

## Remembering Professor Peter Senker: A Pioneer in Science Policy and Technological Innovation



For over three decades, Peter Senker (1934 -2024) was a cornerstone of the Science Policy Research Unit (SPRU). From his early days at SPRU to his later years as a Visiting Professor, Peter Senker's work on technological change and its societal impacts has been influential. SPRU colleagues Tim Brady, Charlotte Huggett, Martin Bell, and Ben Martin, remember and celebrate his commitment to interdisciplinary research and mentorship, which has shaped the careers of many in the field of science policy.

For much of SPRU's first 25 years, Peter Senker was a key figure in the Unit's rise to prominence. Founded in 1966 by Christopher Freeman, one of SPRU's strengths in those early years was its group structure, with 30 or so staff being formed into about five or six main groups including the 'Innovation Group', the 'Energy Group', the 'Developing Countries Group' and the 'Military Technology and Arms Limitation (MTAL) Group'. Peter led the 'Technology and Skills Group'. He was a constant source of advice, inspiration and, not least, good humour for members of that group but also for many others who worked at SPRU during those early years.

### Early Contributions to SPRU

Peter joined SPRU in 1972 to work on technological change, manpower, skills and training in a succession of projects for the Engineering Industry Training Board (EITB), taking over that area of work from Martin Bell and developing its focus in a slightly different direction. In the very early stages, Chris Freeman (who knew Muriel Venning, at that time Head of Research, Planning and Statistics of the EITB) was also involved in these projects. Like many of the SPRU pioneers, Peter

had an undergraduate degree (in his case an MA from Cambridge) but did not have a PhD. What he did possess, however, was extensive work experience mainly in the electronics industry (in Mullard), working in industrial market research and forecasting. This was to prove invaluable to the Skills Group and SPRU more generally. He had also spent a year studying environmental policy as an IBM Fellow at Manchester Business School in 1971 before joining SPRU the following year.

One of the key issues the SPRU Skills Group research addressed was how the introduction of new technology would affect skill requirements. The period coincided with the development of computer numerically controlled (CNC) machine tools and automated equipment across a range of industries, and consequent worries that existing skills were inadequate to cope with this change. Many firms were reluctant to pay for training and education so in the mid-1960s, the Government created a set of Industrial Training Boards in various sectors funded by the Government and by a levy on firms. Peter secured research funding from a number of these Boards – the Engineering Industry Training Board, the Paper and Paper Products Industry Training Board, and the Construction Industry Training Board. Later the Manpower Services Commission and the Department of Employment were to provide alternative sources of research funding.

### **Mentorship and influence**

Peter recruited and mentored many young researchers who went on to pursue successful academic or policy careers, including Erik Arnold (the founder of Technopolis, the international consultancy group), Tim Brady, David Gann (now a Pro-Vice-Chancellor at the University of Oxford), John Phillimore, Andrew Davies, Flis Henwood, Ruth Woodfield and Paul Simmonds. They all owe him a considerable debt. The ‘recruitment process’ for Tim Brady was perhaps not atypical. In 1980 Peter needed someone to cover the maternity leave of one of his researchers on a project funded by EITB. Howie Rush (another early SPRU pioneer) who had known Tim since 1972, and who was then working at NEDO (the National and Economic Development Office), recommended Tim, and Peter arranged an interview with him in a local pub. Tim had no previous experience of academic research and had been working in the construction industry since leaving university. Presumably Peter found out Tim could talk to strangers and could hold his own in a conversation and considered that sufficient to appoint him as a Research Officer on a three-month contract. Peter made it very clear at the outset that this was a temporary appointment with no guarantee of further contracts. As it turned out, that three-month temporary appointment led to eleven years of employment for Tim at SPRU working in one of the world’s leading research groups.

Peter was an inspirational mentor. He taught his colleagues the principles of analysing interview data, recommended the appropriate literature to read to help guide the research and, most importantly, guided them on how to write up the research findings in different forms. Tim Brady recalls one time when he was trying to make sense of the findings about how changes in technology affected maintenance skills and how he was struggling to categorise the different approaches he and his colleagues had unearthed. Peter recommended reading Joan Woodward’s classic research on Organisation Theory and it soon became clear that categorising firms according to whether they were involved in unit, batch, mass or continuous process production methods provided the key to analysing the data. Peter was also a great fan of Guy Routh, an economist at the University of Sussex, and promoted his book, *The Origin of Economic Ideas*, to anyone who would listen. His review of economists who didn’t ‘make it’ offers alternative economic theories which seem much more useful to deal with some of the issues we face today related to inequality, concentration of wealth, environmental issues and climate change.

### **'Red Pen' Editor**

Peter was also instrumental in developing the writing skills of those in his group, including his secretary, who published a well-received paper on the inadequacies of SPRU's introduction of word processors. At the time much of the emphasis was on publishing reports for the sponsors rather than writing articles in academic journals. Peter was a master of the 'red pen' technique of editing – teaching one how to write clearly and succinctly to make sure the reports were cogent, comprehensive and easily understood by a non-academic audience. He also encouraged his colleagues to write articles about their research in the industry trade magazine, *The Engineer*, for which they were paid a fee which was a helpful addition to the meagre salary of a Research Officer. Some of these former colleagues have subsequently used a similar 'red pen' approach with their students to help them write up their research findings. Most importantly, Peter taught colleagues how to write funding proposals – a skill which was crucial to contract researchers at SPRU and elsewhere as their continued employment depended on attracting external research funds. (One fond memory of those times, in the days before that sort of thing became frowned upon, was that the Skills Group used to celebrate successful grant applications with a bottle of champagne in the office!)

### **Collaboration and consultancy**

Peter was also a great collaborator. The Skills Group had very productive relationships with researchers such as John Bessant, Stuart MacDonald, Robin Williams and James Fleck, who worked at the TPU (Technology Policy Unit) at Aston University. Peter also developed close relationships with other researchers at Sussex such as Alan Cawson, Andrew Sayer and Kevin Morgan from the School of Social Sciences, with Raphie Kaplinsky at the Institute for Development Studies, Ivor Goodson of The Schools Unit, and Richard Pearson and others from The Institute of Manpower Studies, which was then located in the Mantell Building alongside SPRU.

From the mid-1990s to 2006, Peter was Chairman of IPRA Limited (a small consultancy group), leading many research and consultancy projects. Clients included the Construction Industry Board, the Construction Industry Training Board, the Construction Industry Council, the Department of the Environment, the Department of Trade and Industry, the Employment Department, and Training and Enterprise Councils.

### **Visiting Professor**

After leaving SPRU, Peter became a Visiting Professor at the Department of Sociology, Social Enterprise and Innovation Studies at the University of East London (1995-2018), where his principal research interests were in the relationships between society, the economy, technology and inequality, in both developed and developing economies. With his support, his colleagues there published two books. More recently, Peter was involved in evaluating policies designed to reduce environmental damage. He continued to publish extensively on a wide range of issues including technology and inequality, vocational education and training, and social care and excessive bureaucracy (see <https://petersenker.org.uk/publications-2/> for a list of his more recent publications). Peter's healthy dislike of bureaucracy, which was very apparent during his time in SPRU, was evident to the end!

Already in his late 80s, Peter returned to SPRU in February 2020 and again in October 2021 to give lunchtime seminars; in 2020, he spoke of how the expansion of electric car production was likely to exacerbate rather than reduce global warming.

Peter was also a member of the Editorial Board of *Prometheus*, the journal devoted to 'critical studies in innovation', right to the end of his life. After Tim visited him last Christmas, Peter emailed to ask Tim to review a paper for the journal reporting on a pilot study of the use of AI-generated text to inject humour into economics teaching as a means of improving the learning experience. Peter remained deeply interested in new technology and its impact on learning and education.

### **Peter's legacy at SPRU**

The fact that SPRU – a relatively small and specialised interdisciplinary research unit set up to address what was then called 'science policy' – is still in existence and indeed thriving after nearly 60 years is something of a mystery, as well as a source of considerable pride. Its continuing existence and success indicate that it was created with firm foundations. Those include in particular a shared sense of values – a determination to address real-world problems, to bring in relevant concepts, analytical frameworks, theories and methodologies from different disciplines in a truly interdisciplinary manner to analyse and understand those problems, to adopt an international perspective, and to speak truth unto power and stand firm to one's principles, but also to have some fun along the way – all to ensure that science, technology and innovation enable us to make the world a better place. Like other SPRU pioneers, Peter Senker truly embodied those values and helped foster them in others. He will be greatly missed by former SPRU colleagues and many others who worked with him over the years.

Peter was married twice, first to Linda Cree, who passed away in 1975. He married Jacqueline Goulston in 1979, who later worked at SPRU for many years (Dr Jacqueline Senker). He is survived by Jacqueline and his three children and three stepchildren.

- Professor Peter Senker, political economist, born 1934; died 2024