
SATSU

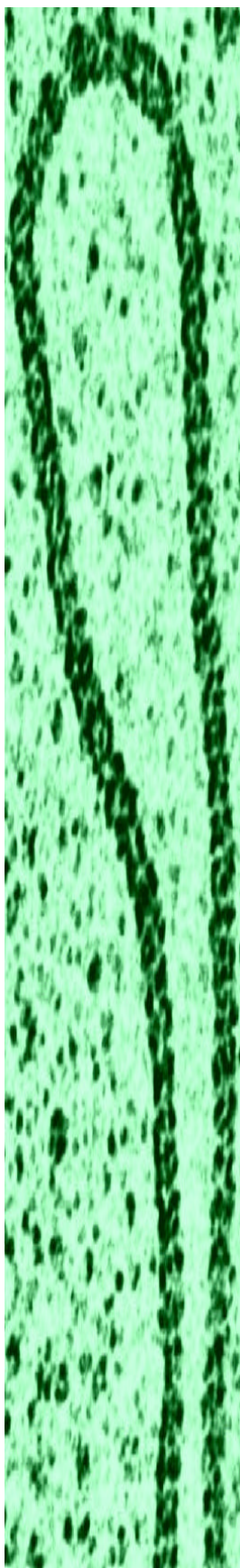
Science & Technology Studies Unit

Activities during
2002

Sociology of Science &
Technology Policy

Cultural Dynamics of
Scientific & Technological
Change

Identity & Risk
Understandings



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Activities During 2002

The Science and Technology Studies Unit specialises in understanding the complex dynamics of change in contemporary S&T networks. Conceptually, SATSU has sought to explore the socio-technical co-construction of knowledge, artefacts and public policy.

The Unit was initially established, in the late 1980s, to critique public/private links between university and industrial actors. In subsequent years, SATSU's portfolio has expanded considerably to encompass a widening field of critique applied to technology and science.

This document provides a brief overview of SATSU's work during 2002

2002



Director's Introduction

The year 2002 saw the Unit continue to build on its three broad areas of work, as we have summarised below. As most of these projects are still underway, we have deferred detailed discussion of their findings until our next SATSU *Review* to be published at the end of 2003. Even so, we provide a brief comment on each of the projects to indicate the focus and direction of their work.

The year also saw some notable developments and events outside of our formal research activity. First, in collaboration with the Department of Sociology we hosted and organised the biennial EASST conference (www.york.ac.uk/org/satsu/easst2002) whose theme was *Responsibility under Uncertainty: Science, Technology and Accountability*. Over 500 participants (of whom 140 were postgraduates) attended from 31 countries, and 371 papers were given. The Conference was opened by an introductory address given by Lord May, President of the UK Royal Society and the opening Plenary paper by Dorothy Nelkin from New York University. Accountability was seen to have many forms. Papers throughout the conference examined its 'performance' within scientific discourse, its relation to political narratives and different regimes, its articulation through public engagement, and the social constitution of the design, value and meaning of technology through accountability to and the accounting of the user. Making an account and being accountable to others interweave here, indicating the dual role of accountability as both explanatory and normative.

Core Research Areas

SATSU's key intellectual strengths lie in three related fields of enquiry, each of which serves as a basis of empirical research activity:

Sociology of Science & Technology Policy

SATSU has been able to occupy a position that combines both critiques of and for policy formation. That is, our research is intended to actively contribute to the intellectual environment within which decision-making takes place in a wide variety of contexts. During 2002, a number of activities have illustrated SATSU's continued critical attention to the changing shape and form of Science and Technology Policy. They include:

A Systematic Review of Cycling Research Findings and Needs: Helping to Implement the National Cycling Strategy. Project funded by the HM Treasury as part of its Whitehall Summer Placement scheme. Conducted in the Department for Transport, Summer 2002. Status: Completed. Contact: Paul Rosen

Consultancy to the EU Commission's Foresight for Transport exercise in Austria, June 2002. Participating as panel expert in the 'Time politics, Foresight and Transport' panel chaired by Prof. Barbara Adam. Status: Completed. Contact: Nik Brown

Another important development was the Unit's successful designation as a research training centre within the European Commission's Marie Curie Programme. We have already begun to recruit a number of excellent doctoral students from across Europe: SATSU offers fellows the opportunity to work alongside experienced scholars who are making a substantial contribution to knowledge of the social implications of new genetics. Our focus is on three issues: the Social Context of Human Genetics; Risk and the Politics of Nonhuman Transgenics and Cloning; and the Social Shaping of Industrial Activity and Innovation in the New Genetics.

Outside of our formal research work we have also undertaken some national and international consultancies that have been funded by both public and private sectors. We plan to build on this latter work – relating to the culture and consumption of technologies - in the future, through modelling this process in different settings.

Looking to the future, the Unit has during the latter part of 2002 been party to various proposals made by Networks of Excellence to the EC. We hope that by the next time we publish our *Review* we will be able to report on new work underway in relation to one or more of these.

Prof. Andrew Webster

Cultural Dynamics of Scientific and Technological Change

Determining the patterns and dynamics of change represents an increasingly important starting point for a more constructive engagement with scientific and technical innovation. SATSU's work has focussed on providing a means of key features of emerging and future developments and can be demonstrated through the following projects:

Ethnography of Digital Photography in Europe. Consultancy for Eastman Kodak as part of a global ethnography of digital camera use. Status: Completed. Contact: Paul Rosen

Valuing the National Cycle Network: Travel Behaviour, Transport Infrastructure and Local Communities (funded by the University of York's Innovation and Research Priming Fund). Status: Current. Contact: Paul Rosen

A historical study of the wheelchair. UK ESRC funded (L218 252007). Status: continuing. Contact: Brian Woods

The clinical and commercial development of pharmacogenetics. Wellcome Trust funded. Status: continuing. Contact: Graham Lewis

Identity and Risk Understandings

Underpinning much of SATSU's work are analytical questions about the management and negotiation of risk and endangerment in a number of empirical contexts including biomedical and social science research. In particular, a number of our projects explore a whole range of lay and expert identity formations in a number of risk debates:

Xenotransplantation: Risk identities and the human/nonhuman interface (UK ESRC grant award: L218 25 2044). Status: Continuing. Contact: Nik Brown

A Review of Ethics and Social Science Research, by Graham Lewis, Nik Brown, Steve Holland, Andrew Webster (Nov 2002) Consultancy commissioned by the Economic and Social Research Council. Status: Completed. Contact: Graham Lewis.

Activities during 2002

Publications

Books

Anne Kerr, *Genetic Politics: From Eugenics to Genome* (New Clarion Press) 2002 (with Tom Shakespeare)

Paul Rosen, *Framing Production: Technology, Culture & Change in the British Bicycle Industry.* (Cambridge, MA: MIT Press) 2002

Chapters

Richard Tutton, *Culture, society and the new human genetics, Year's Work in Critical and Cultural Theory*, (K. McGowan (ed), Blackwell: Oxford) 2002

Paul Rosen, 'Pro-car or anti-car? "Environment", "economy" and "liberty" in UK transport debates, in G Lyons & K Chatterjee (eds), *Transport Lessons from the Fuel Tax Protests of 2000.* (London: Ashgate) 2002

Paul Rosen, Towards sustainable & democratic urban transport: constructivism, planning and policy, in A Jamison & H Rohrer (eds), *Technology Studies & Sustainable Development.* (Munich: Profile) 2002

Journal articles

Brian Woods and Nick Watson, Missing Histories: The Development of the Wheelchair during the 20th Century, *BON* Issue 26: 50 (2002)

Nik Brown & Mike Michael, From Authority to Authenticity: Governance, Transparency and Biotechnology, *Health, Risk and Society*, 4, 3, 259-272, (2002)

Graham Lewis (with John Abraham) Citizenship, Medical Expertise and the Capitalist Regulatory State in Europe, *Sociology*, 36, 1, 67-88, (2002)

Paul Rosen, Innovate or die, *Velo Vision magazine*, 5, pp.14-5, March (2002)

Richard Tutton, Gift relationships in genetics research, *Science as Culture* 11, 4, 524-542 (2002)

Andrew Webster, Innovative health technologies and the social: redefining health, medicine and the body *Current Sociology*, 50, 3, 443-457 (2002)

Andrew Webster, Risk and Innovative Health Technologies: Calculation, Interpretation and Regulation, (in A. Webster (ed.) Special Issue of *Health Risk and Society*, 4, 3 (November 2002)

Conference Papers and Presentations

Nik Brown and Mike Michael, *Transparency - the very idea*. From authority to authenticity, Keynote address at the Royal Society of Arts (Science, Citizenship and the Market), London, Sept 18, 2002

Nik Brown and Mike Michael, *The Sociology of expectations*, European Association for the Study of Science and Technology, University of York, Aug 2002

Mike Michael and Nik Brown, *From Authority to Authenticity in biotechnical governance*. European Association for the Study of Science and Technology, University of York, Aug 2002

Mike Michael and Nik Brown, *Being and Becoming in xenotransplantation: Health, Politics and the 'Parahuma'*. British Sociological Association conference, Reshaping the Social, 25-26 March, 2002

Anne Kerr, *Genetics and Citizenship: Exploring Transformations*, European Association for the Study of Science and Technology, University of York, Aug 2002

Anne Kerr, Invited paper at international conference Biotechnology between commerce and civil society, Kulturwissenschaftliches Institut, Essen, Germany, 5th-7th September 2002. *Genetics and Citizenship: Exploring Transformations* to be published in Ster, N (ed) Biotechnology between Commerce and Civil Society (Transaction Publishers, 2003)

Anne Kerr, Invited paper at 45th Symposium of the Society for the Study of Human Biology 'Ethics and Human Biology: Diversity, Difference and Deviance', London, 20th-22nd September 2002, *Sociologies and Bioethics of Genetics, Tensions and Potentials: The Case of Stem Cells*

Anne Kerr, Invited participant at international conference on *Science and Citizenship in a Global Context: Challenges from New Technologies*, IDS, University of Sussex, 12-13 December 2002

Yuwei Lin, 6-9 Jun. 2002 *The pan-hacker culture and unconventional software innovation: exploring the socio-technical dimensions of Linux*. Linux Tag conference, Karlsruhe, Germany

Yuwei Lin. 31 Jul. - 3 Aug. 2002, *The social shaping of software: a case study of Linux*. European Association for Studies of Science and Technology, biannual conference, University of York, UK

Richard Tutton, Anne Kerr and Sarah Cunningham-Burley (2002) *Exploring formations of genetic subjecthood*, paper presented at BSA Medical Sociology Annual Conference, University of York, 27-29 September

Andrew Webster and Graham Lewis presented a paper: *The implications of pharmacogenetics for clinical trials*, at the Medical Research Council Clinical Trials Unit, London on November 18. The paper, part of the on-going project on the clinical and commercial development of pharmacogenetics, identified a number of significant changes likely in the way trials are managed and evaluated as a result of pharmacogenetics techniques.

Andrew Webster, *The IHT Programme: implications for health policy*, RISTEX Workshop, Tokyo, Japan, February 2002

Andrew Webster, *Innovative health technologies and evaluation*, Health Technology Assessment International Conference, Oslo, March 2002 (Invited plenary speaker)

Andrew Webster, *The Commercial Exploitation of Knowledge: Towards an Institutional Convergence of Industry and Academia*, NISTEP International Symposium '02, New Articulation of Science and Technology System, Tokyo, Japan. 2002. Invited plenary speaker.

Andrew Webster, *Foresight as a Tool for the Management of Knowledge Flows*. Paper prepared for the STRATA CONSOLIDATING WORKSHOP, European Commission, Brussels, 22-23 April 2002

Andrew Webster, *Response to Prof. Remi Barre's 'Foresight and Their Themes'*, Paper presented at The Role of Foresight in the Selection of Research Priorities hosted by the Spanish Ministry of Science and Technology, May 2002

Andrew Webster, *Perspectives on Health Technology Assessment: A Sociological Response*, Workshop on HTA, (sponsored by UK DoH, NICE and ESRC), June 21, LSE London. 2002

Andrew Webster, *The Commodification of Science*, EASST 2002 Conference, York, July 31-Aug 4 2002, Invited sub-plenary speaker.

Brian Woods and Nick Watson, *Wheelchair innovation under state control: a historical glance*, Centre of Rehabilitation Engineering, Kings College London Conference, 'Recent Advances in Assistive Technology and Engineering,' Birmingham Botanical Gardens, 18-19 November 2002

Brian Woods, *A Concise History of the Wheelchair Under the British State*, The Society for the History of Technology, Annual Meeting, Delta Chelsea Hotel, Toronto, Canada, October 17-20 2002

Brian Woods and Nick Watson, *Towards a Sociology of the Wheelchair*, Invited Lecture at the School of Disability Studies, Ryerson University, Toronto, Canada, 17 October 2002

Brian Woods and Nick Watson, *Accountability, Wheelchair Design and the British State*, European Association for the Study of Science and Technology, 'Responsibility Under Uncertainty: Science, Technology and Accountability,' University of York, 31 July – 3 August 2002

Brian Woods and Nick Watson, *Towards a Sociology of the Wheelchair*, British Sociological Association Annual Conference, 'Reshaping the Social,' Leicester University, 25 – 27 March 2002

Ragna Zeiss, *Attention for surfacewater quality: the development of awareness of the pollution problem in the west of the Netherlands and the north of England*, Royal Dutch Chemical Organisation (KNCV), Ede, 10 January 2002.

Ragna Zeiss, *Water purity disenchanted? Moral and symbolic purity of water in periods of deterioration of physical purity*. European Conference of the

Research Grants and Funding

European Digital Ethnography study (new):

Paul Rosen secured for SATSU a consultancy with the Eastman Kodak Company, New York, to conduct the European component of a global project examining the impacts of digital photography on the relationship between photography, family memory sharing and domestic life. Interviews were conducted in London, Paris and Berlin during summer 2002, with the analysis drawing on SATSU's past work on the consumption of information and communications technology. Contact: Paul Rosen.

Valuing the National Cycle Network (new):

Travel Behaviour, Transport Infrastructure and Local Communities. This pilot project is funded by the University of York's Innovation and Research Priming Fund. It examines the response of local communities to the provision of a new cycle route - the Spenn Valley Greenway in West Yorkshire. The project is being conducted in collaboration with the sustainable transport charity Sustrans, which developed the route as part of the National Cycle Network. Contact: Paul Rosen.

A Systematic Review of Cycling Research Findings and Needs (new):

Helping to Implement the National Cycling Strategy This project was one of six supported in 2002 as part of HM Treasury's Summer Placements in Whitehall scheme, designed to bring university researchers into government departments in order to conduct short policy-relevant research.

International Society for Literature and Science (Experimenting Arts and Sciences), Aarhus, 9 May 2002.

Ragna Zeiss, *Standards in Place, Colour out of Place: Affording an additional notion of deviance*, conference organised by the Centre for the History of Science, Technology and Medicine & Wellcome Unit for the History of Medicine (The Normal and the Abnormal: historical and cultural perspectives on norms and deviations), Manchester University, 10 July 2002.

Ragna Zeiss, *Standards, Networks, Affordances and Mobilisation in the context of drinking water quality*. Advocating a constructivist-realist approach in standards research, European Association for the Studies of Science and Technology, York, 1 August 2002.

Ragna Zeiss, *Drinking water quality standards, networks, Affordances and mobilisation*, SATSU seminar series, York, 15 October 2002.

The project involved constructing a database of research on cycling conducted since the early 1990s, and evaluating the degree to which this research has covered key research priorities identified through analysis of the National Cycling Strategy (NCS) and discussions with the NCS Board for England, and other key stakeholders. The database and final report can be accessed via the SATSU website at <http://www.york.ac.uk/org/satsu/Projects/whitehall/> Contact: Paul Rosen

Public Involvement, Environment and Health (new):

Evaluating GIS for Participation (UK ESRC project code: L144250045) This project applies a methodology for 'community mapping' (Geographical Information Systems for Participation - GIS-P) to three different case studies in order to determine its usefulness across a range of circumstances. GIS-P had previously been used successfully as a tool for bringing together public perceptions of environmental and risk issues with expert perspectives. The current project, funded under the UK ESRC's Science in Society programme, extends the use of GIS-P to air quality management, health and epidemiology, and land use planning. Contact: Paul Rosen.

A Review of Ethics and Social Science Research (new):

SATSU was commissioned by the UK ESRC to conduct a review of existing governance arrangements for social science research. The review was undertaken by Graham Lewis, Nik Brown, Steve Holland, Andrew Webster. The official report was delivered to the ESRC in Nov 2002. Contact: Graham Lewis

Marie Curie Training Site (continuing): SATSU successfully secured funding to become a European Commission Marie Curie Training site on 'New Genetics / New Society? Integrating Science, Society and Policy'. The award will run from 2001 to 2005 and is expected to fund up to 75 months worth of post graduate training and supervision. Main Contact: Nik Brown

Xenotransplantation: Risk Identities and the Human/Nonhuman Interface (continuing) (UK ESRC grant award: L218 25 2044). **Abstract:** The research examines how various risks associated with xenotransplantation (XTP – the use of nonhuman cells and organs in human transplantation) are negotiated between different constituencies, reflecting and mediating changing formulations of the human/nonhuman interface. Xenotransplants are illustrative of much wider social questions about the regulation of transspecies disease risks, animal experimentation and new biological innovation. Four analytical themes inform the research: the potentially disparate roles of disciplinary 'expert' discourse in such areas as immunology and virology; the implications of distinctions made between 'public' and 'expert'; the temporal dynamics of risk; and different in models of regulatory governance. Main Contact: Nik Brown. Collaborators: Dr Mike Michael (Goldsmith's College, UCL) Prof. Robin Weiss (Wohl Viron Centre, UCL).

A Historical Sociology of the Wheelchair (continuing) (UK ESRC grant award: L218 25 2007). **Abstract:** For millions of disabled people the single most important technological innovation of the 20th century has been the modern wheelchair. Yet, in

common with most technologies for disabled people, there has been little sociological analysis of this machine. Through a combination of oral accounts and archival sources this project will construct a historical sociology of the wheelchair in the 20th century. By bringing together disability studies and the sociology of science and technology, this study will examine the underlying processes in wheelchair design; explore the ways that the wheelchair has constructed and transformed self, identity and the meaning of disability; and investigate lay and expert contributions to wheelchair innovation. Our inquiry into how this machine has developed will make a valuable contribution to an understanding of the multidimensional nature of the relationship between the creators and users of technologies for disabled people. Main Contact: Brian Woods. Collaborators: Prof D MacKenzie and Mr N Watson (University of Edinburgh).

The Clinical and Commercial Development of Pharmacogenetics (continuing) (Wellcome Trust grant award) **Abstract:** This two-year project is focused on the use of pharmacogenetics in existing (licensed) drugs and clinical testing of new (unlicensed) drugs. The research is particularly interested in the social and ethical concerns to do with trialling and clinical practice, and patient and physician responses. It addresses the way firms anticipate and negotiate a route through which pharmacogenetics might be successfully deployed. Main Contacts: Graham Lewis and Andrew Webster. Collaborators: Paul Martin & Alison Pilnick, Andrew Smart (University of Nottingham).

BSA fieldwork grant (new): Yuwei Lin, 150 GBP from BSA for fieldwork

Research Graduates

Ragna Zeiss

Thesis title: *Standards and their (changing) environments. The mobility of drinking water quality standards.*

Yuwei Lin

Thesis title: *The hybrid identities of hackers in the information communication technologies (ICTs) innovation systems*

Contacting SATSU

SATSU welcomes collaboration with scholars of Science and Technology worldwide. Please feel free to visit the SATSU website for up to date information on our activities, or contact us directly using the addresses below.

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