Research funding bodies (MS number 316)

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Synopsis: Before the Second World War few geographers attracted large grants to support their research, although some were able to obtain money to cover travel and fieldwork costs. After the war, research practices changed and funding was sought both to support postgraduate students and to employ research associates and fellows on a range of projects and programmes from a variety of sources. In the Anglophone world, these external sources complement the infrastructural support for research provided to universities through central granting agencies and student fees.

Origins of the dual funding structure

University systems in many parts of the world – especially those where the English language predominates but also in Scandinavia and the Netherlands, for example – have evolved a dual structure for funding research activities. Alongside support for teaching and related activities, the universities’ core funding streams sustain the institutions’ the basic research infrastructure, such as library and computing resources as well as staff research time; other sources have to be tapped from a second stream for grants/contracts to fund personnel, equipment and other resources, plus travel costs (including attendance at conferences to present results) for specific projects and programmes. Elsewhere – as in Germany and the former Soviet Union and to a lesser extent in France – universities are predominantly teaching institutions, with research funding concentrated on separate laboratories, not all of which are located within universities.

In the English-speaking world, very little money was obtained by geographers through the second of these streams until after the Second World War. Research – as in many other (non-scientific) disciplines – was a small-scale, individual activity, for which the main expenditure was on travel and subsistence while the researcher was in the field/archives collecting information. Research activity and productivity (through publications) was not a priority of most academics’ work, and career prospects were not closely linked to research performance. Much of the work undertaken involved either original data collection in the field (including archival sources for historical studies) or the synthesis of material from a variety of secondary sources to provide
accounts of the characteristics of a region or place. A great deal of it was done with virtually no financial support (as described in Mead, 2007), undertaken in vacations almost as a sideline from the main task of teaching. As Pruitt (1979, 103) describes the US situation:

Before … 1948, research was conducted by geographers mainly on a one-person basis, financed by the individual with perhaps a small grant of a few hundred dollars from the university, the Social Science Research Council, or a foundation. It was mostly a summertime activity, or the occupation of a sabbatical. Occasionally graduate assistants had the opportunity to go into the field with the professor on these research undertakings if financial support could be found. The scale of the enterprise was generally modest and called for considerable sacrifice on the part of the geographer. Today, it is hard to believe that there was once a time when a person was expected to pay the costs of the studies he was conducting, and to finance his own travel, photography, drafting, and attendance at scientific meetings. [Although many geographers still contribute to such activities from their own incomes.]

Even relatively large projects undertaken at the time obtained little or no external support. The largest in the UK, for example, was the Land Utilisation Survey, launched in 1933 and directed by Dudley Stamp from the London School of Economics. Its goal was to map the use of every piece of land in Great Britain (a Northern Ireland survey was undertaken later). The mapping was undertaken by volunteers – mainly high school students – as was collation and interpretation of the data by academics. Small sums of money were obtained to cover administrative and other expenses (Stamp mortgaged his home at one stage to raise money) but most of the work was done for free – producing maps that proved extremely valuable for land-use planning during and after the Second World War (Stamp, 1936-1950, 1948: Willatts, 1987). Similarly, Estyn Evans relied on volunteers to do the fieldwork for his survey of prehistoric monuments in Northern Ireland (Buchanan, 2006) and the large enterprise directed by Clifford Darby to map and analyse the 1086 Domesday returns for England involved no external funding, although Darby ensured that the university departments which he headed during the period employed cartographers to draft all of the diagrams (Darby, 1977).

Funding was available before 1939 to support certain types of research activity, especially travel, with the main goal being to allow scholars to interact with their peers in other countries and to develop an appreciation of geographical practices elsewhere. Thus, for example, in the 1930s Robert Dickinson – a pioneer British urban geographer – had a Rockefeller Travelling Scholarship to spend the academic year 1931-1932 in the USA familiarising himself with the work of leading scholars; and in 1936-1937 he had a further scholarship from the same source to spend a year in France and Germany for the same general purpose. But he was very much the exception: few geographers were able to raise the money to support their travels/subsistence and relieve them from their normal teaching and administrative responsibilities for such long periods. (On support for foreign travel for US academics after World War II, see Mikesell, 1973. During the war a number of academics gained initial field experience overseas during their military service – see Fisher, 1979. A number of British academics also gained such experience through appointments or secondments to new university institutions in the British Empire: Dudley Stamp was a professor of geology and geography at the University of Rangoon, 1923-1926, for
example, and Oskar Spate, who wrote a pioneering text on India and Pakistan – Spate, 1954, 1965 – was at the same institution between 1937 and 1939; and Keith Buchanan held posts at both the University of Natal and the University of Ibadan before moving to the London School of Economics in 1953 and then to the Victoria University of Wellington: Buchanan and Pugh, 1955.)

This situation had been changing for other disciplines – especially those in science and engineering – which needed laboratories and equipment, plus dedicated staff to run them, in order to meet the needs of societies increasingly dependent on scientific (including medical) and technological research as the basis for economic and social advancement. Geographers were not entirely excluded from such sources – but as in general they did not undertake large research projects they had little need for substantial resources.

Some of the first geographical research projects to obtain substantial external support – largely to pay for dedicated researchers to undertake large-scale data collection, collation and analysis – were funded through the US Office of Naval Research, established in 1946. Although most of its work focused on issues relevant to naval operations, a Geography Branch was established as a result of the efforts of Evelyn Pruitt (who obtained a geography PhD from UCLA in 1943 and then worked for the Coast and Geodetic Survey, Aeronautical Chart Branch: Walker, 2006). Under this Branch major research programmes were established on the Arctic and in coastal studies generally (the latter including the Coastal Studies Institute based at Louisiana State University’s Department of Geography), and there was funding for pioneering work on air photo interpretation and what later became known as remote sensing. In addition, the Branch also supported various aspects of systematic and regional geography, including pioneering studies of urban Central Business Districts (Murphy, 1972) and separate investigations led by William Garrison (at the University of Washington), Brian Berry (University of Chicago), and William Warntz (at the American Geographical Society). Much of this involved cutting-edge quantitative studies, including the use of computers, in both human and physical geography. (For a list of the first group of studies funded, see Pruitt, 1979: she records that between 1955 and 1966, 97 individuals received grants.)

Winning recognition

Although the ONR’s Geography Branch pioneered funded research by geographers and facilitated a considerable number of PhD submissions, human geography in the US – as elsewhere – was on the margins of large-scale research funding development. Particularly important for this was the National Science Foundation, the largest source of public funds for (non-medical) research in US universities: its expenditure in 2006 was $6,406 million. Geography – especially human geography – was not recognised as a science by this body and although some individuals were able to tap its resources, there was no established path for human geographers nor any moneys set aside specifically for the discipline. To alter that situation, geographers lobbied the NSF and the National Academy of Sciences (the country’s pre-eminent scholarly society) for an opportunity to make their case for sustained support. A committee produced a book on The Science of Geography (NAS-NRC, 1965), which promoted the discipline as a ‘useful science’ through the examples of four topical areas: physical geography; cultural geography; political geography; and location theory. As
a result, geography gained recognition within the NSF framework with the establishment of a geography and regional science programme – directed by a series of academics seconded to NSF. This has provided substantial funding for a range of geographical work over the last forty years, including the major initiative taken when Ron Abler was the programme director to fund a national centre for work in GIS.

For human geographers, there was the allied issue of gaining recognition for their discipline as a social science, to which there was considerable resistance. In the late 1960s, the US National Academy of Sciences and the Social Science Research Council jointly funded a Survey of the Behavioral and Social Sciences. Geography was included within this, though reluctantly: Gauthier (2002, 577) reports that … geography initially had not been selected to participate in the survey, because the other panels in economics, sociology, psychology, anthropology and political science did not view the field as a viable social science. Not until the geography panel issued its report in 1969 was there any acknowledgement that geography was indeed a legitimate social science. The panel members changed people’s minds by making a strong argument for geography as a social science that made contributions to society and the development of public policy.

The report stressed the location theory (or spatial science) approach to human geography even more than *The Science of Geography* did, emphasising that human ‘geography is concerned with giving man an orderly description of his world’ (Taaffe, 1970, 5). It presented the discipline as an integral component of the social science portfolio, increasingly sophisticated in its analytical tools, focusing on spatial organization, and offering particular skills in mapping and data acquisition.

These two reports, and the greater research activity by human geographers within their much altered discipline, facilitated increased access to research funds from c.1970 on and helped to gain the discipline a much higher profile nationally within the scientific and, especially, social scientific communities. (In the first eight months of 2007, the NSF’s Geography and Regional Science Program allocated grants totalling some $30million, some of which was to support doctoral dissertation projects.) Nevertheless, the position remained somewhat tenuous, and in the 1990s the Association of American Geographers successfully lobbied for a further opportunity to promote their discipline to the national scientific community – because of a ‘well-documented perception (external to geography as a discipline) that geography is useful, perhaps even necessary, in meeting certain societal needs’ (NAS-NRC, 1997, ix). The report on *Rediscovering Geography: New Relevance to Science and Society* once again stressed human geographers’ technically-based analytical skills, especially those involving spatial analysis and GIS.

In the UK, as in the USA, human geographers were required to establish their credentials within the social sciences in order to gain access to national sources of research funding. A Social Science Research Council (SSRC) was not established there until 1965 (a Medical Research Council, a Science and Engineering Research Council, and a Natural Environment Research Council already existed), and human geography was not included in the disciplines for which it initially offered both research funds and postgraduate student support. To counter this, a group of senior academics asked if they could present a case for their discipline’s inclusion to the SSRC Chairman, who agreed to receive it. Preparation of the case was largely
undertaken by Michael Chisholm, against some opposition within the discipline from senior individuals who wished to maintain the status quo and continue to get studentships (though no access to research funds) through the established route of the Department of Education (Chisholm 2001). Their opposition was largely against their discipline being repackaged as a social science, something that Chisholm then did in a number of books (Chisholm, 1971, 1975; Chisholm and Rodgers, 1973). With the clear support of the SSRC Chairman, Lord Young, the campaign succeeded – though there was little apparent enthusiasm shown towards geography by representatives of most of the other social science disciplines: human geography joined the SSRC (later renamed the Economic and Social Research Council – ESRC) in 1967, though rather than have a separate committee for the discipline (as was the case for all of the founding disciplines) it was linked with planning for the allocation of research grants: there was a separate geography sub-committee for allocating research studentships (Johnston, 2004). Among the first recipients of research grants was Peter Haggett, and major SSRC-funded projects directed by Alan Wilson were operating at Leeds during the 1970s. Separate disciplinary committees were abolished in the mid-1980s, and replaced by a Research Grants Board and a Training and Development Board which handled grants and studentships respectively, and on which each major discipline – including human geography – is represented. There is also a Research Resources Board which invests in major, social-science wide initiatives, such as the Data Archive and in obtaining free access for academic users to all UK census data.

**Funding streams**

Research councils and other funders operate in two main modes – responsive and directive. Under the responsive mode, an amount of money is set aside each year to fund projects proposed by individual researchers and research groups. Applications are peer-reviewed, and the allocations go to those with the highest evaluations in a competitive situation. Under the directive mode, the funders determine particular lines of research in which they want to invest, and invite applications against a set brief. Those lines might be particular research themes of immediate public interest – such as devolution in the UK since 1998 (http://www.devolution.ac.uk/) and the major Canadian Metropolis project (http://canada.metropolis.net/generalinfo/index_e.html); they may involve sustaining research activity, such as funding widely-used surveys (the American National Election Study, the British Election Study and the British Household Panel Study, for example), making census data freely available to academic researchers, promoting major cross-disciplinary research initiatives (such as GIS, which was supported by the ESRC-funded Regional Research Laboratories in the UK and the NSF-funded National Center for Geographic Information and Analysis) or establishing a Data Archive where data sets are stored and disseminated for further analysis.

In the UK, the research councils also provide funding for postgraduate students with award schemes covering both tuition costs and a salary. The ESRC now operates what is termed a ‘1+4’ system, whereby the first year of a studentship involves attendance at formal courses designed to provide the breadth and depth necessary for a research career (for which a separate qualification may be earned – such as MRes – and the other three are deployed in undertaking the research for a PhD degree). Only a small number of departments is recognised to provide the basic training and students compete for the awards available there; a slightly larger number can accept students
for the research component. All UK universities offer research degrees, however, and some offer financial support. In North America, most postgraduates are supported by their individual universities: some offer competitive scholarships; most employ postgraduates as part-time teaching and/or research assistants. Support for fieldwork and other research expenses may also be available, but may have to be obtained through competitive grants from the NSF and other bodies – in some cases as part of a research grant awarded to students’ supervisors.

Recognition by the main research funding bodies in the US and UK not only gave human geographers access to important – and prestigious – sources of money: it also established their discipline’s credibility within the social sciences, facilitating the search for support from a wider range of sources. These include major charities established to support research in the social sciences and other disciplines: in the UK these include the Nuffield Foundation, the Leverhulme Trust, the Joseph Rowntree Foundation (which is linked to several separate Trusts), the Carnegie UK Trust, and the Wellcome Trust. There is also a wide range of other sources for research funding which human geographers are able to tap, including the British Academy, the recently-established Arts and Humanities Research Council, many government departments (national, regional and local) and various arms of the European Union (EU) which has become a major source of research funding.

The EU operates through a series of Framework Programmes, each of which has a major theme: that for the Seventh Framework Programme (covering 2007-2013) is Competitiveness and Innovation, which has four sub-programmes – Cooperation (budget €32billion), Ideas (€7.4billion), People (€4.7billion) and Capacities (€4.2billion). Grant allocations are made by a European Research Council following similar procedures (emphasising peer review) to those operated by national bodies. While some parts of the programme are quite specific (€2.3billion on energy research, for example), others are more general – such as €1.8billion for research infrastructures (data archives, for example) and €4.7billion for career development grants: under the Ideas component, the European Research Council has €7.4billion to spend on ‘the most talented scientists, supporting risk-taking and high-impact research, and promoting world-class scientific research in new, fast-emerging fields’. The opportunities for geographers – usually in collaborative, international teams – are very substantial (as with the European Spatial Planning Observation Network – ESPON: http://www.espon.eu/: a list of some EU programmes in which UK geographers were involved in the period 1996-2000 is in Thrift and Walling, 2000, which also discusses non-EU international collaborative programmes in which UK geographers have participated).

US human geographers also have a wide range of potential sources, including the prestigious John Simon Guggenheim Memorial Foundation, whose fellowships have funded research by a number of scholars (complete lists are available on the Foundation’s website: http://www.gf.org/05fellow.html), largely by paying for them to be released from their teaching and administrative responsibilities. And, of course, US geographers participate in major international collaborative programmes organised by a variety of organisations – some under the umbrella of the International Council of Science and others through NGOs such as the World Wildlife Foundation (Turner, 2005).
Research contracts

Although much emphasis with regard to research funding goes to the winning of grants, in part because they are perceived as prestigious being allocated on the basis of peer-reviewed competition, considerable attention is also given – and increasingly so within human geography – to obtaining research contract income. Contracts differ from grants in that the latter generally involve what is sometimes termed ‘blue skies’ research – the pursuit of knowledge for its own sake with little or no concern about its application (although research councils and others are increasingly concerned – and pressed by their government funders – to have ‘user inputs’ and focus on ‘useful knowledge production’ ) – whereas contracts are normally undertaken for an end-user (generally, though not always, in the private sector) as a form of applied research. Academics are encouraged only to obtain contracts that are fully-funded, which have a substantial intellectual component (i.e. there is original research involved), and from which the results can be published (i.e. do not remain classified because they are commercially sensitive), but the availability of money for research that might otherwise not get funded is important.

Many geographers have undertaken funded research through such channels. Some major research centres have been established in this way such as the G-Map company established at the University of Leeds to undertake location-allocation studies for commercial and public sector clients (later sold to commercial clients and operating as GMAP Consulting – see [http://www.eurodirect.co.uk/Pages/GMAP_Consulting.html](http://www.eurodirect.co.uk/Pages/GMAP_Consulting.html)) and the Flood Hazard Research Centre at the University of Middlesex ([http://www.fhrc.mdx.ac.uk/](http://www.fhrc.mdx.ac.uk/))

Research funding and research evaluation

Obtaining research funding is now a central part of academic activity in the British and North American university systems: without the separate inputs from research councils, charities, government departments and other sources, the dual funding structure would not operate. There are several reasons for this, the most important of which is that research is becoming increasingly expensive, because it is more labour-intensive in the collection and analysis of data. Major research projects can no longer be operated as summertime activities: they are year-round enterprises, many of which require the principal investigators to be released from their increasingly onerous other university tasks linked to teaching and administration, and a considerable number also require associated research assistance – from postdoctoral workers (gaining additional research experience and expertise as the first stage of an academic career), postgraduate students dedicated to parts of the project or programme, and also from contracted workers, such as those engaged to conduct major surveys as part of a research initiative.

That funding sustains not only the research activity itself but also the infrastructure on which it is founded. Most of the national research councils provide an ‘overhead’ element additional to the direct costs of the project, for example, which is a contribution to the host institution’s costs of managing and underpinning that activity – as well as preparing for further rounds of applications and investments. In the UK, for example, the overhead element was for some years set at c.40 per cent of the direct costs of a project but the principle of ‘Full Economic Costing (FEC)’ for research
grants has now been accepted and means that the overhead element may be 100 per cent or more of the direct costs. Some research funders, such as a number of charities in the UK, decline to meet this overhead element – claiming, for example, that the infrastructure for research in universities should be funded out of general taxation, to which they are major contributors; the funding formulae for universities take this into account, providing a parallel stream of income for researchers/institutions which cannot get the FEC of their grant/contract income.

Research grant income is also important because it is increasingly used as an indicator of research excellence, on the argument that the more you earn to undertake research the better you must be at it. This is particularly important in the UK where a series of six Research Assessment Exercises has been held since 1986 as part of the evaluation of research activity and excellence. (On the RAE and parallel exercises, see the forum on this topic in Progress in Human Geography, Volume 30 (6), 2006.) Increasingly, the allocation of the infrastructural funding for research in universities (the so-called QR element) is determined by the results of this exercise: the departments with the highest grades (currently on a seven-point scale) get the bulk of the money, with those in the lowest categories getting none. (On recent allocations across geography departments, see Johnston, 2006; on the RAE’s influence on geography in the UK, see Sidaway and Johnston, 2007.)

Those RAEs have largely been based on evaluations of research outputs, notably publications, although departments/universities have been required to provide information on the number and size of research grants/contracts won as well as the number of postgraduate studentships. In 2006, however, the government launched an initiative to replace those evaluation processes – at least in the sciences – by a metrics-based procedure, in which the QR allocations would be a function of certain indicators. Research funding was presented as the main candidate, although other metrics – such as citation counts – are also being considered. If (more probably when) this system is introduced, earning income will clearly become the core of most research activity there – although some activities will remain which the individual researcher can undertake with little more than a modicum of support for, say, travel.

References


**Further Reading**

Websites for the main funding bodies:

**Australia**


**Canada**


**New Zealand**

Royal Society of New Zealand: [http://www.rsnz.org/funding/](http://www.rsnz.org/funding/)

**United Kingdom**

Arts and Humanities Research Council: [http://www.ahrc.ac.uk/](http://www.ahrc.ac.uk/)

British Academy: [http://www.britac.ac.uk/](http://www.britac.ac.uk/)

Economic and Social Research Council: [http://www.esrc.ac.uk/](http://www.esrc.ac.uk/)

Natural Environment Research Council: [http://www.nerc.ac.uk/](http://www.nerc.ac.uk/)


The Leverhulme Trust: [http://www.leverhulme.ac.uk/](http://www.leverhulme.ac.uk/)


The Wellcome Trust: [http://www.wellcome.ac.uk/](http://www.wellcome.ac.uk/)

**United States of America**
