

In Memoriam: Professor Geoffrey Oldham, CBE (17.02.1929– 01.10.2017)

Geoffrey Oldham, known to all as 'Geoff', was one of the founders of the Science Policy Research Unit (SPRU) in 1966 – along with Chris Freeman and Jackie Fuller. I met him in 2014 when I arrived at SPRU as the new Director. We started a SPRU History project to feed into the SPRU 50th anniversary of 2016, and Geoff became one of our most important sources. His stories about SPRU radiated with love and devotion to the unit and many of the people whom he had worked with. He taught me SPRU principles of problem-driven research, and inspired me with his accounts of how he navigated, networked and built a global SPRU.



Early career

Geoff took a very roundabout route to arrive at SPRU. This path would become a typical SPRU one. In the early 1950s, he studied geology and geophysics at the University of Reading in the UK, followed by a PhD in geophysics at the University of Toronto in Canada, supervised by Prof. Tuzo Wilson, a world leader in the field. He moved on to senior positions as a geophysicist in Standard Oil of California. During a trip for the company through Latin America, he began to wonder what he was doing with his life. Geoff was startled by the level of extreme poverty he encountered, he decided to focus on promoting global development through science. At that point, he was not sure however how to act on this decision, but he was ready to redirect his career.

A sequence of events in the early 1960s gradually shaped a new avenue. His former PhD supervisor at Toronto opened up a fellowship opportunity to engage in an international exchange project in geophysics research between Canada and China. Geoff accepted this and started intensive preparatory Chinese language learning - first in London and then in Hong Kong. Cancellation of the planned geophysics project led to a widening of his fellowship to encompass a study of the development of science and technology in China and more widely in other Asian countries. He was appointed as one of the Hong Kong delegates to the 1963 UN Conference on Science and Technology for Development. These experiences began to define his new mission which focussed squarely on questions about the roles of science and technology in the development of Third World countries. More important, he became convinced that these questions warranted serious academic study – something he proceeded to undertake in a range of Asian countries and more specifically in China where he was able in 1964 to make a visit to interview scientists in numerous centres and institutes on the eve of the Cultural Revolution.

Origins of SPRU and establishing science and technology policy for international development

Then, sitting in a Library in Hong Kong he read an article about plans in Sussex to set up a new research group that would deal with science policy. Immediately he became interested and wrote to Stephan Toulmin who was working on the plan. A secondment to the Scientific Affairs Directorate of the OECD in 1965-66 brought him into contact with Chris Freeman, who would be put in charge of setting up SPRU at the University of Sussex. This led to a lifelong companionship and friendship. They complemented each other with Chris in a more intellectual role and Geoff as the instigator of global networks with his own strong mission.

When Geoff took up his position as Deputy Director of the new institute in 1966, he pushed ahead with establishing policy research about science and technology in developing country contexts. He was instrumental in securing a large, multi-year programme grant from the Ford Foundation that provided a core around which smaller and shorter project funding was developed. It was however not just about the funding, Geoff, like Chris Freeman brought to SPRU research an intense concern about research impact, and was determined that SPRU's research about science and technology policy in developing countries should make a tangible difference in the world.

Building on his own research and that of colleagues and visiting scholars at SPRU, he quickly developed a clear view that this difference should be about ways of harnessing science and technology for development that differed sharply from the dominant prescriptions and practices of the time which entailed an almost

total reliance on the international transfer of technology, know-how and scientific understanding from the rich countries. Instead, Geoff was convinced that much greater emphasis should be placed on ways of rapidly enhancing poor countries' capacities to select, acquire and create 'their own' technologies, know-how and science. This thinking became a defining feature of SPRU and much of SPRU's outreach and impact over the years has entailed strengthening the capabilities of poor countries to analyse their own S&T policy problems and to generate and implement their own policy solutions. Geoff's views led to a deep collaboration with the Institute of Development Studies (IDS) also established at Sussex in 1966. He served on their academic board until his retirement and facilitated a wide range of projects between SPRU and IDS. These include the formulation of the influential Sussex Manifesto on Science and Technology for Developing Countries during the Second Development Decade of the UN (1970).

Geoffrey Oldham and IDRC

During his years as Deputy Director, Geoff contributed directly to two cases of extraordinarily significant impact. The first involved setting up the International Development Research Centre of Canada ([IDRC](#)). In 1969, Geoff had met the President of the Canadian International Development Agency (CIDA – Canada's bilateral aid funding organisation), and he had outlined his views about the need for aid activities concerned with science and technology to move beyond almost total reliance on the transfer of technology and science from the rich countries. CIDA's President was quickly convinced that Geoff was right and he set out to do something about it. He asked Geoff to join a small group in Ottawa to design a new public organisation that would do just that, and to help draft the legislation required to set up what came to be called the International Development Research Centre (IDRC). Maurice Strong, who latter served as a commissioner of the [World Commission on Environment and Development](#), was present at the inauguration of IDRC in the House of Commons (Canada). Without Geoff, there never would have been an IDRC as is noted by Keith Bezanson, a former President of the IDRC in his personal in memoriam to Geoff.

When IDRC was established in 1970 it focused almost entirely on supporting scientific research and technological development in developing countries in areas such as agriculture, food and nutrition and healthcare delivery. This was a path-breaking initiative in the early 1970s, and its example encouraged other aid organisations to take similar approaches that have become commonplace today. IDRC was distinctive among research donors by insisting that the bulk of its funding would be directed to developing country researchers working in developing countries. For Geoff, working in between SPRU and IDRC was ideal because, as he confided to me, the former brought the intellectual depth and inspiration while the later brought networks and an ability to implement ideas.

The second area of significant impact involved strengthening developing countries' capabilities to undertake their own policy analysis about scientific and technological development. Geoff persuaded the IDRC to include in the work of its Social Science Division a programme on Science and Technology Policy research. In 1970, he was appointed Associate Director for the programme while continuing part-time his Deputy Director role in SPRU. For the next ten years, the programme fostered the work of existing scholars in this area and the development of new researchers, along with the emergence of research groups and their interaction in multi-country projects. While the immediate use of its results was made by governments in some countries, much of the programme's impact flowed from the subsequent involvement of policy researchers in and around policy-making in their own countries. Many of the policymakers and scholars also came to SPRU for a visit or embarked on a PhD. This became a major avenue of SPRU's global impact and reputation.

Science and Technology Policy Instruments (STPI) project

The most significant initiative of the new IDRC research programme was the [Science and Technology Policy Instruments \(STPI\) project](#) that ran from 1973 to 1978, involving research teams from ten developing countries. It was described in the project's concluding report as: "*...an experiment – a large, self-managed, action-oriented international research project by researchers and policymakers from less-developed countries*". (p.104). Such a focus on the experimental and action-oriented character of the work is also deeply embedded in SPRU, and for example clearly visible in the work of the STEPs centre established between SPRU and IDS. The centre published a new Sussex Manifesto in 2010 in collaboration with Geoff. When I, in 2016, began to develop ideas for setting up a Transformative Innovative Policy Consortium, I was inspired too by the work and ideas of Geoff, his emphasis on investing in people, on and combining academic research with action and implementation.

Returning to SPRU (1982–1992)

Geoff resigned from this IDRC role in 1980 and took over as Director of SPRU in 1982 – at a time when several challenges were piling up in the Director's in-tray. Some were internal. In particular, by the late 1970s, the organisation of SPRU research had become concentrated in distinct research groups that were

increasingly autonomous and in some cases insular, raising questions about organisational coherence and intellectual originality. In addition, although SPRU had undertaken from the start a wide range of teaching across different schools in the University, it had not formally 'owned' and managed any teaching programmes. However, early in 1982, it was agreed that SPRU would take formal responsibility for the bulk of its post-graduate teaching. Intended to have a positive effect on SPRU's overall funding, this would also require closer integration into university systems of management that were primarily teaching-driven rather than more flexibly research-driven as they were in SPRU. At the same time, the latent tensions within SPRU between 'teaching' and 'research' faculty threatened to become more divisive.

There were also external challenges in Geoff's in-tray. Within the UK the Unit faced the high tide of Thatcherism that brought with it a scorn for social science (apart from narrowly bounded areas of supply-side economics) along with a deep scepticism about the role of public policy. A Thatcher government had already taken office in 1979, and it seemed unlikely that this would have much interest in either funding or even listening to SPRU's kind of research. At the same time, the neoliberal capture of research and policy agendas in international organisations like the World Bank also threatened the funding and use of SPRU research, not least in areas concerned with science and technology policy in developing countries.

Geoff's contribution to overcoming these challenges became evident by the end of his directorship in 1992: the Unit's total income had not fallen since 1983-4, but had been sustained in real terms - though roughly doubling by inflation; SPRU was much more embedded in the University and was nearly twice as large; more than 400 students had passed through its new graduate teaching programmes since 1982, and the number and diversity of DPhil students alone had grown to nearly 90 from 25 countries. Particularly important was the emergence or strengthening of new directions in research (e.g. in connection with environmental sustainability), while frontier-quality research had been sustained or renewed in several areas. As a reflection of these developments, SPRU was awarded the highest rating (5) in the Research Assessment Exercise carried out by the Higher Education Funding Council for England in 1992.



In addition to this reflection on his SPRU directorship, Geoff's wider contribution had already been recognised in the Queen's birthday honours of 1990 by an award of the CBE for services to science.

A valued international consultant and adviser

These organisational and personal awards were not a cue for Geoff to wind down his professional activities. After he left SPRU, he plunged into a new round of work that involved his participation in a bewildering array of boards, trusts, advisory bodies and policy review missions. Selective comments about only two sets of activities can perhaps provide a flavour of these contributions.

The first set involved his participation in high-level UN bodies concerned with science, technology and development. This had already started when he was a member of the UN Advisory Committee on Science and Technology for Development between 1986 and 1992, serving as Chairman from 1990 to 1992 – the first British scientist to be elected to the post. He subsequently became the UK delegate to the UN Commission on Science and Technology for Development from 1993 and was Chair of that body's Working Group on Gender and Science and Technology for Development (1993-95). When I recently had to give a presentation on the Transformative Innovation Policy Consortium at the same UN Commission, I was informed by one delegate that expectations were high because I had to live up to the grand legacy of Geoff.

His later UN work led to a sequence of activities concerned with changing the widespread gender imbalances in scientific and technological activities: the evaluation of UNESCO's work on science and gender (2010); involvement in a research project undertaken by the Council of Canadian Academies' Expert Panel on Women in University Research, leading to an influential report in 2012; contributions to the proceedings of the Gender Advisory Committee of the Academy of Sciences of the Developing World (2009-2017); and contributing to the proceedings of the North and Latin America Gender Summit (2016). He also made the connection with SPRU again; in April 2015, he was instrumental in setting up a workshop at Sussex in partnership with GenderInSITE (an international campaign to raise awareness among decision-makers on the gender and science, innovation, technology and engineering (SITE) dimensions of international development) on International Approaches to Support Gender Equality in Research Careers for postdoctoral research staff, early career academic faculty and final year PhDs.



The second set of activities arose when Geoff moved to Canada to act as Science Advisor to the President of IDRC from 1992 to 1996. This involved contributing to a number of country reviews of science and technology policy. The first of these took place in South Africa in 1993. It was designed to assist the South African science and technology institutions to make the transition to democracy, and much of the process consisted of mediating discussions between the National Party government and the ANC, with the direct involvement of Nelson Mandela. The second country review mission was in China in 1994. It focused on the stream of radical reforms to the Chinese science and technology

system that begun ten years earlier. It involved a long series of interactions between Geoff and various Ministers and Vice Ministers of Science and Technology in China.

About a decade later, SPRU researchers, along with colleagues at the Institute of Development Studies, set up a China Seminar series and the wheel turned a full circle: nearly 50 years after he had first brought his research about China into the fledgling SPRU, Geoff was asked to kick off the series by contributing the historical insights from his research and consultancy over all those years (see link to the video, below).

[Read *Fifty years of Science and Technology in China: A Personal Account* by Geoff Oldham \[PDF 433.30KB\]](#)

During the last decades of his life, Geoff travelled the world as he had always done, exploring new ideas, pioneering new approaches. Geoff served as SPRU's Deputy Director until 1982, then as Director until 1992. Through those 26 years, and then for nearly 25 more in supposed 'retirement', he focused his considerable professional energies on policy issues concerned with the roles of science and technology in the developing countries of Asia, Africa and Latin America. The SPRU History project captured a number of his accomplishments, we talked to him as he came to SPRU to participate in seminars and for other meetings. He enjoyed reminiscing about his encounters, experiences and projects. In SPRU we are all standing on the shoulders of Geoff, the connections he made, and respect he had won. It was easy to see why: because of his vision, his deep belief in working with genuine symmetrical partnerships, and his generosity, warmth and kindness. I will miss his stories, inspiration and voice.

On behalf of all his colleagues and friends both at SPRU and in Geoff's extensive networks around the globe, we would like to offer our deepest sympathy to his wife, Brenda, and all their children, grandchildren and great-grandchildren.

Professor Johan Schot, SPRU Director, University of Sussex

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