

ISSTI

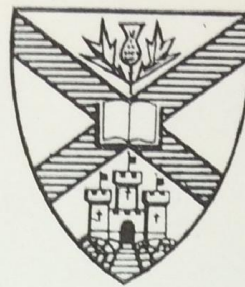
THE INSTITUTE FOR THE
STUDY OF SCIENCE
TECHNOLOGY AND INNOVATION
www.issti.ed.ac.uk

newsletter

SSU50 Edition | June 2016



David Edge



University of Edinburgh

Welcome to the SSU50 special edition of the ISSTI Newsletter to celebrate the 50th Anniversary of the establishment of the Science Studies Unit, which also contains details of our programme of activities in June 2016.

Science Studies Unit First Report 1966-69

Welcome to SSU50	2
David Edge's Proposal for the SSU	3
SSU50 June Programme	4

SSU

Science Studies Unit
50th Anniversary



Message by the Head of Science, Technology and Innovation Subject Group Prof Catherine Lyall

The Science Studies Unit (SSU), forerunner of the present Science, Technology and Innovation Studies (STIS) subject group, was established in 1966, initially with the aim of teaching science and engineering undergraduates about the social impact of science.

In the event, under the inspired leadership of its first Director, the late David Edge, the staff of the Unit did much more than that, pioneering a fundamentally sociological approach to understanding science and its place in society, which was instrumental in the creation of the now-thriving interdisciplinary field of science, technology and innovation studies. Now celebrating its fiftieth anniversary, the “Edinburgh School”, as it came to be known, is still a powerhouse of research and teaching in this important international field.

A series of inspired appointments by Edge – sociologist Barry Barnes, philosopher David Bloor, and historians Gary Werskey and Steven Shapin – deepened this educational remit, turning the Unit into an exciting site of scholarly research on science, especially in the sociology of scientific knowledge.

STIS continues to support the Unit’s original teaching goals with many popular courses aimed at broadening the education of our science undergraduates. The spirit of cross-disciplinary and reflective learning fostered by the SSU is very much in evidence as we launch, next semester, our new *Responsible Researcher* course for Honours students in science and engineering.

This week’s festival of events to mark the 50th anniversary of the founding of the Science Studies Unit allows us to celebrate past achievements and look forward to the continuing growth of STIS. It allows us to applaud the work of our founders and alumni, many of whom we are looking forward to welcoming back to Edinburgh for the events this week. And, finally, it allows us to acknowledge the excellent work of our present day graduate students.

Our students have been especially active in helping us to organise these events and I would particularly like to thank: Matjaz Vidmar, Meritxell Ramirez-i-Olle, Chihwei Yeh, Valentina Marcheselli, Justyna Bandola-Gill, Alvaro Saez, Thokozani Kamwendo, Hyojung Sun and Daniel Thorpe. Many others have helped in other ways. Staff colleagues Robin Williams, Steve Yearley, Sarah Parry, Miguel Garcia Sancho, Lawrence Dritsas, Neil Tarrant, Jamie Smith, Geraldine Debar and Anne Valentine have all played key roles.

I would like to welcome you to Edinburgh and wish you all a successful week. We hope to see you back again in November when we have further events planned to coincide with the University Graduations where we honour two leaders in our field, Professor Helga Nowotny and Professor Bruno Latour.

Catherine Lyall
Professor of Science and Public Policy

This is the Newsletter of the Institute for the Study of Science, Technology and Innovation (www.issti.ed.ac.uk) This interdisciplinary network, founded in 2000 by Robin Williams, brings together colleagues from across the University studying science, technology and innovation and is hosted by the Science, Technology and Innovation Studies (STIS) Subject Group,

Science, Technology and Innovation Studies (STIS) Subject Group at the University of Edinburgh is internationally recognised as a leading centre of research, teaching and knowledge exchange in this important interdisciplinary field. With more than 40 staff, STIS enjoys outstanding ratings for its scholarly publications and impact, sustains research intensity with a high volume of external research income, and excels in teaching through a suite of undergraduate and postgraduate courses and programmes. For more information, see our website: www.stis.ed.ac.uk.

David Edge's Proposal for the SSU

1 - In May 1965, a document titled 'Proposed New Department of Science Studies at Edinburgh University' and written by David Edge, was circulated to members of the Committee on Providing a Broader Basis for the Science Degree. This document was based in part on an outline scheme for such a department prepared by Professor Conrad Hal Waddington, then Edinburgh's Chair of Animal Genetics. Edge produced his proposal in early 1965 as contribution to discussions around creating the department, hiring Edge to be its first director and seeking financial support from the Wolfson Foundation. At this time Edge was in charge of science on the BBC Third Programme (forerunner of BBC Radio Three).

Proposed New Department of Science Studies at Edinburgh University

by

Dr. David Edge, B.B.C.

It is proposed to found a new Department of Science Studies at Edinburgh University, with the overall aim of focussing attention, by teaching and research, on those areas where scientific activities overlap with the concerns of human societies - with particular reference to practical concerns (such as sociological change and economic growth) and matters of 'science policy'.

Aims of the Undergraduate Course.

The basic aim of the teaching course could be summarised thus:-

(a) to remedy an ignorance (sometimes a wilful ignorance) among science graduates of major aspects of civilisation, such as literature, art, religion and philosophy, and of the 'strategic issues' of science, and (b) to bring out the ways in which the development of science has influenced, and is influencing, various aspects of human life, with particular emphasis on the strategic aspects of practical affairs, rather more than the philosophical, artistic or religious fields.

-3-

Syllabus.

The course will draw teaching material from the following general areas:-

- (a) Sociological results of scientific advance.
The population explosion, control of disease and pests, transport, urbanisation, power, leisure, etc.
- (b) The organisation of scientific activities.
The finance of research, UGC, Ministries of Science and Technology, industrial and defence research establishments, CSP, International Organisations, UN agencies, Pugwash, etc.
- (c) The organisation of British industrial economy.
Some economic ideas, G.N.P., growth of industry, structures of large firms, the Stock Exchange, etc.
- (d) History and Philosophy of Science.
The sources of scientific ideas, and their evolution, and the history of technology.
- (e) Scientific and Religious Thought.
History of conflict, and present development in modern theology.
- (f) Science and Culture.
The influence of scientific attitudes and ideas on literature, drama and art.
- (g) Science and the Democratic Process.
The necessity of widespread scientific understanding in a democracy, the problems and possibilities of communication via the mass media, an analysis of particular decisions (e.g. fluoridation).

Teaching Methods.

The course will proceed, in the main, by studying individual cases in depth, rather than by giving a broad but shallow overall coverage. For instance, the developme

2 - Edge's proposed syllabus comprises the themes and topics he envisaged the new course would entail. His proposal described a three-year structure. Year 1 would be unexamined, include many 'star' lecturers and be an 'appetite-whetter'. Year 2 would be a full-year course covering items a, b, and c. Finally year 3 would see selected students pursue special studies and write a thesis.

The Director's research interests centre round the topic of the 'communication of science', a neglected field in this country, but successfully broached (by Schramm, Tannenbaum, et al.) in America. There is a wide range of problems still untouched:-

- (i) Philosophical problems associated with the notion of 'understanding science'.
- (ii) The problem of defining the 'level of understanding' of science required of members of a democratic society, if they are to reach reasonable decisions. (The fluoridation debate is an excellent example awaiting documentation and analysis.)
- (iii) A discussion of the level of 'scientific understanding' reached by mass secondary education, and of whether the mass media can significantly improve this - or need to. This argument should be quite pragmatic, and related directly to (b).
- (iv) Research into where people actually get their scientific information from. (This is known for America.)
- (v) Psychological research into the communication process itself, the effects of style and presentation, the problem of 'conceptual illusion', etc. Professor Kay and Dr. Warr, at Sheffield, have relevant research in hand in this general area.

The Department plans to have a working library, and

3 - Research was vital, Edge argued, to 'ensure a high quality of enthusiastic teaching' from staff members. This list comprises the topics Edge considered as yet 'untouched' in 1965.

SSU50 June Programme



In June 2016 STIS is organising the first cluster in a series of events and special projects to honour this crucial event in the history of our discipline, which are running throughout this year (see: <http://www.stis.ed.ac.uk/ssu50>).

The 2016 ISSTI Retreat (14th and 15th June 2016; 9am, the Edinburgh Centre for Carbon Innovation) with a special focus on taking stock of the now intertwined studies of science, technology and innovation.

Highlights:

- Paolo Quattrone - *In search of value: an anecdotal history of the representation of value in accounting*
- Philip Grant – *A Capital Error: Why the Concept of ‘Capital’ Is No Longer Valuable?*
- Jan Webb – *On (Not) Assembling Value in Energy Markets: heat networks and British cities*
- Neil Pollock – *Prosthetic Markets: How category makers, not just innovators, shape the digital economy*
- Niki Vermeulen – *Counting Quality*
- Stuart Anderson – *Algorithm Society*
- Karen Gregory – *From Digital Labor to Surveillance Capitalism*
- Hadi Mehrpouya, Bettina Nissen - *Happily ever after (bitcoin): Negotiating roles and values in short-term partnerships by joining other attendees in bitcoin matrimony.*
- Arie Rip - *Sites of a Grand Societal Experiment*
- Xiaobai Shen - *Imitation at the “optical point” - building an intellectual property regime in China*
- *STS as Travelling Theory: Asia as Method* (Francesca Bray, Brian Wynne, John Law)

ISSTI Retreat Public Lecture (15th June, 1.30pm, Edinburgh Business School Auditorium) by Prof Harry Collins: Sociology of scientific knowledge and gravitational waves

Following the much-celebrated detection of gravitational radiation by LIGO (The Laser Interferometer Gravitational-Wave Observatory), announced earlier this year, Harry Collins will reflect on his near half-century of fieldwork on the gravitational wave community and assess the closure of the gravity-wave story and its implications for the sociology of scientific knowledge.

SSU50 Gala (15th June, 3pm, Edinburgh Business School Auditorium), with presentations by Barry Barnes, David Bloor and Brian Wynne and informal contributions from many former SSU members including Wendy Falkner, Anne Kerr, John Law, Donald MacKenzie and Andrew Pickering. Followed by drinks reception.

SSU50 Workshop – Practising the Reflexivity Tenet (16th and 17th June, 9am, the Edinburgh Centre for Carbon Innovation) What better way to celebrate the 50th anniversary of the creation of the SSU than by applying the reflexivity tenet to the tradition of knowledge that its members initiated?

The programme includes:

- *Historiographies of the SSU*
- *Presentation of the book project “Talking STS”*
- *Brainstorming and Q&A about STS mythologies*
- *Walking tour about the history of science in Edinburgh and the SSU*
- *SSU Alumni reunion*
- *Geographies of STS*
- *Naming STS*
- *Walking research lectures*

STIS Cabaret (17th June, 7pm, Underground, Teviot) will round off this cluster of SSU50 celebration events. A group of Edinburgh STIS students and scholars will do a fun and artistic take about their research, compered / marshalled by a professional stand-up comedian.

We are very grateful for the support from the School of Social and Political Science and the BSHS.