However, for others academia has not entirely surrendered its distinctiveness as a place for the relatively autonomous (re)production of high-level knowledge within national and supranational social formations.

These three observations constitute the context for this Forum. Since the late 1990s, more geographers have started to look inward at the 'rules of the academic game' (as the Forum's bibliography attests). Far from navel-gazing, this represents a genuine concern about the role of academia in general and Geography in particular within formally separate but practically interrelated economies, societies and polities. Universities and their constituent disciplines are vitally important actors in countries with well-developed tertiary systems. In a number of obvious ways, they are major players in the lives of nations and, as a corollary, the modern world as we know it. The recognition of this fact has, arguably, been the inspiration for those educational policy-makers who, this last 30 years or so, have sought to remake universities as vehicles for national 'productivity' or a narrowly defined 'welfare'. In response, commentators in the centre or on the left have sought to uphold a different conception of universities and their disciplines as more-than-instrumental actors in what is, after all, a more-than-capitalist world. This raises many important questions, some of which can be answered philosophically while the others require a robustly empirical response. What should universities be for? What is the 'function' of a discipline called Geography? Have universities become 'unfree' places in the west (and, indeed, beyond)? Is professional geography changing as a result of new governance practices within higher education systems? Have professional geographers lost control of their own subject by acting *in loco politicus* for administrators and secretaries of state for education?

Sophisticated responses to the first two questions can be assembled by consulting countless writings going back years. However, answers to the last three questions tend, with some notable exceptions, to be anecdotal rather than evidence-based. Although this Forum does not provide an empirical answer to these questions, it will hopefully provide readers with some tools to think more carefully about the possible links between new university governance mechanisms in the west and the (re)making of academic Geography. At their best these tools might challenge some (usually unwritten) shibboleths that those on the right *and* the left (as well as in the centre) hold about Geography and the so-called 'new higher education'. More specifically, this Forum was organized on the basis of a simple hypothesis: namely, that changing governance structures within western academia might be altering the very *substance* of the geographical knowledges we produce and disseminate as university researchers. This is why the Forum focuses on new or older-amended research assessment 'systems' (the scare quotes indicate the inappropriateness of this rather muscular term in some national contexts).

Because of a wish to respect the geography of the changing governance and practice of Geography, it was also surmised that there might be spatial unevenness to how the subject is being remade at the research level.

The Forum is in two parts. The first comprises brief descriptions of the national research assessment mechanisms prevailing in several western countries. Many geographers are simply unaware of how, and with what consequences, geographical research is assessed in other countries and so Part I, I hope, provides a useful service in this regard.[1] In Part II, there is a set of more personal and reflective discussions of how research assessment, as principle and practice, impacts upon the kinds of geographical knowedges we collectively produce. The contributors vary by nationality and career stage (though not by gender, for purely contingent reasons rather than ones of thoughtless bias). Those writing in Part II are, on the whole, very concerned about what they regard as a spreading assessment 'style' that defines academic 'value' in rather narrow ways. Some readers will be more sanguine, even though the descriptions in Part I do seem to suggest a loose transnational convergence in the assessment of geographical research in which academic freedom is eroded (even as academics are often complicit in this process rather than resisting it).

What kind of research assessment for what kind of geographical research? This Forum provides no conclusive answers. But it does, hopefully, offer us some ways to think through how we are remaking disciplinary research under assessment conditions only partly of our own making. As with other disciplines, much geographical research ends up ignored in unread books, policy papers or academic journals. However, much of it 'matters' in the rich sense of that term because it shapes the thoughts and actions of students, activists, policy-makers and many others besides. Knowledge, however 'truthful' it aims to be, is always politics by other means. Research assessment systems are thus themselves political technologies because they aim to shape what counts as 'valid' and 'valuable' knowledge. If the contemporary world involves a great competition among professional knowledge producers to be heard and deemed legitimate spokespersons – academics, researchers in NGOs and think tanks, government researchers, etc – then we need to control the way our own knowledge productions are governed. This requires time, effort and the unglamorous politics of university committees, research council missives, central government green/white papers, lobbying deans and vice chancellors and so on. If some readers interpret this Forum as a sign that all is not well with professional geography in the west, then the challenge is clear: don't wait for others to make things better, but think, rather, what can be done to create the Geography you think matters. If we are near the end of a long revolution towards modes of academic governance many of us dislike, then it will take an equally lengthy and persistent sort of activism to make things otherwise.

*Noel Castree*
*University of Manchester*

## Part I: Existing research assessment systems

### *1 Research assessment in Ireland*

While research has always been undertaken in Irish universities, predominately funded through public sector contracts and the European Union frameworks, it is only in recent years that there have been significant sources of funding and investment in research infrastructure by the state. Broadly coinciding with the Celtic Tiger phenomenon and the growth in Ireland's knowledge economy, the Irish government in the late 1990s invested significantly in research, setting up new funding agencies (the Irish Research Council for Humanities and Social Science, the Irish Council for Science, Engineering and Technology, and the Science Foundation Ireland) and funding the creation of new programmes and institutes of research

(Programme for Research in Third Level Institutions administered by the Higher Education Authority). This has led to an exponential growth in funded research within Ireland (Geography has done particularly well at attracting these monies – see Kitchin, 2004), although it has not been without its difficulties including a stop-go flow of funds and profound effects on other aspects of university work. At the same time the government is placing significant pressure on the higher education sector to reorganize their activities and priorities with the explicit aim of increasing research outputs and quality, achieving critical mass in selected areas (notably ICT and biotechnology), and to improve the international ranking and reputation of Irish universities (this, in part, is being driven by an OECD review of higher education in Ireland that concluded that reform was necessary, including the adoption of 'international' benchmarks to evaluate research excellence[2]). There is a strong instrumentalist agenda at work here with funding being targeted at research that makes an explicit contribution, as defined by the state, to society and economy – essentially policy-focused research or research that produces new patents and products. There is also a strong emphasis on what might be termed competitive collaboration, wherein funding demands cooperation between institutions, as a means to scale up intellectual capacity and resources, that otherwise compete for students, staff and other funds.

While there are formal systems of research assessment to evaluate the work supported by these agencies, there is no systematic exercise that evaluates individual and departmental research competences across the higher education sector (cf. the Research Assessment Exercise in the UK). Instead assessment is largely confined to an evaluation of the progress, value-for-money and financial probity of funded projects and programmes. Each of the major research funding agencies conducts six monthly evaluations of projects through a formalized reporting system, usually a report detailing expenditure, activities, outputs and, if required, an assessment by a supervisor or research office as to whether funding should continue. In the case of research programmes funded through the Higher Education Authority or Science Foundation Ireland research outputs are liable to end-of-term assessment including a full financial audit and bibliometric analysis. As a consequence, research conducted in the absence of funding is, in the main, not formally evaluated beyond some selected internal processes, such as promotion boards and performance management exercises (recently introduced across the university sector).

That said, a more recent trend has been some universities moving toward running their own internal resource allocation models that seek to ensure that 'both pay and non-pay resources follow ... performance and activity' (Trinity College Dublin, 2004). For example, University College Cork is in the process of introducing an allocation model in which up to 15% of a department's budget will be allocated on the basis of research output. As well as creating disquiet among staff in the university, such a system has the potential to create internal tensions and competition within departments between research active and less-research active staff *vis-à-vis* teaching and administrative loads, promotions, and so on. It will also have other effects. On the positive side, it may well stimulate the development of a research culture and research groups within departments that have been less active. On the negative side, it may alter well-established forms of scholarship. In the humanities and social sciences a single-authored monograph has been seen as the gold standard of publishing, not international articles, and there is a much stronger tradition of edited books and grey literature. It also fails to take into account disciplinary traditions. Irish geography is relatively empiricist in its nature and decidedly focused on Ireland, but such writing is often considered parochial by editors and referees of international journals (see Berg and Kearns, 1998; Kitchin, 2004).

While research assessment can be characterized as being in its infancy in Ireland, it is important to note that research assessments conducted in other countries, in particular the UK, have profound effects on Irish academia. With respect to research, many EU and Irish funded projects are cross-border in nature, linking the Irish universities with those in Northern Ireland. Given that researchers in the North are part of the UK's RAE, pressures are placed on Irish researchers to conform to the expectations of, and to help their Northern counterparts to compete within, that exercise. With respect to employment, Irish academics are competing in the same labour market. This creates particular problems concerning the comparison of careers developed in different countries and thus contexts. The effect is to compare what are sometimes termed 'RAE-able' vitae with Irish vitae that have been built in the context of higher teaching loads and staff-student ratios, a research environment in the social sciences that is heavily policy-orientated, and a system in which heavy emphasis is placed on inter-institutional and interdisciplinary collaboration. For academics wanting jobs in Ireland they often have to compete with the desirable qualities of RAE vitae (in particular, international refereed articles), and those wanting to move to UK universities have to create and maintain a RAE vitae while residing in a system that has different pressures and priorities (although clearly many also overlap significantly). This is compounded for older academics given the frequent reliance on soft monies (leading mainly to grey literature) prior to the development of the funding agencies in the late 1990s.

The combined effects of formal assessments of funded research, crossnational collaboration, and a shared labour pool, is to move the Irish system towards a research culture similar to the UK, but with fewer of the benefits and rewards for strong performance. That is, there are no additional funds made available to departments or universities (within the allocation models it seems that underperforming departments will lose money, with the surplus being redistributed to high-achieving departments; that is, there are no new funds available), and while rapid promotion is achievable it is much less common due to a more hierarchical organization of staffing and the fact that there is very little movement of academics between institutions (it is rare that an Irish academic does not spend the whole of their career in the same institution).

To conclude, Ireland's research environment is in a period of rapid change given the introduction of new funding agencies and the pressure being brought to bear on the universities to undertake widescale restructuring and reform. Research assessment is a formal part of this system, but is largely restricted to the evaluation of funded projects or resource allocation funding within specific universities, rather than a systematic assessment of the university sector as a whole. Moreover, the universities have moved, through the establishment of the Irish Universities Quality Board, to try to head off the introduction of any national RAE system, although it seems likely that some kind of system will be introduced in time. As it stands, however, both the universities and the state seem reluctant to import wholesale the UK's system, which is perceived as being as much destructive as constructive, especially with respect to morale and institutional cohesiveness. That said, as detailed, the RAE already casts a shadow over Irish academia.

*Rob Kitchin*
*National University of Ireland, Maynooth*

*2 Research assessment in the Netherlands*

*a The current system of research assessment*: The quality of academic research in the Netherlands is assessed periodically. All academic programmes in a discipline are simultaneously evaluated by an independent agency, the QANU (Quality Assurance Netherlands Universities). A standard protocol allows for comparison and ranking based on selected

quality indicators. The protocol was devised by core organizations in academe: the Royal Academy of Arts and Sciences (KNAW), the Netherlands Organization for Scientific Research, also known as the Science Foundations (NWO), and the Association of Universities in the Netherlands (VSNU). The Academy is concerned with overall development and quality control of academic endeavours, including the accreditation of university research centres. The science foundations are the main public funding agencies; they launch research programmes and are charged with oversight of ongoing ones. At the behest of their association, the universities enhance their research profiles by funding centres of excellence.

Since the 1970s, budgets for research have been shifted from the universities to NWO. Their allocation on a competitive basis gave quality assessment stature; public and private funding agencies use it to guide their spending. The assessment itself uses self-evaluations and a review by an expert panel every six years. It is widely seen as having increased the quality of research, not least because the component of self-reflection forced the researchers to fit their individual research into programmes. The improvement was mainly an effect of changes in funding that have resulted in the concentration of research in ever-larger programmes. This secular trend has brought better management of research and a steadily increasing output of academic publications, including dissertations.

The evolving funding system has ensured that virtually all academic research programmes are devised in consultation with funding agencies, which has reduced the autonomy of researchers. Such a shift might easily diminish the quality of academic research if it would hinder the pursuit of new ideas; it is clear that less research is driven by the curiosity of individual scholars. Yet, there are innovation subsidies, targeted at various categories of high-potential researchers, to be spent on establishing new programmes.[3] Ironically, such innovation-stimulation ultimately institutionalizes and further normalizes research ideas.

*b What is special about the organization of Dutch geographical research?*: The quality assessment evaluates research programmes, not the work of individual geographers in the round. It reveals that the social sciences, arts and humanities – including human geography – take their cue from the successful model of organizing research in programmes adopted in the biophysical sciences to promote the accumulation of knowledge. This development means that researchers have traded academic freedom for guarantees of research time and resources.

Until the early 1980s, university faculty members largely operated individually, and research was fragmented. There was overlap between work at the various universities, and developments in the discipline abroad rarely inspired Dutch geographers. Budget cuts enticed the universities to coordinate their research. They built profiles around selected fields of strength while accepting the challenge of funding agencies to cooperate in national research programmes. In return, their research capacity was increased: earmarked budgets for research grew and there was a new emphasis on the production of PhD dissertations for which a separate category of researchers-in-training was created.

These first-generation programmes, although approved by NWO, were loosely defined and managed. This system of 'conditional financing' made research funding available for a period of five years. It allowed the departments to build their research capacity and generate results to be evaluated *ex post*. If these were insufficient, the funding might not be continued. Research Institutes within the Faculties assumed responsibility for programme management, which still afforded the researchers a large measure of autonomy. The universities selected a limited number of 'fields of excellence' from the programmes maintained by the Faculties. At that time, quality was largely defined by numbers of

publications, giving an advantage to very large programmes. And the evaluation was an internal, largely descriptive exercise 'to inform others about the research being carried out',[4] but also to derive guidelines for future research.

Because of the increased number of publications, many in quality international journals, and the participation in international research programmes, Dutch geography has become more visible. But the programme management has remained inefficient. This has led to the higher-level decision to cut research budgets at the universities and allocate them to programmes run by KNAW and NWO. The Faculties were appeased by the promise that much of the money would flow back through the funding of initiatives by researchers themselves. Indeed, the system has increased research activities at the universities, funded by these organizations and other government and non-governmental agencies. The funding system also created the need for a more formal system of quality assessment.

The four remaining departments of human geography (Utrecht, Amsterdam, Groningen and Nijmegen) cooperate in many ways, for instance in the national graduate research school, Nethur;[5] there are multiple contacts among the researchers. Since everyone is somehow involved, the decision was made to invite foreign scholars to constitute the expert panel. An unintended benefit is that all documentation for the assessment as well as the report of the panel are available in English. The most recent external assessment of the research in the discipline of Geographical Sciences was conducted in 2001.[6]

*c Evaluation*: Coordination and concentration characterize geographical research in the Netherlands and have, in the eyes of some, improved the quality of the research: NWO favours the use of 'priority research themes', often co-financed by other stakeholders, and the need to spend the huge sums creates a preference for large, comprehensive programmes and big specialized research centres. These include the Netherlands Institute for Spatial Research[7] and the brand new Netherlands Institute for City Innovation Studies.[8] Participation in European research programmes is also coveted and comes with a seal of quality approval. But at the same time, participation in such research programmes has the drawback of requiring co-financing, which makes it only an option for established research groups.

At all levels – from individual projects to large programmes – academic researchers compete to capture budgets. This means that their competences are continuously assessed by peers or bureaucrats; also that there are strong incentives to maintain or increase 'quality' (an elastic concept to be sure). While individual researchers outside programmes have poor access to research grants, there is lavish funding to support new initiatives. This is channelled through, eg, NWO's innovation programmes 'Veni, Vini, Vici', each addressing different categories of high potential researchers. The successful applicants can thereby set up new research programmes.

The path toward high-quality research has brought increased coordination, first by the universities themselves, then by NWO. The system of quality control led to better-quality geographical research but, by being strongly linked to revised funding, it has also turned out to be an instrument to control the topics that researchers can investigate.

*Jan van Weesep*
*Utrecht University*

*3 Research assessment in Germany*

Germany does not have one unified system of research assessment, but a three-layered patchwork made up of various subsystems. These layers are: the national/federal level; the 16 states, or *Länder*; and the individual universities. Higher education in Germany is largely the responsibility of the 16 *Bundesländer*, which means that there are 16 Ministries of Science which formulate higher education policy, in addition to the Federal

Ministry of Education and Research. Furthermore it is important to understand that up until the late 1980s, the major universities in Germany were seen as more or less equal in academic excellence and reputation. Rankings at the national level only started around 1990. Most of the evaluations mix research assessment with other assessment components. In the following we will trace this research component while we describe the three layers of overlapping evaluation systems that currently exist.

In Germany, rankings at the *national* level are a relatively new phenomenon. Since 1989, popular press magazines such as *Der Spiegel* and *Focus* have published the results of their own indicators and ranking systems, based on quantitative data such as average number of semesters until course completion and level of third-party funded research as well as a reputation grade awarded by peers. More reputed is the ranking issued by the *CHE – Centrum für Hochschulentwicklung*, an independent not-for-profit organization founded in 1994 by the *Hochschulrektorenkonferenz*, the council of university vice-chancellors, and the Bertelsmann Foundation, which remains the main funder. Within this ranking, research is just one pillar out of nine. The main difference from other ranking systems is the assumption that there is no 'best university', but only universities with different strengths and weaknesses. As a consequence, these rankings are strictly subject-specific and rank universities in three groups (Top Group, Middle Group and Bottom Group). Indicators are not weighed, but published in disaggregated form. Only in 2006 will Geography be added to the canon of evaluated subjects. Indicators for the research component of the CHE ranking are: amount of third-party funded research; bibliometric data on publications (in the case of Geography, no database for publications[9] was seen as adequate, so publications will not play a role); PhD dissertations and *Habilitationen*[10] per professor; and results from an inquiry asking professors to name three departments leading the research in their field. Results of the first CHE Ranking for Geography were published on 4 May 2006.

Research assessment at the national level also takes place in the context of the *Exzellenzinitiativen* (Initiatives for Excellence) announced in 2005 by the Federal Ministry for Education and Science, in which universities can enter in a national competition for additional funding for graduate schools, research clusters and financial support for those who gain the status as *Spitzenuniversität* (top university). These Spitzenuniversitäten, up to ten in number, will receive a minimum 3% budget increase. The competition will run until 2011 and is endowed with 1.9 billion in total. Juries of international scientists will referee the applications.

Another, very direct instrument of research assessment is the way the *Deutsche Forschungsgesellschaft* (German Research Foundation, DFG), funded jointly by the federal government and the *Länder*, assesses funding proposals. Two peers act as referees. The main focus is the quality of the research proposal and a second criterion is the research record of the researchers involved, including their publication record over the last five years. When assessing candidates for posts at universities, departments also rely heavily on the research record (level of third-party funded research and publications). They form a recruitment committee and use external peers for the selection of candidates.

Much of the decision-making and budgetary power in the field of higher education rests with the *Länder.* Most of the 16 German *Länder* have their own system of higher education evaluation, but all these systems mix research and teaching assessment. Some of the *Länder* commission every 5–6 years an assessment of a particular subject (eg, Geography) across the *Bundesland*, while other *Länder* only have evaluations conducted at the level of individual universities. A group of five or more experts (professors) from other parts of the country is appointed to gather and analyse quantitative and qualitative data on performance. Every Geography

department in the *Bundesland* then provides this commission with a report. Based on this report, members of the commission visit the individual department and then write their own report. In some cases (eg, Humboldt Universität Berlin since 2002) this results in actual report cards for individual professors. These report cards are given to the individual and the Dean of the department. Areas covered by the overall departmental reports typically include teaching and research, with research gauged by the level of third-party research funding, quantity and quality of publication output and activities serving the scientific community. These reports can have political consequences: while strong departments may gain extra funds, departments who did not do so well on these reports may be reduced in size or have the chance to regain lost ground by negotiating agreements on targets, which they then have to meet.

Some universities hand out funds according to the performance of specific departments or individuals, with performance indicators for teaching and research measured on a yearly basis. Performance indicators for research include the levels of third-party research funding, the number of PhD dissertations and *Habilitationen* supervised per professor, job offers to staff received from other universities, and the number of scholarship holders in a department. Only rarely do publications appear as a performance indicator. Should departments fall behind on their performance indicators, a certain amount of funding is held back, an agreement on targets is negotiated and this funding is released only under the condition that these targets are then met.

Let us summarize. In Germany, formal research assessment exercises are carried out in a highly devolved manner, each *Bundesland* using a different, non-standardized system, but all relying on almost the same cadre of leading academics acting as peer-reviewers in their field. Research assessment on a central federal level is a very recent phenomenon. As a result, Germany does not have one unified system, but a patchwork made up of three different layers (national, *Länder*, universities) of research assessment systems.

Finally, it is important to note that the German higher education system as a whole is undergoing profound changes at the moment. The more egalitarian approach to university funding is giving way to increased competition, more external pressures and greater funding disparities between individuals and institutions. In the new hierarchical model, the 'top' universities stand to gain additional funding to compete at international level. With the introduction of variable salaries for professors, they will gain flexibility to attract leading researchers. Overall, disparities look due to increase, not just between universities but also between higher education in richer and poorer *Länder*. Research assessment systems are one element of this process of increased competition and polarization.

*Hans-Georg Bohle,[a] Dorothea Kleine[a] and Elmar Kulke[b]*
*[a]Universität Bonn and [b]Humboldt-Universität zu Berlin*

### *4 The UK Research Assessment Exercise*

The first UK Research Assessment Exercise (RAE) was conducted in 1986. There have been five exercises, the last in 2001, with at least one more to come in 2008. The purpose of the RAEs is to provide research quality ratings for departments in Higher Education Institutions,[11] the ratings providing the basis for selectively allocating funds (QR) to reward quality. The broader objectives are to strengthen the international competitiveness of UK research and to provide public information on research quality in higher education. The Funding Councils (FCs) argue that 'since the focus of the exercise is research excellence, the RAE serves also to act as a general stimulus for continuous improvement in the quality of research undertaken and disseminated by UK HEIs, and as a quality assurance mechanism'

(Funding Councils, 2005a: 4, para 10; see also Roberts Report, 2003).

Each time it has been undertaken, the assessment process has become increasingly detailed and cumbersome to implement, partly as a response to demands for increased transparency and equity in an exercise that can significantly influence the future direction (even existence) of departments and the working condition (even careers) of individual academics, and partly because the resources allocated have become crucial to the funding of research intensive universities.[12] Few details of the process can be provided here but the controversies that surround the assessment criteria and practice are often as nothing as surrounds the algorithm that distributes the monies.[13] Assessment is by peer review with each subject area (67 in 2008) evaluated by a panel appointed after consultation with the respective subject community. Each panel produces a set of draft criteria thought appropriate to its discipline upon which it then consults.[14]

In determining research excellence, the 2001 Geography Panel said it would 'attach greatest weight to research outputs which demonstrate originality; and have made, or are expected to make, a considerable contribution to the discipline, one of its sub-fields, or to an inter-disciplinary area of research enquiry. Demonstrable impacts of geographical research beyond the discipline and the academy will also be taken into account where they are evidence of the quality of the research' (Funding Councils, 1999: 144: para 3.27.13). A similar statement exists in the draft criteria for 2008 where it is also said that 'research excellence will be judged against the key criteria of originality, significance and rigour' (Funding Councils, 2005b: 3). The Geography Panel has always actively sought to dispel criticism made of the RAE generally that it does not give due credit to inter-disciplinary research, or to applied or practice-based research, provided they meet its criteria of excellence. The Geography Panel has a tradition of writing a detailed report for its research community on its working practices, such as the functions of its subpanel of users of geographical research and the contribution of international experts to the grading decisions. The report also discusses the grading outcomes and what the Panel has learned about trends in geographical research since the previous exercise (Geography Panel, 2002).

In 2001, based on an evaluation of the quality of research outputs (normally four publications per academic), record of research vitality, research income, postgraduate student numbers and indicators of staff esteem, departments were graded from 1 to 5*, the latter being the highest rating. The main findings of the 2001 exercise for Geography were:

- a higher level of research quality than in 1996 with 38 of the 62 departments assessed being graded 4, 5 or 5*; these departments contained 84% of staff assessed compared to 61% in 1996;
- a decline in the number of Geography departments entered (down from 65 to 55) alongside a continuing concentration of staff, postgraduate numbers and research income in the strongest departments;
- while research income spent by UK geography departments had risen since 1996, numbers of graduate students had remained largely unchanged.

In almost all subject areas the proportion of staff returned in the top categories of department rose sharply in 2001 and it soon became apparent that the Funding Councils would not fully fund the improvement based on the 1996 algorithm. Even so, total QR has increased significantly (see note 12) and in 2005–6 Geography departments in England will receive just under £27 m but on the basis of a more selective algorithm than existed in 2001. Departments scoring less than 4 now effectively receive no funds, and the ratio has been widened to 1:3:3.75 between Grades 4, 5 and 5* departments respectively. The five largest recipients (a function of size multiplied

by quality rating) will receive 40% of the total amount (£10 m) and the ten largest 64%.

The objectives of the 2008 RAE are essentially unchanged but key alterations have been made to the process of assessment following sustained criticism of the 2001 exercise. Among the more important changes are:

- a clear focus upon research that is regarded as of 'international' quality;
- an attempt to improve consistency in grading decisions between subject areas by creating a system of main panels designed to standardize procedures between like disciplines (Geography and Environmental Studies is in a grouping with Town and Country Planning, Architecture and the Built Environment, and Archaeology);
- the use of a continuous scale of assessment so that the financial consequences of just making or failing to make a grade will be much less significant;
- assessment will be based more formally on three indicators of quality – research outputs (still four publications in most cases), weighted at 75%, the research environment (15%) and esteem indicators (10%);
- greater attention will be paid to individual staff circumstances (see, for example, Shelton *et al.*, 2001).

Since each individual output is to be graded, panel members have a huge workload in front of them. The reading may prove relatively straightforward compared to the subsequent evaluation process.[15]

*Richard Munton*
*University College London*

*5 Research assessment in New Zealand*

A culture of audit and accountability is entrenched in New Zealand universities, reflecting two decades of government adherence to neoliberal technologies. In the last five years, there has been an emphasis in political discourse on how the tertiary education system can be further transformed in order to contribute to the development of a 'knowledge economy' (Larner and Le Heron, 2005). Among the new calculative practices that have accompanied this drive is the Performance-Based Research Fund exercise, or PBRF for short.

In 2002 a regulatory bureaucracy, the Tertiary Education Commission (TEC), was established to oversee state interests in the postsecondary sector. The sector comprises eight universities, as well as regional polytechnics, wananga (Maori tertiary institutions) and postsecondary private training establishments (PTEs). All, public and private, receive state funding calculated by formula, mainly according to numbers of effective full time students (or EFTS) enrolled. The creation of the TEC came after a decade and a half of inter-institutional competition for EFTS, with duplication of courses, degree programmes and facilities, as well as branding and advertising excess, in a country of only four million people. One rationale for the TEC is to promote collaboration and cooperation. Nonetheless, its most conspicuous act to date has been the introduction and management of a research assessment exercise that is widely interpreted as a means of intensifying competition, both between and within institutions.

The PBRF is based on a partial reallocation of existing state funding, by removing 'top ups' paid notionally for research as part of the standard formula. Over the four years from 2004, these are being diverted progressively into a different pot, augmented by small amounts of new money. The contents of the pot are then redistributed in line with institutional research performance. This is substantially determined by aggregating the externally assessed attainments of individual researchers. However, the results of the first PBRF round in 2003 were released publicly in the form of departmental rankings (TEC, 2004), and lists of individual performances were 'in some cases passed back to university management to use for purposes for which they were not intended – such as recruitment and promotion' (AUS, 2005).

Only 12 assessment panels, made up of national and international peers, were

convened for the first round, leading to anxiety about their willingness or ability to recognize disciplinary distinctions in the production of knowledge. All academic staff on contracts of 0.2 or above were required to enter, despite many of those working less than full time having been appointed mainly for teaching reasons. Although individuals could nominate which panel by which to be assessed, there was little real choice. Most physical geographers went to Physical Sciences, which was dominated by bench scientists, and most human geographers to the Social Sciences panel. Individuals were then ranked as 'A', 'B', 'C' or 'R', with the financial return to institutions varying by panel. An 'A' ranking is defined as research of 'world class standard' and was awarded to just 6.5% of staff (in all disciplines) assessed in the eight universities. The 'R' judgement, widely held to denote 'research inactive', was handed down to 33%, including many 'new and emerging researchers' who had not had the opportunity to develop a track record over the six years that constituted the assessment period.[16]

Individual portfolios must include a list of publications, nominating the four best, alongside indicators of peer esteem and 'contribution to research environment'. These components are weighted respectively 70:15:15. In effect this means that well-published individuals in academic institutions with few postgraduate thesis students (an important measure of 'contribution') cannot earn an 'A'. For institutions as a whole, the final ranking is aggregated from the combined measure of quality of individual portfolios, numbers of thesis completions, and the value of external research earnings in the assessment period, in the ratio 60:25:15. Such precision has been undermined by an absence of agreed means of incentivizing individuals or departments, given that the formula for allocating funds is considered to be an internal institutional decision. In geography programmes across different universities there is therefore no apparent relationship between numbers of academic staff, their mean quality scores and PBRF allocations. The publication of the outcome of the 2003 round also saw the highest scoring universities appropriating the rankings to use in advertising for undergraduates, although the exercise purports to say nothing of teaching quality.

It was the TEC's intention that a second PBRF round should be held within three years of the first, in 2006. Given the considerable effort involved in completing the first round, it was later decided that the 2006 evaluation would be a 'partial' round. The panel structure remains the same; the round is primarily intended for those who feel that they can improve their scores on the basis of an augmented record, or one better described. Nonetheless it is apparent that some universities, in attempting to enhance their overall ranking, are treating this round as in effect compulsory (AUS, 2005). This has increased concerns that individual PBRF scores will be used by senior managers in institutions as tools of human resource management, evidence of which is already emerging (Curtis and Matthewman, 2005).

Heads of school face real difficulties in preparing for PBRF rounds. This is partly because the basis of evaluation is the individual, even though the department is the reporting and allocation unit. There is no means of minimizing the number of 'R' grades, as eligibility is determined by formula not by selection, although the formula has been reworked for 2006 (but still includes postdoctoral fellows, for example). The ranks of 'A' and 'B' rated researchers can only be built up slowly through standard appointment processes, as there is little willingness by cash-strapped institutions to engage in a transfer market. Good researchers can be lost at any time, since staffing cuts (ongoing in parts of almost all universities) must proceed initially by means of 'voluntary severance', in which encouragement of individuals to stay or to quit is not permitted.

Even when the PBRF is fully operational, it seems likely that levels of reward (or penalty) for departments will in most cases be

outweighed by variations in EFTS income. It has, however, already succeeded in coding research performance in calculable and comparative terms. But the debates about how incentive structures are to be aligned with PBRF goals, and how the tensions with other important aspects of academic performativity are to be resolved, have barely begun.

*Eric Pawson*
*University of Canterbury*

*6 Research assessment in the USA*

Assessment of doctoral programs in the USA is carried out at irregular intervals of about a decade by the National Research Council (NRC). The last reported assessment was published in 1995 (Goldberger *et al.*, 1995). This provided rankings of 36 geography departments based on a series of educational and subjective reputational criteria using data that related to the period 1986–92. The prior assessment was published in 1982 (Jones *et al.*, 1982) and reviewed 49 geography programs. The most recent assessment, originally planned for 2005–6, was postponed to 2006–7 because of funding issues. The published rankings are used as a measure of the overall relative performance of departments and the 1995 ranking of departments has been widely used since it was published, not only by departments to attract students and claim status (at least, by the highly ranked ones), but also by university administrators who use the rankings as evidence of the relative standing of departments within their discipline, college, and university; this can affect both attitudes towards departments as well as the resources they receive. The long period between assessments means that departments live with an increasingly aging ranking based on obsolete data (Ostriker and Kuh, 2003).

A National Research Council committee evaluation and critique of the 1995 procedures (Ostriker and Kuh, 2003) led to a set of revised criteria for the next assessment. Criticisms of the previous process and assessment products were several. The overall scoring was based on numerical ratings which gave a false impression of precision in the assessment and being exact results. Overall measurement of educational and scholarly quality was based on a subjective assessment of reputation which in itself confounded research reputation and educational quality and led to the overemphasis of subjective criteria. Data about faculty, students, and graduates were collected from institutional coordinators, from the Institute for Scientific Information, and the NSF Doctorate Records File, but these data were not validated by the data providers. The strengths of the 1995 study include wide acceptance as a source of information on program quality, transparency in the methodology, continuity with the previous NRC studies, and comprehensive coverage of doctoral programs in the USA (Ostriker and Kuh, 2003).

The quantitative criteria recommended for the next assessment exercise (Ostriker and Kuh, 2003) focus primarily on three sets of characteristics: institutional, doctoral program, and program faculty. Many of the specific variables recommended for collection in each of these categories have not previously been used in assessment of research-doctorate programs in the USA, although variables collected in the last assessment are included for continuity and comparison.

Institutional characteristics are used to record a broad view of the university environment in which doctoral programs exist. Specific measures include data on students, research expenditures, libraries, provision of healthcare and childcare facilities, availability of university housing (for doctoral student), as well as awards, recognition and university-level support for doctoral students. Data on students include the year in which a doctorate was first recorded at the institution, the enrolment total for full- and part-time students, the number of full- and part-time graduate students, the total and Federal expenditure on R&D measured as an average of the previous five years. Library resources will be measured through the number of staff, expenditures for

acquisition of books, print and electronic serials, and electronic databases.

The recommended variables to be collected on doctoral program characteristics for the next assessment includes the number and characteristics of full- and part-time graduate students enrolled in the Fall semester of the survey year. Data on completion rates (number of students, median time to completion), provision of financial support, teaching assistantships, availability of dedicated workspace, numbers of students accepted and enrolled in the program in the previous three years, provision of support for doctoral students to travel to professional meetings, provision of an organized programme to support development of student teaching skills, availability of related interdisciplinary centres where students can conduct their research, existence of programs that collect data on student outcomes, and names of competitor programs. These variables and data provide an overview of the departmental environment in which doctoral training takes place, as well as the resources available to doctoral students are to carry out their research and to become members of the professional academic community associated with the discipline.

Characteristics of program faculty to be collected focus on the number, activity, and engagement of faculty with research and doctoral program training. Specific measures include the percentage of program faculty with research support, the number of awards and honours received, the percentage of faculty receiving one or more awards, the percentage of faculty publishing, the publication and citation rates per faculty member, and academic rank and tenure status, as well as citizenship and other diversity metrics for individual faculty. Metrics of program faculty also include the percentage engaged in more than one doctoral program, intended to provide a description of interdisciplinarity as an important element of contemporary doctoral training in US research institutions.

Previous studies of doctoral programs in the USA (1982; 1995) have contained a qualitative reputational measure used to assess the effectiveness of programs in educating research scholars and scientists. Measurement of scholarly reputation is a controversial topic, yet institutions and students do use reputational measures in making decisions about programs; reputational measure will be included in the next assessment. Scholarly reputation will be measured from ratings provided by faculty as peer researchers within the discipline and by enrolled students who have advanced to candidacy for their doctoral degree. Students will be surveyed in relation to their education experience, research productivity, program practices, and institutional and program environment. Assessment will also include information on whether individual programs record the career outcomes of cohorts of PhD recipients both directly upon graduating and for a period of 5–7 years following completion; program level use of this information to benefit future students and to evaluate the effectiveness of the program are also important.

The NRC methodological study (Ostriker and Kuh, 2003) recommends the use of resampling methods to develop ranges of rankings for each program ranges better reflecting the variability of ratings by peers. The 1995 research assessment provided confidence intervals for the program rankings but these were seldom used. The NRC report (Ostriker and Kuh, 2003) is hopeful that new methods of data presentation can and will be used to facilitate a better understanding of the results in the next assessment, and that the overall rating of a program based on a combination of quantitative and qualitative measures does not provide a precise, exact, and unequivocal ranking of a program. Instead, programs overlap and that there are a range of plausible rankings of programs based on the metrics collected in the assessment exercise. Whether the data and results are presented and interpreted in this way in the next assessment remains to be seen.

*Richard Aspinall*
*Arizona State University*

## Part II: Whither research assessment?

*1 Geographies of research assessment: the neoliberalization of geography?*

The spatiality of research assessment, like that of much of the institutional structure of academia (Sheppard, 2006b), operates in tension with the spatiality of knowledge production. Knowledge production takes advantage of fluid translocal and transnational networks of scholarly exchange; albeit networks that are organized around well-trod centers of calculation – localities (elite universities and research institutes in the global North) and disciplines (of high social status) that shape the norms of what counts as knowledge. The spatiality of research assessment operates at, and seeks to reproduce, nation-state and subnational scales – with some nations much more equal than others.

The assessment of scholarship is as old as scholarship itself. Informal norms and mechanisms of assessment, as well as normative philosophical principles, have helped sort out what is taken to be knowledge from what is disparaged as simply belief – in ways that vary within and across disciplines and space-time. Since the early 1980s, however, increasingly formalized research assessment systems have emerged with convergent norms. Since this timing coincides with the increasingly coordinated neoliberalization of national governance systems, it should be of little surprise that these assessment schemes have neoliberal hallmarks.

The neoliberalization of scholarship has several dimensions. It reinforces competition between individuals, departments, academic institutions, disciplines and countries – on the implicit grounds that competition is socially beneficial whether we produce widgets or knowledge. It propagates the market valuation of scholarship, as measured by the money that can be attracted from wealthy public- and private-sector stakeholders to finance that research. The competitive market, it is held, will value production factors, including knowledge, on the basis of their marginal utility to society. In other words, research funds are assumed to flow to activities according to their social utility. It supports short-termism (cf. Hallsworth, 1996): rapid innovation to develop a knowledge production niche ahead of the competition, in the hope that this will generate dynamic economies that benefit the first mover (attracting more research funding). It entails accounting and monitoring systems to ensure that those paying for scholarship get value for money. Neoliberal governance occurs at a distance (Rose, 1999: 49): individual agents are given autonomy to act as long as they are accountable. Accountability involves the creation of calculable spaces to monitor outcomes; setting targets, monitoring outcomes, and developing performance rankings. Finally, it involves and facilitates fast policy transfer (Peck, 2002), outward from the centers of calculation, of 'best practice' theories, methods and research topics.

As academics, we gradually internalize such norms as simply the way that our work should be done – creating for ourselves a neoliberal academic subjectivity. *Inter alia*, a neoliberal subjectivity normalizes the logics of individualism and entrepreneurialism, equates individual freedom with self-interested choices, and makes individuals responsible for their own well-being (Leitner *et al.*, 2006b; Berg, this issue). This has substantial potential knock-on effects for geographic scholarship, but these will themselves vary with geographic context. The neoliberalization of research follows distinct trajectories in different geographical contexts. Neoliberalism was not born ready-made as an ideal type, but has been differentiated from the beginning (Leitner *et al.*, 2006a). Its strategic priorities, tactics, practices, and contestations, are deeply shaped by place and geopositionality (Sheppard, 2006a), with particular implications for local knowledge production.

Two distinct national variations can be identified in the part I reports, reflecting contrasting national political geographies of

central-local state relations. The UK research assessment exercise, introduced under the Thatcher government in 1986, and progressively refined under subsequent Conservative and Labour governments, is the first and most influential example of a centralized state model, in which the national government sets the terms of assessment. This model is influencing other centralized state contexts within and beyond the Anglophone realm. New Zealand is an example of diffusion, whereby the RAE is taken as a model and adapted to the local context – much as happened with neoliberalism itself. Ireland, with its long-standing ambivalent relationship with the UK, has explicitly avoided adopting an RAE style assessment, notwithstanding its linguistic, cultural, and geographic proximity. Yet, as Kitchin notes, the context of the RAE and the close linkages between British and Irish academic job markets and institutions has meant that the RAE has had strong indirect effects. There are plenty of selective incentives for Irish academics to develop what he dubs an RAE vita, subscribing to the subjectivity and performance norms of UK academia, in order to succeed in Ireland or the UK. The Netherlands has developed its own research assessment infrastructure since the early 1980s, with distinctive features such as an emphasis on centers of excellence, research institutes and 'priority research themes'. Nevertheless, assessment increasingly involves the same kinds of measures as in the UK: quantity of publications, fund-raising – and publication in English-language journals and other outlets.[17]

A more multilayered and patchwork model characterizes nation states with Federal central-local state relations, reflecting the political autonomy of US states and German *Länder*. In Germany, state-led Federal rankings are recent, avoid ranking universities (stressing instead 'different strengths and weaknesses'; Bohle *et al.*, this Forum), and do not yet include Geography. *Länder* have their own assessment systems, however, for both research and teaching, that take into account the educational goals and institutional structure of each *Land*. Universities also make their own decisions to expand, contract or close departments based on their own performance indicators. Notwithstanding such differences, it seems that such assessments use similar performance measures to the RAE. Indeed RAE-like trends can be observed:

> The more egalitarian approach to university funding is giving way to increased competition, more external pressures and greater funding disparities between individuals and institutions. In the new hierarchical model, the top universities stand to gain additional funding to compete at international level. With the introduction of variable salaries for professors, they will gain flexibility to attract leading researchers. Overall, disparities look due to increase, not just between universities but also between higher education in richer and poorer *Länder*. Research assessment systems are one element of this process of increased competition and polarization. (Bohle *et al.*, this Forum)

In the USA, assessment includes national scale rankings of doctoral Geography departments, most formally and prominently conducted since 1983 by the National Research Council (1983, 1993, and 2006–7); occasional decisions at the state level to prioritize, differentiate, and combine the multiple departments to be found in single state university systems; periodic external reviews of most individual departments, governed by the particularities of the institutional culture of individual universities; intra-institutional budget allocation mechanisms; and norms governing promotion, tenure, and annual salary increases. (It has long been the case that seniority is generally not directly taken into account in determining salaries, and many state university systems also do not allow for cost of living increases. Thus the correlation between seniority and salary is modest.) In 1983, the NRC ranking was based entirely on reputation as gleaned from a random sample of Geography faculty. In 1993, the same was true, but so-called 'objective' measures were also published (eg, citation rates).

The imminent (2006–7) ranking will move away from reputation, to rankings based heavily on weighted combinations of such statistics as research funding and faculty publications, and on a new set of data being collected on how graduate students are treated and how they perform (eg, attrition rates, time to degree and placement). There will also be a move away from ranking individual departments towards a system of tiers as also used in the RAE. Similar output measures (along with measures of undergraduate instruction) increasingly shape institutional-scale support and budget allocations, and the discussions surrounding the periodic external reviews (such reviews often include an attempt to persuade university administrations to expand support for the department under review). Yet the decentralized and overlapping nature of research assessment means that pressures to publish or perish, while increasing, are now lower than those in the UK. This is perhaps just as well, since US faculties face much greater pressure to offer innovative and high-quality teaching catering to a broader spectrum of society, with higher formal instructional workloads. Arguably, in such federalized assessment systems, there is more room for contestation of norms at the local scale – but it is harder to take such initiatives to the national scale.

Taken together, Geography as a discipline, like others, is increasingly being disciplined and challenged by powerful external social forces that are profoundly shaping its trajectories. Its future as a discipline will be shaped by its ability to compete according the usual measures of 'productivity': Citation statistics, placement in highly ranked journals, funds raised, the quantity and quality of graduate students trained, and (to a much more variable degree across national contexts) measures of the quantity and quality of undergraduate instruction. There is plenty of evidence to suggest, at least in the USA and the UK, that Geography as a discipline has adapted well to these performance strictures, as national associations, departments and individual geographers adopt and adapt these norms and expectations.

It is worth recalling that what have become measures of performance, while convenient, are deeply problematic. Citation rates are as much a measure of the politics of academia – its cliques, fashions and power hierarchies – as they are of the significance of a particular paper (Curry, 1991). The ISI journal rankings (http://jcr01.isiknowledge.com/JCR/JCR?RQ=HOME) also depend on a citations index, and can produce results that are odd, by any measure. For example, *Economic Geography* was the 10th-ranked journal in Economics in 2004, out of 172, in terms of 'impact factor', even though it is reasonable to suppose that the vast majority of card-carrying economists have never cracked its spine (if they have heard of it at all). The funds raised for research vary for reasons that have little to do with the quality of scholarship. Some research simply has huge fixed costs (eg, expensive machines), whereas other research can and should be done on the back of an envelope. Research is funded because it is deemed important by the powers that be (eg, research on terrorism), or because it is assessed as potentially profitable (eg, research on drugs), not because it is of great long-term significance.

While we all are intellectually aware of such problems, and those of any ranking system, we are nevertheless quick to trumpet any measures that favor us. Thus every performance report gains at least selective support, reinforcing its discursive and material power. Our continued participation in such practices, wittingly or not, enthusiastically or not, will surely have profound effects on the discipline and on the kinds of knowledge it values – and produces. No one can predict the exact nature of these impacts, given the pervasiveness of unintended effects in any complex societal system, but some possibilities are worth highlighting and reflecting on.

- We become less willing to take risks. Instead of hiring junior scholars with potentially interesting ideas, we favor those with

good rates of publication and citation, even if the former might have a greater potential change the discipline. This selects for trend-following rather than trend-setting scholarship, since the latter by definition cannot quickly generate citations and publications. It may discourage imaginative students and out-of-the-box thinkers from hazarding Geography as a career.

- We favor research, and degrees, that can be completed quickly, selecting against the kind of deep thinking about past contributions to the field that can help us avoid throwing the baby out with the bathwater. Ideas go out of fashion before their potential is fully exploited (much like the problems of excessive rates of technological change in the economy). New ideas are presented in opposition to pre-existing ones, rather than as constructive contributions to a community of scholarship.
- We reinforce the importance of quantity over quality, and applied over basic research.
- We reinforce a culture of competitive individualism, valuing our colleagues (and ourselves) by their influence, productivity, and salaries.
- We promote scholarship that meets the wishes of wealthy stakeholders, rather than research the meets the needs of the least well off.
- We reinforce divides between those whose research topics are attractive to potential funders and those for whom this is not the case. Under a fund-raising regime, the former are more likely to see themselves as carrying the department and the others as free riders, and the latter are less likely to be hired and promoted. Recent tensions between physical and human geographers in a number of departments I know are, I believe, a reflection of this.
- We divert significant resources from doing research to documenting and promoting it – much like health care providers who reduce their time with patients to fill out insurance forms.
- We opt for quick publications rather than ambitious careful scholarship.
- We align with the agendas and priorities of publishers, who find more profit in producing companions, dictionaries, and encyclopedias than in scholarly monographs. These are quick publications for all concerned, and fill an important role, but they again take collective energy away from original scholarship.

Of course many trends are far from new, but have gained additional momentum and legitimacy from the current assessment norms. Geographers will also have differently situated views about the desirability of such changes, some welcoming them, but others finding them profoundly disturbing. Yet they should not be regarded as inevitable, for those (like myself) concerned about their implications, notwithstanding proponents' Thatcherite claims that 'there is no alternative'. As for neoliberalism more generally, contestation is possible if we are willing to apply our energies to our own immediate institutional environment (Castree, 2000).

*Eric Sheppard*
*University of Minnesota*

*2 Hierarchical space: geographers and neoliberalism*

This short commentary focuses on aspects of certain spaces of knowledge production constituted through audit practices in academic Geography. I am particularly interested here to discuss the way that what might be termed 'neoliberal spaces of audit' lead to specific productions of time-space in academic knowledge and practice. In doing so, I will outline what I see as three key aspects of spaces of audit in Geography. First, it is important to recognize that, even though we may be thoroughly opposed to the neoliberalization of our academic labour, geographers do not occupy some constitutive space 'outside' neoliberalism. Instead, we should see ourselves as occupying a paradoxical space (Rose, 1993)

that forms the conditions of possibility within which we simultaneously contest and reinforce neoliberalism. Second – and both in spite of and because of our desire to contest the neoliberalization of our work lives – geographers are interpellated through the hierarchical thinking of liberalism and neoliberalism. By this, I mean that regardless of our ideological disposition towards neoliberalism, the subject positions open to geographers are circumscribed by the always already hierarchical character of a thoroughly liberal (and now neoliberalizing) academy. Third, and finally, such hierarchical thinking has significant implications for the way that we (re) produce space in our academic work. By this, I mean to argue that some of the scalar hierarchies of place that many (but not all) geographers take for granted as 'self-evident' are instead the products of contested social constructions of space that arise in neoliberalizing academic audit systems.

It is important to point out that the discussion focuses on hegemonic processes and, as such, they are not going to be enacted in the same way by all geographers. Additionally, I am in no way suggesting that these hegemonic processes are not contested by geographers. Indeed, many geographers do contest these types of audit processes regularly while others might blithely reinforce them. Accordingly, the responses of individual geographers to these hegemonic processes are likely to be complex and contradictory at best.

*a Liberalism and technologies of the (academic) self*: I argue that academics are particularly susceptible to the commodification of the self that arises within the logics of neoliberal individualism because of our powerful socialization in *liberal* ideologies of the self-actualized individual. Like many of our colleagues in academe, geographers are especially well socialized in the socially constructed logics of individual 'merit' whereby those who succeed are deemed to have done so through a combination of innate ability, hard work, perseverance, and a host of other positive or meritorious personal characteristics.

Academics are thus particularly susceptible to what we can call neoliberal governmentality (or what Foucault, 1988, referred to as techniques for governing individuals from afar) primarily because we have been so thoroughly interpellated through liberal ideologies. In this regard, we need look no further than the 'curriculum vitae' (CV) to see it as part of a technology of the self that has, for some time now, been used to effect a liberal governmentality. Paradoxically, the CV can cut both ways: it can be used as a disciplinary technology by institutions, but it can also be used by academics as a means of ensuring a wide range of freedoms from institutional disciplining practices. It is the subject-effects of the former that I am interested in focusing upon here.

There remains to be written a critical historical geography of the CV in academia. For now, however, suffice it to say that the CV is not simply a listing of ontologically pregiven categories, but instead it can be seen to instantiate a disciplining of the academic self to meet the strictures of liberal individualism and 'merit'. In this way, the CV provides a technology for naturalizing and objectifying particular categories of our own labour (teaching-research-administration) such that we maximize retention of the surplus value that we create by inserting our bodies within a disciplinary grid of rewards and punishments constituted in liberal academia. Read in this way, instead of being seen as merely an 'objective record' of our achievements, the CV can be seen as a political technique for ensuring that our academic bodies align with the objectives of the academic institutions in which we work, and the wider system of political-cultural-economic norms that define 'value' in our respective academic geographies. CVs are one of the primary techniques by which academics become 'responsibilized' for the contradictions that arise within the increasingly capitalist-like accumulation strategies of universities – institutions that are finding increasingly sophisticated (but not always subtle) ways to insert

our bodies into their accumulation strategies (on the relationship between the body and accumulation; see Harvey, 2000).

If such technologies were mere 'technical processes' for assessing merit, then we should expect a relatively straightforward positive correlation between the process for assessing merit and the actual assignment of rewards for meritorious service. However, as considerable feminist scholarship has illustrated, there is little evidence for such a naïve view of merit. In a study (Berg, 2002) that I carried out on academic Geography in Canada, for example, I found that men are 40 times more likely than women to have attained full professor status. Similarly, Audrey Kobayashi (2002) has shown that despite more than a decade of equity hiring programs, women of colour still make up less than 2% of academic Geographers in Canada. This and other evidence suggests that we would better understand academic Geography as an exclusionary space of white, bourgeois masculinity (McDowell, 1990; Rose, 1993; Berg, 1994; 2001; 2002; Sparke, 1996; Seager, 2000; Wilson-Gilmore, 2002).

Nevertheless, it is important to recognize that the audit techniques of governmentality that have arisen within liberal academe are political techniques that reinforce and reproduce hegemonic social relations – and they do so in a way that appears to many to be free of politics (see, for example, Halsey, 1990). Some of the commentaries in this Forum provide examples of the ways that technical discussions produce technical critiques that tend to elide the power relations that inhere in audit processes. More important, perhaps, is the fact that academic geographers, rather than being prime subjects of contestation, instead are particularly susceptible to being interpellated through newer more neoliberalized (and neoliberalizing) regimes of governmentality.

*b Neoliberalizing the academy*: My argument so far, then, is that the hegemony of liberalism in academe has provided fertile ground for the growth of what we should see as a neoliberalizing governmentality among academics. Here I am referring to two inter-related processes: the political process of neoliberalizing academia; and the political process of embedding and naturalizing neoliberal logics in academia through more intensive forms of governmentality. I want to suggest that it is the former process – which might be seen as akin to 'roll-back' neoliberalism (Peck and Tickell, 2002) because of its emphasis on cutting budgets and rolling back collegial forms of academic governance in order to replace them with more marketized and coercive processes – that has tended to gain the attention of academic geographers, especially in critical analyses (see, for example, Berg and Roche, 1997; Mitchell, 1999; Castree and Sparke, 2000; Roberts, 2000; Smith, 2000; Demeritt, 2000).

The embedding of neoliberalism in academia, however, has apparently had less critical attention, perhaps because such embedding, or 'roll out' neoliberalism, has been intimately tied up with the everyday practices of academics. In this context, critical geographers have tended to construct themselves as occupying a space outside neoliberal academia. While it is an admirable space to want to occupy, paradoxically, it is this notion of a 'pure' space outside neoliberalism that makes it difficult for us to identify the object that 'we' wish to contest. In this regard, I think recognizing that there is no constitutive 'outside' to neoliberal logics may be an important moment in any anti-neoliberal project, precisely because I think failure to recognize this actually prevents us from engaging effectively with neoliberal academia.

Accordingly, I think it is very important, for strategic *and* intellectual reasons, to recognize that we are all neoliberal now – at least in some form or another. If we do this, then one thing becomes very clear: the assumption that neoliberalism forms a clean break with a much better past is highly suspect.

*c Neoliberal governmentality and the rise of audit cultures*: There is now a significant literature in Geography and elsewhere regarding the neoliberalization of academic

life, especially as it relates to the imposition of corporate structures, intensified forms of instrumentalism, and the development of explicit commodity relations in universities (see, for example, Berg and Roche, 1997; Mitchell, 1999; Castree and Sparke, 2000; Demeritt, 2000; Roberts, 2000; Smith, 2000; Blomley, 2002; Paasi, 2005). What I wish to focus on here, however, is not this neoliberalization *per se*, but rather the processes that are key to further embedding neoliberalization as a constant state of creative destruction in the universities.

If we can identify important moments in the embedding of neoliberalization in academia, surely one of them must involve the intensification of audit procedures in universities. Such audit procedures have been instrumental in transforming liberal governmentality into neoliberal governmentality. In this regard, we can see a significant intensification of audit processes designed, so we are told, to ensure 'quality' and 'excellence' in teaching and research. As Michael Power (1994) points out, we have seen under neoliberalism an explosion of surveillance processes, whereby the process of auditing that was formerly restricted to financial activities has been transferred to justify (and naturalize) the monitoring of a whole host of non-financial practices in contemporary society. However, and contrary to arguments by its many proponents, audit is not about ensuring equality and excellence; instead, it should be seen as a system of 'control of control' (Pels, 2000, 141).

> Audits are often not directly concerned with the quality of performance, whether environmental, educational or financial, but rather with the systems in place to govern quality. This 'policing of policing' distinguishes the audit explosion from an older tradition of engineering-based quality control and its statistically grounded methods. (Power, 1994: 6)

Most academics are familiar with the problematic languages of command and control that arise within the new audit culture. We are being asked not only to be good teachers and to do research well, but also increasingly to quantify our performance through systems of 'total quality management' and 'research assessment' that supposedly provide objective measures of quality and performance. The 'Research Assessment Exercise' is by now familiar to every academic geographer in the UK (see Munton, this Forum). Similar programs can be found in places like New Zealand, which operates a 'Performance Based Research Funding' exercise (see Pawson, this Forum). Australia is planning to implement an analogous system of audit-based academic research funding soon, and a number of states in the European Union are currently considering comparable academic audit systems. Finally, it is likely that future rounds of the UK RAE will not operate using peer-review, but instead will use more quantitative (and ontologically problematic) measures such as the ISI rankings and citation counts to measure research 'quality'.

My objective here is not to provide a thoroughgoing critique of these audit processes (this has already been done for anthropology; see Strathern, 2000), but instead to highlight their role in both embedding neoliberalizing tendencies in academia, and in producing a neoliberalized academic subjectivity among academic geographers. In this regard, I want to note a number of (but not all) implications of audit systems such as the Research Assessment Exercise or the Performance Based Research Funding Exercise:

- They are inherently hierarchical in that they constitute an inequitable distinction between those who audit and those who are audited;
- They are coercive in that they compel those who are audited to meet externally imposed standards;
- They encourage individuals and institutions to create 'auditable outputs';
- They are political technologies whose power lies in their ability to mask political processes in the 'value-free' languages of science and technology;

- They are 'dividing practices' that both individualize and totalize;
- They change the identities of academics and the way that they conceptualize themselves and their relationships with their colleagues and their work;
- They mobilize academic geographers in projects of governing the self.

Taken together, the above characteristics indicate that neoliberalizing academic audit systems have amazing power to transform both universities and the academics who work in them:

> To be audited, an organization must actively transform itself into an auditable commodity: one 'structured to conform to the need to be monitored ex-post . . .'. Thus, a major feature of audit is the extent to which it reshapes in its own image those organizations [and people] who are monitored. (Shore and Wright, 2000: 72)

As I will argue, however, audit systems have many more subject effects than transformation of the institutions that we work in as academic Geographers. Indeed, I argue that a neoliberalized (and neoliberalizing) academic geography is actually structured in a way that actively transforms the scaling of academic spaces and, in so doing, transforms the way that geographers understand space itself. Here I am speaking of the production of scaled knowledge that arises within a cultural-political-economy of neoliberal logics of academic accumulation (also see Berg, 2004).

*d Neoliberalized geography*: Aansi Paasi (2005) provides us with an important analysis of the problematic constructions of 'international publishing' that arise within the logics of academic audits that are dominated by citation analysis. As a number of commentators have suggested (Henkel, 1999; Clifford, 2002; Batty, 2003; Johnston, 2003), the UK Research Assessment Exercise (RAE) is a model of neoliberalized governmentality at work in both internal university management and national 'quality control' (Paasi, 2005). The RAE sets up a system of 'self-governance' that sees departments and individuals in academic geography across the UK subsume research decisions to RAE audit requirements. Many departments run internal 'mock RAE' exercises to ascertain who has produced the best auditable outputs (and therefore, who and how to submit to the market logics of the RAE).

One particularly important key to quality in the RAE is the production of 'internationally recognized' and 'agenda-setting' work. However, as a number of writers have pointed out, the 'international' scale is not some pre-given ontological category, but it is itself socially constructed through both the cultural politics and political-economies of academic citation structures. The primary ranking system for defining 'international journals' – Thomson ISI – is a key part of academic capitalism (Paasi, 2005). It defines as 'international' almost exclusively (33 of 35 ranked journals) English-language journals in Geography. Since it uses only these journals as the measure of 'international citations', it reinforces an already asymmetric scaling of 'international geography'.

As I have argued elsewhere (Berg, 2004), this affects more than just publication and citation, but also has important knock-on effects on the way that geographers operating within the metropole understand the 'international scale' itself. In this respect, it is the huge academic markets of Geography in both the USA and the UK rather than any intrinsic *international-ness* that (re)produce highly suspect notions of 'the international' in geographic publishing. In other words, what we have come to recognize as 'international' in academic geography is instead a parochial space comprised almost exclusively of works produced in the USA and the UK; produced by academics working in the USA and the UK; and 'consumed' almost exclusively by academics inhabiting the USA and the UK.

These are hegemonic processes at work, so it should be made clear that not all geographers working in the USA and the UK assume unreflexively that their state-nation-spaces coincide directly with some pregiven *international*.

At the same time – and in spite of Geographers' growing attention to such problematic constructions of *the international* – academic audit systems with their focus on work of 'international calibre' continue to reinforce this asymmetric construction of internationality. It is thus in the interests of geographers working in the USA and the UK to *not* contest the social construction of an international division of attributes that constitutes the *international* as co-equal with their *national*. Just as white privilege is invisible to most whites, Anglo-American privilege in academia is invisible to most Anglo-Americans. However, even when such privilege is not invisible to specific geographers and they contest it, their actions may just as easily reinforce Anglo-American hegemony in the international frame. Indeed, my own intervention in this special thematic section can be seen to produce just such a paradox: the moment I intervene in the *international* literature that is partly constituted by this journal, I benefit from both contesting and reinforcing that which I attempt to deconstruct.

*e Conclusion: hierarchical space*: I have argued here that academic geographers, with their attachment to liberal individualism, have long been subject to technologies of the self. Recent times, with the concomitant rise of neoliberal audit systems in the academy, have seen the embedding of a neoliberalizing ethic in academic geography. The embedding of neoliberalism in Geography through audit systems such as the Research Assessment Exercise, has in turn had significant implications for the way geographers understand time and space. I have argued here that both liberalism and its successor neoliberalism have effected new academic subjectivities – auditable geographers, who in turn produce particular kinds of geographies that reinforce hegemonic understandings of national space and the international scale. Thus, while I am very concerned with the implications that audit systems are having for our work lives, I am perhaps even more concerned about the ways that audit systems reconstitute spatial scales in academic geography. Accordingly, I think that we need to be wary of the relationships between geographers' spaces of production and the way that these spaces lead to specific productions of time-space in academic knowledge and practice.

*Lawrence D. Berg*
*University of British Columbia, Kelowna*

### *3 Assessing research, diluting outputs, confusing institutions and bedazzling disciplines*

When asked to contribute to this Forum with a sense of 'attitude', my reactions were mixed. As John Short (2002: 324) asked, in his troubled outsider's view of the timidity of British geographers in commenting on the Research Assessment Exercise (RAE), 'who wants to upset the apple cart, especially when another RAE may be just over the horizon'. The answer is that many want to. Look at Markusen (1999), Peck (1999), Martin (2001), Clifford (2002), Dorling and Shaw (2002), Gregory *et al*. (2002) and Hamnett (2003) (there is an even longer list), and you find ample evidence of disgruntlement. The fact that the chair of the RAE panel overseeing Geography evaluations is more upbeat about the discipline (Thrift, 2002) strengthens concerns about 2008 RAE fallibilities. My experience has been that those in the midst of key RAE processes generally seek to be fair and try their best, but 'outsiders' are much more likely to see how the whole process is structurally flawed.

Does this mean I believe research should not be formally assessed? The answer is no. Having started lecturing in the UK in the late 1970s, I am very conscious of a world without research assessment. As Nancy Rothwell (2005) asserts, research assessment should lead to the more efficient management of research resources, and encourage institutions to look hard at their profile and key contributions. This does not mean there have not been huge failings along the way.

The ridiculous transfer market in moderately performing academics, who are overvalued by institutions desperate to persuade themselves an appointment will move them up the research league, is one example. The damaging way self-proclaimed 'stars' are offered substantial reductions in teaching and other departmental duties is another. The manner in which teaching programmes have degenerated, in some cases owing to a lack of staff (as research is favoured), offers yet another (eg, McCall, 2005). By contrast, decisions to shun the world-view of the RAE in favour of improving teaching programmes or responding to the research needs of local or regional institutions seem positive signs of clarity over the contribution an institution wishes to make. Diversity of university objectives seems to me desirable. The under-funding of teaching programmes, and the failure of the RAE to give anything approaching equal treatment to different forms of research, is not a failing of research assessment as such, merely a failing of current practice.

Various presentations made by RAE panel members emphasize to me that there has been a distinct difference in approach between Geography and other RAE panels. For 2008, the criteria for research assessment are supposed to be originality, significance and rigour (eg, HEFCE, 2005a: Annex A). Compared with other disciplines, my reading of Geography is that undue weight has previously been and is likely to continue to be placed on the first of these criteria, and in such a way that 'original' is equated with 'new'. This means that what seems to be perilously close to plagiarizing writing in other disciplines scores, as does a search for gimmicks that look different, whether this is seeking more obscure 'others' or (more commonly) squeezing new concepts and theories into a so-called relevance for Geography. The mode of operation is slash and burn. Hit fast and move on. Rigour (and significance) goes by the way, as what scores are new ideas, not their value, the quality of supporting evidence or contributions to knowledge. Of course, rigorous research can be insignificant and unoriginal, but for my book no research merits a 'quality' title if its supposed significance and originality is not based on rigorous investigation. Yet major swaths of research in Geography fail the rigour test hands down (eg, Baxter and Eyles, 1997). Of course, there are different types of rigour. I particularly like Doreen Massey's (2002: 646) response to Dorling and Shaw's (2002) criticism of her call for better conceptualization by explaining that this 'is just a commitment to rigour, to good research that makes a difference'. Her argument that there is not enough time for blue-skies research rings positive bells, but I fear these aims do not come across as primary driving forces in human geography. It is perhaps unfair to select one sentence to represent the sentiments I see too commonly among RAE panel members (and as a consequence more widely), but Nigel Thrift's (2002: 296) sentiment that 'I think the methods used in geography have generally been boring', is for me the tip of the iceberg. Newness and amusement are being weighted more highly than rigour and appropriateness. If the RAE panel favours this, can departments resist?

What comes across strongly from RAE exercises is the prioritization of a minority of perspectives within human geography (with the clear appearance that, in broad terms, cultural and economic geography are favoured). In physical geography a similar process of limiting the themes that score in the discipline has been under way (Gregory *et al*., 2002). As Short (2002: 324) expressed this process: 'Certain themes . . . are considered more important that others and one is entitled to ask whether they are based less on intellectual arguments and more on canny acceptance of what resonates favourably with those in power.' One result is a devaluing of certain disciplinary themes. As an illustration, when engaged in exploring departmental views on RAE (sub)panel membership, I received various comments that 'development geography' should not

have a representative because it is not 'theoretically informed'. This thought returned to me during a TV programme on the 2004 Boxing Day tsunami, in which the commentator was appalled that 'the west' knew so little about the region and its environmental issues. My thoughts at the time were that, for Geography, is it any wonder? The kind of Geography the RAE panel has favoured allows for 'exciting' new issues from around the world to be bundled together around so-called theoretical questions. This is a return to the low-grade-ism geographers rejected as 'World Bank tourism' more than 30 years ago (eg, Connell, 1973). The prioritization of theory over substance has led to a downgrading of rigorous research analysis (note how some departments have lowered PhD expectations to achieve high four-year completions and so more research council funding). In what I see as a return to the Geography of the 1950s, too much so-called leading Geography today comes across as little more than insights from chats with a specially selected group of like-minded elites (even if 'elite others'). Readers will be able to tell that I share many of Chris Hamnett's (2003) concerns about how Geography is currently practised, in revealing too much interest in theory for its own sake, lacking a genuine critical edge and circumventing rigorous empirical analysis.

When more geographers are regretting the discipline's failure to contribute to public policy (Peck, 1999; Martin, 2001; Dorling and Shaw, 2002; Burgess, 2005), it is especially worrying that RAE evaluations work against such contributions. I note here the feedback from the 2001 RAE, during which outside 'practitioners' were instrumental in raising the final grades from a (small) number of submissions, which were given lower grades by the academic panel members. To my knowledge, no one on the 2008 (sub)panel has made a significant contribution to public policy. I fear the worst, despite assertions in draft RAE criteria that all research will be treated equally (HEFCE, 2005b). Capturing the dissonance between much 'academic' research and public policy issues, the then Secretary of State for Education, David Blunkett (2000: 36), highlighted policy-makers' frustrations over much social science research: 'Many feel that too much social science research is inward-looking, too piecemeal, rather than helping to build knowledge in cumulative ways, and fails to focus on key issues of concern for policy-makers, practitioners and the public'. The RAE favouritism for seeking the ever newer, rather than building a corpus of rigorously evaluated knowledge, seems designed to ensure that human geography continues to have little to offer (eg, Dorling and Shaw, 2002).

Even the media recognizes the divisive impact of divisions in research approach in modern academia, with the antipathy felt by each side expressed in flamboyant name-calling, like 'dinosaurs' and 'charlatans' (eg, Farrar, 2005). The challenge of dissimilar views does not bother me, if creative reflection results. But I find an unwillingness to engage and a failure to comprehend the merits of other approaches or other views on what research quality means. This is leading to a sense of injustice among those who are not in currently fashionable themes. For Short (2002: 324): 'RAE committee members become the arbiters of the discipline, the new gatekeepers, part of the government surveillance system.' For myself, I have a lot of time for the RAE (sub)panel members I know, and I am convinced that they will try their best to be fair in their assessments. But the structure is against them. It might have been political naivety in 2001, but it is nonetheless clear that RAE (sub)panels have failed the discipline as a collectivity (Martin, 2002). Most notably, while Geography in the UK is generally regarded as strong internationally, past RAE exercises acknowledged surprisingly few geographers (and hence departments) as having an international presence. For disciplines in which the UK has little international leadership, many more researchers and departments scored for their international research quality than in

Geography. Indeed, Martin (2002: 4) reports that Geography came 42nd out of 56 subjects in 2001 in its share of departments graded with a substantial international presence. The disciplinary 'establishment' in the UK thinks its Geography is weak internationally.

Not unsurprisingly, most geography departments are suspicious about 2001 ratings. It did not help that the 10 departments with the highest 1996 ratings were lobbying for funds to be concentrate on the highest-rated departments, especially as their representatives dominated the 2001 evaluation. Certainly failure to secure a 5 or 5* rating in 2001 led to significant budget cuts (with major hikes for those with these grades). Many external funders followed suit, by limiting grant and fellowship applications to departments scoring above stated RAE grades.[18] Some institutions also use RAE ratings to focus funds internally, as with PhD studentships (Shepherd and Davis, 2005). As a result, 2001 RAE grades have weakened Geography in many UK universities. All this when Geography is no longer in the core school curriculum in the UK, with concomitant falls in undergraduate applications. Some departments seeking compensation for lost research funding have sought major increases in undergraduate intake, and a number of smaller departments have had to close (eg, Lampeter, London Guildhall, Luton, South Bank, North London). I have heard it said, at meetings at the Royal Geographical Society, by people who should know better, that this does not matter as the lost departments were not important. I wonder if the likes of Paul Cloke, Mark Goodwin, Chris Philo, David Sadler and Nigel Thrift, each of whom held posts at Lampeter, in some cases at times when jobs were scarce, would favour the loss of small departments in this way?

Perhaps 2008 will be different? Possibly, but I am as concerned about 'structural' bias toward parts of the discipline in 2008 as I was in 2001. In addition, the 2008 (sub)panel members' reading (ie, evaluation) load is troubling. Thus, the panel has stated that each submitted output will be read by two of the RAE (sub)panel. In 2001 the Geography (and Development Studies) panel had submissions from 1,198 full-time academic equivalents. Multiplying by four, and then by two readings, gives 9,584 outputs to read. There are 15 in the 2008 (sub)panel, which gives 639 outputs each (assuming similar numbers to 2001). The chair of a less demanding sub(panel) informs me that the allowance for each output on this (sub)panel is seven and a half minutes. Does anyone think quality can be evaluated in this way? Does anyone think 15 geographers are equipped to evaluate the range of materials in all geography departments? Even with the help of a few 'outside' specialists, as used for fields like climatology last time, I am not hopeful. This will add to bias in evaluation outcomes. Quite apart from the usual benefits of committee membership, such as 'insider' insights on what the evaluative criteria actually mean, and so how to score more easily, the smallness of the evaluation panel helps explain cynicism about (sub)panel membership (and (sub)panel members can be fully aware of what their institution expects of them; Shepherd, 2005c). Also, by giving RAE results heavy financial rewards (or penalties), it is to be expected that anticipated RAE priorities bias research priorities nationally.

Moreover, successful RAE submissions provide funds for expansionary appointments in the future (so yet more staff in the themes preferred by the 'establishment'). The discipline meanwhile gets narrower in approach and perspective. At the same time, realizing that a few people will be evaluators next time, and these are likely to reflect priorities in highly rated departments in the past, others are encouraged to mimic. One aspect of this is the expenditure of unnecessary money to 'attract' those who might score highly with, or even better be on, the (sub)panel at the next RAE (Fazackerley, 2005; Lipsett and Shepherd, 2005; Tysome, 2005).

Meanwhile, as Burgess (2005) notes, even in departments with a multitude of RAE

bounties, burnout/drop-out/drop-off attitudes are intensifying (which further lessens the emphasis on research rigour). From the perspective of a highly rated department, Burgess laments that institutions do not seem to care about these pressures. This prompts two thoughts. The first is simply that, for those not rated at the highest level, this is precisely how the majority view the politically naïve decisions of 2001 RAE panel, which has put huge pressure on many geography departments. But enough of this idea, which is well trawled through many geography departments, although seemingly ignored by the Geography 'establishment'. More significant is the question of institutional context. As already hinted, although badly funded due to the myopia of RAE evaluations, institutions can reject the RAE process, viewing it as falling 'outside' their main aims. After all, marginal fiscal benefits accrue if institutions focus on different themes from those favoured by RAE (sub)panels, or that favour contributing to local/regional policy areas (difficult to make 'international impacts' in this context). Much greater rewards can result if institutions are able to gain extra funding through greater student allocations, or if the funding agencies can be persuaded to adjust their cost of teaching formula (Hill, 2005). It needs to be recalled that UK higher education is subject to massive government intervention, directly or via its primary funding agency (and through the priorities of its research councils, government departments and the like). These interventions do not speak with one voice, which complicates the capacity of universities to provide coherent strategies for their own development. Too commonly institutions get so far down their investment plans before funding is cut or a new short-term impulse drags attention in a new direction. Past underfunding also leaves scars, whose mitigation traverses the swirl of initiatives.

In the maelstrom, institutional decisions reveal the weaknesses of RAE-led priorities, as well as dissonance between RAE success and institutional strategy. The fatalities of the first are partly an outcome of the academic predilection for departmental autonomy. Being as scared as chickens about RAE grades (and who blames them given resulting departmental closures?), departments think about what appeals to an RAE (sub)panel. Departments in different disciplines not uncommonly drift apart as a result. The environmental scientists veer toward microbiology, as this is what research councils fund and what the RAE favours. Meanwhile physical geographers plod toward the Quaternary or process geomorphology (Gregory *et al*., 2002). The link that used to exist through ecology and the like is strained and commonly drops down the sink-hole. You can name your own examples – they are bountiful. Institutions want to see their departments doing well and, if this is interpreted as scoring in an RAE, then drift can be encouraged, without recognition of its implications. Of course, some changes of this kind are altering the experience of being in 'geography' departments, for the UK is moving toward the Australian model, where there is not a single geography department, as they are all combined with geology, planning or whatever. Do departments forget their research strategy in the RAE, by submitting under separate sub(panels), or do they take the chance that the Geography (sub)panel also contains an expert in archaeology, geology and so on?

Of course, a high RAE return does not guarantee much. Because of convoluted pressures on institutions, departments are not secure with high RAE scores. Note the contrasting fortunes of Geography at Durham, which seems intent on buying up as many potential RAE (sub)panel members as it can get its hands on, and University College London (UCL), which is seeing institution-wide cuts in staff and departmental funding (AUT, 2005; Shepherd, 2005a). Institutional strategy, and the capability or even the luck of institutional leaders in reading the runes, might explain the difference, but the critical point is that for all the RAE success of UCL

Geography (and indeed of UCL itself), this and other UCL departments are now experiencing major challenges to their research potential. We have to contextualize the importance of RAE funding to explain its impact on Geography. In the case of Manchester, for example, the vast sums spent to secure one Nobel Laureate, with promises of more to come, raises the obvious question: will cuts result to pay for the extravagance (Shepherd, 2005b)?

When asked to write this piece, I anticipated stretching it to a short note. Once started, I realize there is much, much more to say, such that more support for and more argumentation around issues would help. I have not achieved this to the depth required. Additionally, many themes have not been touched on. I have not referred to the disparity between how the Geography and other (sub)panels intend to grade outputs in 2008, or even what the evaluation grades mean (Johnston, 2003; 2005), yet these are critical, as are the negative signals RAE panels, including Geography, have given about interdisciplinarity in the past (as HM Treasury, 2006, recognizes for the RAE as a whole). I have not even articulated what I mean by the Geography 'establishment', although I am sure this group will devote little attention to this piece (or if they do, find innumerable excuses). I hope others will find it at least thought-provoking.

*Keith Hoggart*
*King's College London*

*4 Freedom and servility in the modern university*[19]

*a The burden of assessment*: For me, the real issue is the role of research assessment procedures in radical transformations of academic culture. I offer the following general observations by way of an introduction, and then go on to reflect upon the Australian situation.

First, a decision to begin this note in Christmas week, when even the most secular of reflective minds encounters an ancient promise that we are to be saved through rather than from our humanity, immediately provoked a question. Might it be said that a kind of puritanical enforcement of quantified measures is sweeping away the natural, creative clutter on which real progress in the humanities and social sciences depends? Systemic threats to the very survival of 'liberal' programmes of teaching and research prejudice the good health of every constituent subject.

Second, the research assessment unit should be the university, not specified 'budgetary units'. Each university should submit evidence of developments in teaching, research, civic engagement and international associations related to its evolving mission. Intervals of five or six years could allow indicative tracking of key ventures with undergraduate-postgraduate cohorts and non-student partners. Some of this evidence should illustrate the outcomes of focused interdisciplinarity and productive inter-institutional relationships at local, regional, national and global scales. Diversity in institutional mission and management strategy should be welcomed and facilitated. Where subject- or discipline-based national societies exist, at suitable junctures the relevant units (groups, departments or schools) might ask those bodies to forward independent comments; this recommendation also applies to each of the following observations.

Third, teaching and research activities in human geography should not be assessed in isolation from their specific demographic, institutional, national and international contexts. Equitable provision must be guaranteed for early-career academics, heavily burdened teachers, and those who are obliged by circumstance to operate as individuals or within small and scattered clusters.

Fourth, 'league tables' purportedly calibrated from subject-based inventories and acknowledging the intimate connection between research and teaching bring a contingent requirement. Transparent reporting

upon the full range of impacts within each of the more successful and unsuccessful units, and to determine the echo or ripple effects of skewed funding across the discipline in question, requires verifiably independent investigations of real and perceived costs and benefits of these rankings for the nature of teaching and research within the assessed disciplines nationally, and perhaps even internationally. The point is insufficiently debated outside (or within?) the UK. It may be conceded that the assessments were not originally intended to serve political and academic careerism and the purposes of economic rationalism by disrupting or usurping a complex, creative heritage of subject formation and reproduction. Even so, good practice requires regular and transparent outcomes analyses.

Fifth, western democracies have become exceptionally vulnerable to contrived antagonisms or 'wedge politics', and the liberal arts and sciences may be attacked as expensive luxuries where their conjured 'elitist' image gives politicians a sweeping *imprimatur* for rampant instrumentalism. Where there is indisputable proof of related ad hoc ministerial interference in the research grants mechanism this must be brought into the public arena. If there are instances in which the funding of prescribed 'national interest' goals is distorting or corrupting research behaviours and reshaping teaching and research programmes, this too should be independently investigated.

*b Country and calling*: Australia has long seemed heaven-sent for place-divining arts and sciences: a spirited young nation in unique possession of an entire continent, in receipt of wave after wave of immigrants untutored in its basic geography, history, art, literature and poetry; salutary behests of possession and dispossession inviting civic scholarship and research; didactic landscape inscriptions of empirical environmental learning and applied scientific analysis; extraordinary accretions of fundamental geographical knowledge in a host of colonial, federal and state agencies. Yet the liberal project has struggled against an entrenched preference for the 'practical', and academic geography was itself a late and hesitant starter. Popular prejudices were recently reinforced and exploited by successive governments. In the process, genuine debate has been headed off by an affirming differentiation between 'vocational' and 'professional' pursuits, on the one hand, and the liberal arts and sciences on the other. By extension, as one cornered Vice-Chancellor has explained, Australia's universities were becoming 'functional enterprises', intended merely to generate income and 'to train their inmates to do so' (Osborne, 2005). The latest interventions in research assessment and related funding mechanisms are indeed best understood within an accelerating declension.

The crisis is, of course, neither new nor peculiarly Australian. Key tussles repeat much older articulations: 'The college is for the nation, not for the satisfaction of those who administer it or for the carrying out of private views'; why should 'a man' send 'his son' to college at all, and why should any 'man' want to go there? So said Woodrow Wilson, academic lawyer and president of Princeton University, shortly to become Governor of New Jersey and 28th President of the USA, and a leading player in peace settlements after the Great War and in the early League of Nations. His address targeted the distractions of sport and socializing, but went further: 'Should he seek at college a general discipline of his faculties, a general awakening of the issues and interests of the modern world, or should he, rather, seek specially and definitely to prepare himself for the work he expects to do after he leaves college, for his support and advancement in the world?' (Wilson, 1909: 570 in each instance).

At the time of Wilson's address he must have been aware of the aura of university research emanating from Germany. How far did his speculations extend into the close connections between warfare and scientific

research, degrees of complicity within research-focused academies? More than half a century earlier, on the other side of the Atlantic, John Henry Newman had famously insisted on the superior claims of education above training, underlining the opposition of 'liberal' and 'servile'. He had decided, furthermore, that, because the primary goal of a university was the diffusion of knowledge rather than its direct advancement, 'liberal' programmes should have precedence and true research could be assigned to designated institutes (Newman, 1964; originally 1852, then 1873, etc). His initially obscure lectures have been immensely influential since the later nineteenth century.

Until the 1950s, Australia's campuses mimicked Britain's progression from Newmanesque ideals. Later, the old liberal preference was artificially sustained by connections between immigration-led population expansions and teacher-training schemes. A 'binary' system channelled much of the prodigious growth in student numbers into colleges of advanced education, and for decades the universities retained the revered emphasis on teaching-with-research. By the early 1990s, cavalier federal governments had abandoned the binary division and the traditional mixed mission ruled throughout the putative universities. Commensurate increases in research funding never materialized, institutional amalgamations and reintroduced fees intensified the profound system shock, students resorted to deeply distracting part-time employment, and contracted reciprocities in 'higher' education were conveniently overlooked. Hungry administrations marketed low- and medium-level business and information technology courses for overseas fee-payers, and on many campuses this component soared to between 15 and 20% of the undergraduate enrolment. In Australia's secondary schools the message accentuated existing swings in course selection.

Pragmatism through the door, idealism out the window: Mr Chips graduates in plummeting, 'practical' at last. Some traditional subject departments in the distinctively uncommercial arts and sciences were closed; others desperately sought or were inveigled into intra-institutional mergers, frequently in bizarre and chilling concession to bean-counter edicts on 'viable budgetary units' with minimal regard to disciplinary affinity – 'perm any three from eight', 'accept this marriage of convenience'. Whatever the subject, adjustments were often so urgently attuned to parochial pressures that place-specificity repeatedly blocked credible 'benchmarking' at national and international levels.

Older geography departments unwittingly anticipated and endorsed the trend. Neglecting comparative advantages – old civic foundations, physical-human collaboration, strategic knits with a range of other 'liberal' offerings – they risked new alliances with staff in environmental studies/science, planning, surveying, cartography, earth sciences, archaeology and other threatened programmes. Younger and smaller geography units took pot luck. Unseemly jockeying jeopardized the production and reproduction of geographical knowledge. In Australia's decidedly unspecialized system, students had derived reassurance from intersubject cooperation and dovetailed 'general' or 'pass' three-year structures. In the case of geography, the less productive tensions between physical and human camps could be avoided by the 80 or 90% of the subject's first-year students who did not proceed into its (or any) fourth year 'honours' class. But every liberal subject was changed by the destabilizing, re-sorting and atomization that accompanied the binge of destruction. Identity-signalling pivotals competed with 'bums-on-seats' peripherals – teaching droves of engineers how to open a book, that type of thing – until the survival game made 'service' 'core'. A rare pride in calling was contemptuously ignored. Alienated staff left in droves. Postgraduates endured makeshift supervision. Thus, a perfectly prepared terrain for more decisive political intervention. Poor fella my country. Poor fella my subject.

*c 'Schools of higher money'*[20]: Reactions to Australia's national approach to research funding, largely a severely pruned hybrid of older British and other international formulae, reflect and contribute to the malaise: outrage from the liberal sector about a privileging of science and technology and the remorseless undervaluation of monographs, book chapters, exemplary texts and civic scholarship; unease about 'national interest' funding; and apoplexy over 'double-dipping' supplementations of existing research incomes – partly in response to convenient references to 'research training needs' which bypassed the input of dedicated teaching on struggling feeder campuses. Humanities and social science types muttered darkly about a caricatured 'master-serfism'; conveyor-belt *Mousetrap* emulations; five-page, 'ten-author specials'; and doctorates for lab-minding. They heartily rubbished any resort to citation indexing as the fantasy of 'footnote virgins'. Recently, a furore ensued when the federal Minister of Education chose to reject peer-approved grant applications in the humanities and denied the victims an explanation. Deeper went the wedge. Aristotle, Newman's hero, had seen nobility in politics, but its word engineers became PR devotees. Newman remains inspiring, but we have indeed 'moved on'.

Backtracking some 20 years, the federal government proclaimed that there would be better value for money in a more diversely driven system. In the absence of reliable parliamentary opposition it was able, more or less, to complete the configurement of the arts and social sciences as elitist anachronisms. The patently ideological tactic is to find a means to effect a still greater concentration of research funding while simultaneously exposing the university sector to intensified competition from other publicly funded bodies. Britain's Research Assessment Exercise is held up for approval (Expert Advisory Group, 2005a; 2005b). Elements of the Irish, New Zealand and Dutch approaches may prove less dangerous. Even with concessions to our chaotic ensembles, anything resembling league tables could deliver the *coup de grâce*. It might also yield spurious institutional rankings – the dubiously fortunate atop an increasingly rungless ladder. Rebadged 'teaching only' residuals would be hard put to compete with the private, profit-driven universities encouraged by the government's revised fee packages – carefully aimed as almost all of them would be to serve business and other 'vocational' pursuits. Given the long, debilitating declension, scenarios for the humanities and social sciences depict either gradual elimination slowed by a token research presence within a shrinking upper tier, or circumscription within versions of American-style liberal arts and community colleges. Not yet grist to the mill for the marketers of fee-attracting courses, but that may come.

Prospective local and overseas fee-payers are deeply influenced by the media's appetite for 'global ratings'. Australia's politicians have become sensitized to low local placings derived from research-focused, science- and technology-driven measures (Shanghai Jiao Tong University, 2005). Deft restructurings could push one or two better-financed Australian institutions into the top brackets of deceiving tables, provided they take care to direct the largesse into higher-scoring post-graduate sectors: wealth to wealth, for wealth. Ironically, high-quality liberal programmes are valued elements in the ecologies of teaching and research at many of the world's 'most esteemed' institutions. Australia's finest are taking the point. Alas for the also-rans (or running).

*d Lead kindly: light*[21]: If every generation gets the generation it deserves, no alert can be too loud. The early commitment of so many of our younger people to business and commerce constitutes a dangerously premature switching off. The observations of Newman and Wilson have lost none of their relevance, but even the world's most envied institutions have been muddling along

without any robust consensus on what the modern university stands for, and against. If a university has nothing to say about life's conditions and purposes, about the identification and nurturing of interlinked personal and community values, what indeed is its point? To supply the needs of industry? *Vide* Dickens? Shakespeare or Goethe? Macbeth's endlessly quoted royal moanabout portrays life as a 'brief candle', and, for all I know, Goethe's sentimentally interpreted closing words, 'more light', could have been directed at a privatized utility. No, the philosophy of the liberal arts and sciences mainly supports the irascible Bernard Shaw, who insisted that life was a torch. Let there be both light and fire.

Most of the toxin has come from tweedledum-tweedledee politics, but hope is emerging. Currently, direct government funds furnish between a third and a quarter of the recorded incomes of each of Australia's strongest universities. The University of Melbourne recently decided to regain control of its own destiny by forming a 'public-spirited' private university. Gradually reducing enrolments by about 10,000, it would develop a template based upon general undergraduate arts and science degrees and separate postgraduate ('vocational' and other) qualifications; it envisages a more generous husbanding of mature outlooks that should ensure a greatly improved preparation for postgraduate entry. Monash and Queensland are considering their own versions.

Not before time – and right enough for place, too, despite lingering misgivings about 'private' education and disquiet among accreditation bodies. The cultural topography of higher education is in smithereens. In my country, as in so many others, equally bold and thoughtful leadership from other tertiary institutions, and from each academic subject, may help to restore a few landscapes of genuine opportunity for a younger generation.

*Joe Powell*
*Monash University*

*Acknowledgements*

**Rob Kitchin:** Thanks for the helpful comments of Mary Gilmartin, Denis Linehan and Caitriona NiLaoire. **Lawrence D. Berg:** Earlier versions of this paper were drafted while I was visiting fellow at the National Institute for Regional and Spatial Analysis at the National University of Ireland, Maynooth. I am grateful to Rob Kitchin and colleagues at NIRSA for such a supportive environment. Funding for the research was provided by NIRSA, the Canada Research Chairs Secretariat and the Social Sciences and Humanities Research Council of Canada. An earlier version of this paper was presented as a keynote address to the Inaugural Nordic Geographers Meeting in Lund, Sweden, in June 2005. I am grateful for the many discussions that I had with colleagues during that conference about the ideas presented in that earlier paper. These discussions reinforced and clarified my thinking on many aspects of audit spaces. Finally, I am grateful to Mary Gilmartin and Noel Castree, both of whom provided very helpful comments on earlier drafts of this manuscript.

## Notes

1. Richard Munton had the unfortunate task of writing his piece when the British government surprised most academics by announcing a possible move to a more mechanical, metrics-based assessment system than the RAE.
2. The OECD report had 52 recommendations that focused on the governance of higher education, widening access and participation, improving research and innovation, recruiting international students and increasing investment from a range of sources. One recommendation was for the benchmarking of research output and performance related funding that would 'be sufficiently large to influence institutional behaviour positively' (OECD, 2004: 48).
3. http://www.nwo.nl/nwohome.nsf/pages/NWOP_5TTCVA_Eng?opendocument&nav=Vernieuwingsimp_02_NL (last accessed 12 January 2006).

4. From the preface of the brochure of the 1988–93 'urban issues research program' by the Director of the Institute of Geographical Research of Utrecht University, 1990.
5. http://nethur.geog.uu.nl (last accessed 12 January 2006).
6. http://www.qanu.nl/comasy/uploadedfiles/130344-geogr[1].sciences.pdf (last accessed 14 January 2006).
7. http://www.ruimtelijkplanbureau.nl/en-gb (last accessed 14 January 2006).
8. http://www.hetkenniscentrum.nl/stip/over-stip/overnicis/index.html (last accessed 14 January 2006 (not yet in English).
9. International Citation Indices tend to have a strong Anglo-American bias and prestigious, widely read German Geography journals are not included.
10. A *Habilitation* is the second book (after the Dissertation) which German researchers write in order to qualify for a professorial position.
11. Most but not all departments are submitted based on the university's decision.
12. In 2005–6, the provisional allocation of state funds for HE in England is £6,332 m with £1,251 m, or 19.8%, allocated to research (QR). The proportion is much higher in leading research intensive universities.
13. There are four separate Funding Councils for the UK, one each for England, Wales, Scotland and Northern Ireland, with at least three different algorithms. While carrying out their work, the assessment panels have no knowledge of the algorithms to be used. These are decided by the Funding Councils afterwards in the light of the grading results and the monies they are prepared to make available for QR.
14. For 2008, the Geography subpanel has had its remit broadened to include Environmental Studies, while in 2001 it held responsibility for Development Studies, which has its own subpanel in 2008.
15. Since writing, the Government quite unexpectedly announced a review of how the RAE should be conducted, and even suggested (but now withdrawn) a complete change to the 2008 exercise (HM Treasury *et al.*, Science and Innovation Investment Framework 2004–2014: Next Steps, HMSC: 2006). For STEM (Science, Technology and Medicine) subjects it proposes an evaluation process based very largely on metrics, especially funding, leaving the option for some greater use of peer review in the Humanities (Social Science is simply ignored). Consultation on the proposals is currently under way. HE respondents are split between those who favour the simplicity and transparency of metrics and those who distrust the reliability of metrics as proxies for research quality. Inevitably, all research intensive universities are also concerned about the uncertain financial consequences and the replacement of a system which, for all its faults, had established some level of confidence within the academic community through extensive critique and consultation over the last 15 years.
16. Percentage values are calculated from information in Tables A-48 to A-63, in TEC (2004).
17. It is worthy of note that the current incarnation of the RAE moves away from quantity of publications, in that individuals are asked to provide just four publications for review (although quantity still matters to the extent that it shapes individuals' reputations). Yet it is reinforcing competitive individualism by grading each individual, rather than departments as a whole.
18. This does not happen for the UK's research councils, which award grant funding on application quality. This has led to some in 5/5* departments arguing that other departments are receiving too much funding, which they hold should be concentrated in 5/5* units. Inferior applications it seems should be favoured just because the applicant happens to be in a 5/5* unit.
19. This instinctive personal reaction does not reprise recent anticipations (Murphy *et al.*, 2005; Johnston, 2006).
20. From Australian cartoonist Spooner (*Age*, December 2005).
21. Newman's hymn, my punctuation.

## References

**AUS** 2005: The use of compulsion in the submission of evidence portfolios in the 2006 PBRF Partial Quality Evaluation. Association of University Staff of New Zealand. Retrieved 27 December 2005 from www.aus.ac.nz/policy_professional/PBRF/compulsion2006.htm

**AUT** 2005: AUT campaigns hard over UCL redundancy threat. *AUT Look* 29 September, 3.

**Batty, M.** 2003: 'Editorial: World class universities, world class research: what does it all mean?',

*Environment and Planning B: Planning and Design*, 30, 1–2.

**Baxter, J.** and **Eyles, J.** 1997: Evaluating qualitative research in social geography: establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers* NS 22, 505–25.

**Berg, L.D.** 1994: Masculinity, place, and a binary discourse of theory and empirical investigation in the human geography of Aotearoa/New Zealand. *Gender, Place and Culture* 1, 245–60.

— 2001: Masculinism, emplacement and positionality in peer review. *The Professional Geographer* 53, 511–21.

— 2002: Gender equity as boundary object in Canadian academic geography . . . or the same old 'sex and power in geography' all over again? *The Canadian Geographer/ Le Géographe canadien* 46, 248–54.

— 2004: Scaling knowledge: towards a *Critical Geography* of critical geography', *GeoForum* 35, 553–58.

**Berg, L.D.** and **Kearns, R.** 1998: America unlimited. *Environment and Planning D: Society and Space* 16, 128–32.

**Berg, L.D.** and **Roche, M.M.** 1997: Market metaphors, neo-liberalism and the construction of academic landscapes in Aotearoa/New Zealand. *Journal of Geography in Higher Education* 21, 147–61.

**Blomley, N.K.** 2002: The rules. *Geoforum* 33, 149–51.

**Blunkett, D.** 2000: Influence or irrelevance? *The Times Higher Education Supplement* 4 February, 36–37.

**Burgess, J.** 2005: Follow the argument where it leads: some personal reflections on 'policy-relevant' research. *Transactions of the Institute of British Geographers* NS 30, 273–81.

**Castree, N.** 2000. Professionalisation, activism, and the university: whither 'critical geography'? *Environment and Planning A* 32, 955–70.

**Castree, N.** and **Sparke, M.** 2000: Professional geography and the corporatization of the university: experiences, evaluations, and engagements. *Antipode* 32, 222–29.

**Clifford, N.J.** 2002: The future of geography: when the whole is less than the sum of its parts. *Geoforum* 33, 431–36.

**Connell, J.** 1973: The geography of development or the development of geography. *Antipode* 5(2), 27–39.

**Curry, M.** 1991: On the possibility of ethics in geography: writing, citing, and the construction of intellectual property. *Progress in Human Geography* 15, 125–48.

**Curtis, B.** and **Matthewman, S.** 2005: The managed university: the PBRF, its impacts and staff attitudes. *New Zealand Journal of Employment Relations* 30(2), 1–17.

**Demeritt, D.** 2000: The new social contract for science: accountability, relevance, and value in US and UK science and research policy. *Antipode* 32, 308–29.

**Dorling, D.F.L.** and **Shaw, M.** 2002: Geographies of the agenda: public policy, the discipline and its (re)turns. *Progress in Human Geography* 25, 629–41.

**Expert Advisory Group** 2005a: *Research quality framework: assessing the quality and impact of research in Australia. Issues paper*. Canberra: Commonwealth of Australia.

— 2005b: *Research quality framework: assessing the quality and impact of research in Australia. The preferred model*. Canberra: Commonwealth of Australia.

**Farrar, S.** 2005: Has deconstruction had its day in class? *The Times Higher Education Supplement* 7 October, 3.

**Fazackerley, A.** 2005: Research stars like talent by their side. *The Times Higher Education Supplement* 2 December, 7.

**Foucault, M.** 1988: Technologies of the self. In Martin, L.H., Gutman, H. and Hutton, P.H., editors, *Technologies of the self: a seminar with Michel Foucault*, Amherst, MA: University of Massachusetts Press.

**Funding Councils** 1999: RAE 2001: Assessment panels' criteria and working methods. RAE 5/99, Bristol.

— 2005a: RAE 2008: Guidance to panels. RAE 01/2005, Bristol.

— 2005b: RAE 2008: Consultation on assessment panels' draft criteria and working methods. RAE 04/2005, Bristol.

**Geography Panel** 2002: The 2001 RAE: Report of the Geography Panel to the Geography Research Community. Retrieved 5 January 2006 from http://www.rgs.org/pdf/RAE2001.pdf

**Goldberger, M.L., Maher, B.A.** and **Flattau, P.E.** 1995: Research-doctorate programs in the United States: continuity and change. Washington, DC: National Academy Press, 740 pp.

**Gregory, K.J., Gurnell, A.M.** and **Petts, G.E.** 2002: Restructuring physical geography. *Transactions of the Institute of British Geographers* NS 27, 136–54.

**Hallsworth, A.** 1996: Short-termism and economic restructuring in Britain. *Economic Geography* 72, 23–37.

**Halsey, A.H.** 1990: Long, open road to equality. *Times Higher Education Supplement* February, section 9.

**Hamnett, C.R.** 2003: Contemporary human geography: fiddling while Rome burns? *Geoforum* 34, 1–3.

**Harvey, D.** 2000: The body as an accumulation strategy. In *Spaces of hope*, Berkeley and Los Angeles, CA: University of California Press, 97–116.

**HEFCE** 2005a: *RAE 2008 Research Assessment Exercise: guidance on submissions*. Higher Education Funding Council for England, RA03/2005, Bristol. Available from http://www.rae.ac.uk/pubs/2005/03/rae0305.doc (last accessed 4 September 2006).

— 2005b: *RAE 2008 Consultation on assessment panels' draft criteria and working methods: UOA 32, Geography and Environmental Studies*. Higher

Education Funding Council for England, Bristol. Available from http://www.rae.ac.uk/pubs/2005/04/docs/h32.doc (last accessed 4 September 2006).

**Henkel, M.** 1999: The modernisation of research evaluation: the case of the UK. *Higher Education* 38, 105–22.

**Hill, P.** 2005: HEFCE focuses on lecture costs. *The Times Higher Education Supplement* 21 October, 9.

**HM Treasury** 2006: Science and innovation investment framework 2004–2014. Retrieved 6 September 2006 from http://www.hm-treasury.gov.uk/budget/budget_06/assoc_docs/bud_bud06_adscience.cfm

**Johnston, R.J.** 2003: Geography: a different sort of discipline? *Transactions of the Institute of British Geographers* NS 28, 133–41.

— 2005: Thomas Kuhn and RAE 2008. *Environment and Planning B: Planning and Design* 32, 320–22.

— 2006: Research quality assessment and geography in Australia: can anything be learned from the UK experience? *Geographical Research* 44, 1–11.

**Jones, L.V., Lindzey, G.** and **Coggshall, P.E.** 1982: *An assessment of research-doctorate programs in the United States – social and behavioral sciences*. Washington, DC: National Academy Press, 249 pp.

**Kitchin, R.** 2004: Geography in Ireland in transition. *Irish Geography* 37(1): 15–19. 11 responses. *Irish Geography* 37, 121–44.

**Kobayashi, A.** 2002: 20 years later and still two percent: women of colour in Canadian geography. *The Canadian Geographer/Le géographe canadien* 46, 245–48 (with references on pp. 262–65).

**Larner, W.** and **Le Heron, R.** 2005: Neo-liberalizing spaces and subjectivities: reinventing New Zealand universities. *Organization* 12, 843–62.

**Leitner, H., Peck, J.** and **Sheppard, E.** 2006a: Squaring up to neoliberalism. In Leitner, H., Peck, J. and Sheppard, E., editors, *Contesting neoliberalism: urban frontiers*, New York: Guilford, in press.

**Leitner, H., Sheppard, E., Sziarto, K.M.** and **Maringanti, A.** 2006b: Contesting urban futures: decentering neoliberalism. In Leitner, H., Peck, J. and Sheppard, E., editors, *Contesting neoliberalism: urban frontiers*, New York: Guilford, in press.

**Lipsett, A.** and **Shepherd, J.** 2005: RAE jobs boom yet to peak. *The Times Higher Education Supplement* 7 October, 1.

**Markusen, A.R.** 1999: Fuzzy concepts, scanty evidence and policy distance: the case for rigour and policy relevance in critical regional studies. *Regional Studies* 33, 869–86.

**Martin, R.L.** 2001: Geography and public policy: the case of the missing agenda. *Progress in Human Geography* 25, 189–209.

— 2002: Getting ranked and going global. *Transactions of the Institute of British Geographers* NS 26, 3–6.

**Massey, D.B.** 2002: Geography, policy and politics: a response to Dorling and Shaw. *Progress in Human Geography* 25, 645–46.

**McCall, B.** 2005: Big fall in medical teachers. *The Times Higher Education Supplement* 9 December, 9.

**McDowell, L.** 1990: Sex and power in academia. *Area* 21, 323–32.

**Mitchell, K.** 1999: Commentary: 'Scholarship means dollarship, or, money in the bank is the best tenure'. *Environment and Planning A* 31, 381–88.

**Murphy, A.B., De Blij, H.J., Turner, B.L, Gilmore, R.W.** and **Gregory, D.** 2005: The role of geography in public debate. *Progress in Human Geography* 29, 165–94.

**Newman, J.H.** 1964: *The idea of a university. Defined and illustrated*. New York: Holt, Rinehart and Winston.

**OECD** 2004: *Review of National Policies for Education: Review of Higher Education in Ireland*. Available from http://www.education.ie/home/home.jsp?maincat=17216&pcategory=17216&ecategory=17237&language=EN (last accessed 4 September 2006).

**Osborne, M.** 2005: Arts take a hit in university culture wars. *The Age*, *Melbourne* 2 December, 15.

**Ostriker, J.P.** and **Kuh, C.V.** 2003: *Assessing research-doctorate programs: a methodological study*. Washington, DC: National Academy Press, 153 pp.

**Paasi, A.** 2005: Globalisation, academic capitalism, and the uneven geographies of international journal publishing spaces. *Environment and Planning A* 37, 769–89.

**Peck, J.** 1999: Grey geography? *Transactions of the Institute of British Geographers* NS 24, 131–35.

— 2002: Political economies of scale: fast policy, interscalar relations, and neoliberal workfare. *Economic Geography* 78, 331–60.

**Peck, J.** and **Tickell, T.** 2002: Neoliberalizing space. In Brenner, N. and Theodore, N., editors, *Spaces of neoliberalism*, Malden, MA, and Oxford: Blackwell, 33–57.

**Pels, P.** 2000: The trickster's dilemma: ethics and the technologies of the anthropological self. In Strathern, M., editor, *Audit cultures*, London and New York: Routledge, 135–72.

**Power, M.** 1994: *The rise of audit culture*. London: Demos.

**Roberts Report** 2003: *Review of research assessment*. Bristol: Funding Councils.

**Roberts, S.M.** 2000: Realizing critical geographies of the university. *Antipode* 32, 230–44.

**Rose, G.** 1993: *Gender and geography*. Minneapolis: University of Minnesota Press.

**Rose, N.** 1999: *Powers of freedom: reframing political thought*. Cambridge: Cambridge University Press.

**Rothwell, N.** 2005: The true details of the research assessment exercise will depend on the views and efforts of panel members – this is the nature of peer review. *The Times Higher Education Supplement* 23 September, 13.

**Seager, J.** 2000: 'And a charming wife': gender, marriage and manhood in the job search process. *The Professional Geographer* 52, 709–21.

**Shanghai Jiao Tong University Institute of Higher Education** 2005: Academic ranking of world universities. Retrieved 9 January 2006 from http://ed.sjtu.du.cn/ranking.htm

**Shelton, N., Ni Laoire, C., Fielding, S., Harvey, D., Pelling, M.** and **Duke-Williams, O.** 2001: Working at the coalface: contract staff, academic initiation and the RAE. *Area* 33, 434–39.

**Shepherd, J.** 2005a: Senior UCL staff condemn job cuts. *The Times Higher Education Supplement* 7 October, 56.

— 2005b: Manchester offer entices laureate. *The Times Higher Education Supplement* 2 December, 3.

— 2005c: UCL memo 'expects' 3*s. *The Times Higher Education Supplement* 9 December, 2.

**Shepherd, J.** and **Davis, C.** 2005: 'Criminal' PhD cuts trigger job fears. *The Times Higher Education Supplement* 30 September, 6.

**Sheppard, E.** 2006a: Positionality and globalization in economic geography. In Vertova, G., editor, *The changing economic geography of globalization*, London: Routledge, 45–72.

— 2006b: Taking stock. *Progress in Human Geography* 30, 119–23.

**Shore, C.** and **Wright, S.** 2000: Coercive accountability: the rise of audit culture in higher education. In Strathern, M., editor, *Audit cultures*, London and New York: Routledge, 57–89.

**Short, J.R.** 2002: The disturbing case of the concentration of power in human geography. *Area* 34, 323–24.

**Smith, N.** 2000: Who rules this sausage factory? *Antipode* 32, 330–39.

**Sparke, M.** 1996: Displacing the field in fieldwork: masculinity, metaphor and space. In Duncan, N., editor, *Body space: destabilizing geographies of gender and sexuality*, New York and London: Routledge.

**Strathern, M.** 2000: New accountabilities: anthropological studies in audit, ethics and the academy. In Strathern, M., editor, *Audit cultures*, London and New York: Routledge, 1–18.

**TEC** 2004: *Performance-Based Research Fund. Evaluating research excellence: the 2003 assessment*. Wellington: Tertiary Education Commission.

**Thrift, N.J.** 2002: The future of geography. *Geoforum* 33, 291–98.

**Trinity College Dublin** 2004: Council minutes. Retrieved 14 January 2004 from www.tcd.ie/Secretary/Council/Minutes/2004-01-14-Council-Minutes.pdf

**Tysome, T.** 2005: York leads pack as autumn hunt sets off in force. *The Times Higher Education Supplement*.

**Wilson, W.** 1909: What is a college for? *Scribner's Magazine* 46, 570–77.

**Wilson-Gilmore, R.** 2002: Fatal couplings of power and difference: Notes on racism and geography. *The Professional Geographer* 54, 15–24.