University of York

SATSU Annual Review: 2014-2015







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SATSU's Focus

Established in 1988, SATSU is an internationally recognised social science research centre exploring the dynamics, practices, and possibilities of contemporary science and

technology. Its principal focus is on the biosciences, health, digital media and social networking including new forms of democratic governance, and the broader regulatory universe within which these are found. Our approach is to provide both theoretical and empirically-grounded critical analyses of these fields, and to undertake interdisciplinary and policy-relevant research informed by both conventional and novel methodological techniques.

SATSU currently has 14 members as well as Affiliated members based in the UK and overseas, and is directed by Professor Andrew Webster. The Unit collaborates with colleagues working in dedicated research centres in the UK and internationally within the field of science and technology studies, social media, and science and technology policy. We also welcome applications for PhD study through the new Science and Technology Studies PhD doctoral training programme.

Front cover: Google Pin, Gothenburg Front cover picture credit: ©Andrew Webster



Welcome

Director's Report

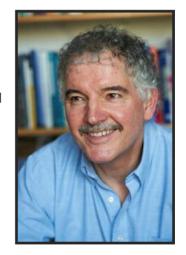
This past year has been marked by success in regard to grant proposals that are strongly interdisciplinary, and research collaborations in the UK and internationally. We have also been consolidating our recent STS networks here in York and through the ESRC Doctoral Training Centre.

Apart from the recent developments at UoY and national levels, future activity associated with new research interests and new research funding has both strengthened our existing portfolio and opened up new lines of inquiry. These relate to a move from an interest in social media to one focused more on informational systems, metrics and infrastructures, a strengthening of work on the bio-political/the bioeconomy, detailed analyses of patterns of clinical innovation, and expectations and discourses associated with (past, present and future) sciences. Equally importantly, we share a belief that our work should play both a critical and constructive role in debate both within and beyond the academy.

2014-15 also saw the completion of the COST Action on 'Bio-objects', and though the funding is now ended, members have been developing follow-up activities including joint publishing and research collaboration, which comes as no surprise, given the intellectual and collegial strength that the network developed during the Action. The concepts of bio-objectification and bio-identification have also been deployed in various papers and continue to provide a useful conceptual model for understanding the socio-technical framing and management of new forms of life. One of the initiatives led by network members Anna Lydia Svalastog and Srecko Gajovic is a new 'Knowledge Landscapes' research group.

Amanda Rees has secured a major research grant from the AHRC, 'Unsettling Science', which will start in October 2015 with a new post-doc post at York from January 2016. The project, which will be undertaken in collaboration with Professor Iwan Morus in Aberystwyth and former York colleague Lisa Garforth now based in Newcastle, focuses on science from the late 19th to late 20th centuries. It explores the ways in which science has been a source of 'unsettling' social change, opening up new possibilities, anticipations and hopes, at the same time as inspiring new conflicts, fears with unintended consequences. The project explores this through various literatures, including popular science periodicals and science fiction.

Darren Reed has also secured a major grant as Co-I in a largescale Digital Creativity Hub funded by the AHRC. It will focus on digital interaction and media convergence: digital games, interactive media and the rich space between. Partners include academic researchers, industry, government, the third sector and the general public, with a strong co-productionist dimension to the work. Research ideas will find a fast



route into the commercial space through close partnerships between the Hub and industry. One of SATSU's completing PhDs, Mark Johnson, has been appointed as postdoc on the new project which starts in October.

The recently established UoY STS Roundtable has met on a number of occasions this year. A session on innovation saw Lynn Baxter from the Management School give a presentation on 'Commercialising a Cancer Detection Technology' exploring how an SME maintains innovation momentum in the development of a medical device, and crucially how the developers sought to design the device such that it would be acceptable in clinical settings, what is seen as 'workable' in that context. The Roundtable's next meeting is focused on the metricisation of life/society and the emergence of data-driven algorithms for the evaluation and shaping of materiality, technologies and behaviour.

The STS ESRC DTC Pathway held a workshop on 'Responsible Research and Innovation', which provided an opportunity for PhD members to discuss their work and offer comment and critique on the meaning and use of the RRI concept. We were also delighted that Jack Stilgoe from the Department of Science Studies, UCL, gave a plenary presentation on the RRI theme and STS. In regard to RRI, SATSU will be involved in a project with Pascale Lehoux, University of Montreal, which examines the design, financing and commercialization of "responsible innovation" in health, determining affordable, relevant sustainable



Welcome

Director's Report Cont...

healthcare responding to the needs of a growing elderly population, supporting chronically ill patients and tackling health disparities.

We welcomed two Visiting Fellows to SATSU, Luca Marelli from the European Institute of Oncology, and Jane Vedel from Copenhagen Business School. We will be saying goodbye to Ros Williams who has secured a post-doc position at Warwick, though she will remain an affiliated member of the Unit. Brian Loader who has been a member for seven years is establishing a new Centre devoted to political youth culture and social media, so has stepped down from the Unit. I want to thank him for all the

support he has shown over the years and wish him every success in his new venture.

We were delighted that Dave Beer has been promoted to a Readership reflecting his prodigious publication output and wider contribution to the Department and University.

Finally, we are pleased that the University has recently announced a new Chair position in STS, and I look forward to welcoming and working with a new senior colleague and will report on this development next year.

News

Regulating Time: New Perspectives on Regulation, Law and Temporalities

This project is an AHRC funded research network which aims to create an interdisciplinary network of scholars whose work engages with the relationships between regulation and concepts of time. The network is co-ordinated by Emily Grabham at Kent Law School, in collaboration with Siân Beynon-Jones (SATSU). Through a series of workshops, culminating in a final conference and, ultimately, an edited book, it aims to make time central in the analysis of law and regulation. Questions to be explored through the network include:



- How do concepts of time shape regulation, and vice versa?
- How do concepts of time affect experiences of regulation, and vice versa?
- In what ways can interdisciplinary approaches to time improve our understanding of the relationship between time and regulation?
- What can academic research on regulation and time learn from stakeholders? How might collaborations between academics and stakeholders in this field engage with, and shape, wider public perspectives on time and regulation?

The network launched with a successful scoping event at Kent Law School in April 2015, which mapped scholarship in this field and provided a forum for planning subsequent workshops. The next event – a symposium on Time, Regulation and Technoscience - will be hosted by SATSU, and will take place on 20 January 2016. It will explore the specific temporal dynamics which emerge at the intersection between technoscience and regulatory processes, and the implications of these for lived experiences of law. For further information, please see the network website: http://www.kent.ac.uk/law/time/



News

AsSIST-UK Launch Event - 25 August, University of Sussex, Brighton

The new national association, AsSIST-UK, Association for Studies in Innovation, Science and Technology, whose purpose is primarily to establish much stronger links between and a national voice for the STIS community, was launched on 25 August at a meeting attended by over a 100 and hosted by SPRU at the University of Sussex. The meeting was an opportunity to reflect on the contribution that UK STIS has made and can make towards our understanding of key issues. The meeting was structured to allow extended discussion around these themes, and to agree the foundational principles of the association.

A full report on the meeting will appear on the SATSU website.

The main themes and discussion Chairs were:

- a) The process and practice of innovation (Chair: Anne-Marie Coles, Leader of the Sustainability, Technology & Innovation Research Group, University of Greenwich)
- b) Governance and policy for STI (Chair: Johan Schot, Director, SPRU, University of Sussex)c) Values and valuation (Chair: Vicky Singleton, Director of Women's Studies/Director of the Centre for Science Studies, University of Lancaster)



d) Engagement and civil society (Chair: Theo Papaioannou, Head of Development Policy and Practice, Open University)

The meeting concluded with a discussion of the strategic priorities for AsSIST-UK: this will address for example REF challenges; ESRC Doctoral Training Centres etc (Plenary);and a proposed Controversies in STIS book (with Routledge).

Brocher Foundation Meeting on Translational Medicine

Andrew Webster attended the meeting (May 17-19) on Translational Medicine held at the Brocher Foundation in Geneva, organised by Eric Aarden, Luca Marelli, Alessandro Blasimme and Dustin Holloway.

About 20 scholars and policy-makers from Europe and the US attended the meeting (see photo), including Sheila Jasanoff via a Skype connection. The meeting identified the drivers, limits and challenges of translational medicine and offered an STS critical analysis of its assumptions and directions of travel. Webster gave the closing plenary which offered a number of areas for future research relating to temporality and the socio-technical spaces in which TM is found, the use and mobilisation of adaptive licensing, the meaning of data and evidence associated with TM and how to understand the way TM restructures patient/clinic relations. The group plans a joint publication and follow up collaborative research activity.





News

New Projects in the pipeline

Earlier this year, we heard that the Unsettling Scientific Stories project (£607K) had been approved by the AHRC. Amanda Rees is P.I. on this three year venture into the history of the future, working with colleagues from Aberystwyth and Newcastle to examine the ways in which, during the long technological 20th century, popular and public culture drew (knowingly or otherwise) on the sciences in order to conceptualise and visualise their future prospects.

Animal Agents

Additionally, there is a new history of science journal in the works – titled BSHS THEMES, the intent is to produce an annual volume exploring a provocative and timely theme in the history of science. In a competitive tender, Amanda Rees's proposal on 'Animals and Agency' was accepted, and will appear as the second volume in this series. The volume draws together scholars from Europe, North America and Asia, and will explore the historiographical, political and pragmatic consequences of taking animal agency seriously – not just for the sciences, but also for the history of science.

UoY STS Roundtable

New Interdisciplinary Network on Science, Technology and Society – UoYSTS Network

This past academic year a group of colleagues from across 9 Departments (drawn from the three faculties) has met to explore shared research interests in the area of 'science, technology and society'. The purpose of the network is to establish new, and draw on existing, links and to create a shared intellectual and institutional resource for those working in the broad area of the interaction between science, technology and society. The initial roundtable sessions have been coordinated from within SATSU.

The SATSU 'Brown Bags' have been discontinued for now, as we devote our energies to this wider network.

We see the network being very timely. We saw calls for science to embrace and recognise the need for social science and other disciplines as in a 2015 Editorial in Nature which said: 'If you – [i.e. the

government] - want science to deliver for society, through commerce, government or philanthropy, you need to support a capacity to understand that society that is as deep as your capacity to understand the science. And your policy statements need to show that you believe in that necessity'.

The next round of the ESRC Doctoral Training Centres will include Calls for 'Centres for Doctoral Training' – at c20% of overall funding – which will not be discipline-based (as most current DTCs are) but be thematic and require cross-disciplinary work on themes that bridge the social/natural sciences and Arts/Humanities. One will, for example, focus on the 'bio-social', which is an interest shared by many in the group and more widely across the White Rose DTC.



The Roundtable will provide us with an opportunity to explore shared intellectual interests to address these needs and respond to the new research challenges agreed across the University as a whole, especially those relating to Health and Wellbeing, Risk, Evidence and Decision Making, and Technologies for the Future. We are hoping to hold a major Workshop next summer that will showcase our shared interests and expertise.



Time, Timing and Termination of Pregnancy: A Qualitative Analysis of Patients' and Health Professionals' Experiences Supported by Wellcome trust

In recent years, prescriptions concerning the meaning of time and abortion have been debated extensively in both the media and in Parliament. Such debates have been conducted without reference to the temporal experiences of those who are directly affected by the regulation of abortion, namely, women who decide to end their pregnancies. Accordingly, this project has drawn on qualitative interviews to explore women's experiences of abortion provision in England, with a particular focus on the temporal dimensions of these experiences. It also addressed the understandings of time that are enacted through abortion provision, via an analysis of health policy documents and interviews with health professionals working in this field.

The project, conducted by Siân Beynon-Jones as part of a Wellcome Trust research fellowship in biomedical ethics, concluded in January 2015.

Dissemination of the findings is ongoing, and they will be further developed through a new AHRC funded research network on the relationship between concepts of time and regulation (see news item).

Blood in the Archive: Rethinking the Public Umbilical Cord Blood Bank

Ros Williams

This thesis challenges the construction of public repositories of human tissue as "banks", using interview data from individuals involved in creating and maintaining the UK's public collections of umbilical cord blood, an important source of clinical-use stem cells. I suggest that, instead of banks, we can think of these collections as "archives". This builds upon the archival paradigm developed in the work of Jacques Derrida and, more recently, STS scholars such as Geoffrey Bowker and Claire Waterton. Those managing the public umbilical cord blood bank – or archive – must contend with

the regularly updated professional standards intended to regulate the clinicians who use the archived tissue. Its workers must operate within the confines of limited and delimiting funding to operate an ostensibly public service that rests on the privation of access to donation. The archivists must anticipate



future clinical need, typing and diagnosing tissue beyond current clinical expectations, and regularly appraising older stock. The anticipatory logic of archiving thus demonstrates the temporal rhythm of a repository of tissues collected in the past, maintained in the present, and of potential use in the future.

Excavating Deep History: Historiography, Methodology and Narratives of Human Nature

Dr Amanda Rees

The 'Deep History' BA Mid Career Fellowship continues to produce results, with a proposal for a special issue of the British Journal for the History of Science accepted earlier this year. The projected special issue on 'Palaeonarratives' will bring historians and palaeoanthropologists together with sociologists to investigate the ways in which emotion, identity and the structure of narrative itself influence the construction and presentation of investigations of the deep past.





REGenableMED

REGenableMED is an ESRC-funded project examining the dynamics of innovation within the field of regenerative medicine. Using a mixed-methods social science approach, the project is undertaking a detailed analysis of the interplay between business models, measures of clinical utility, patterns of regulatory oversight and clinical workflows within healthcare settings. REGenableMED project is being undertaken by a team of researchers (a full list is presented below) from four universities, and is led by SATSU Director Andrew Webster.

The three-year project is now into its second year, and it is making excellent progress in terms of data collection, analysis, and outputs. The team has collected extensive primary and secondary data on the field of regenerative medicine. Graham Lewis, for example, has developed a database on global developments in cell therapy and other regenerative medicine technologies, including clinical trials (thus building on a similar database developed for the REMEDIE project). Around 40 interviews have been conducted with various regenerative medicine stakeholders, which have included clinicians and scientists, regulators, patient association representatives and commercial representatives. Soon, project members at the University of Edinburgh will begin a detailed case study of two regenerative medicine companies in order to examine business models within the field.

Data collection and our analysis of data have been guided by the project's Advisory Group, which includes health innovation and economics specialists, NHS representatives, and patient association reps. The first advisory group meeting was held in London in March, and the next will take place in November. Several themes of note at this stage relate to clinicians' strategic use of regulatory exemptions, the importance of NHS blood and transplant services in providing an 'innovation springboard' for RM, and the highly-innovative, often geographically-bounded clinical sites. One theme, which relates to perceived 'novelty' of innovation challenges in RM, is the subject of the project's first paper, which will be published in *Regenerative Medicine* in September. Around a dozen more papers have been planned.

One major theoretical aim of the project is introduce the notion of *institutional readiness*. The progress of innovation projects is often understood in terms of technology readiness: the extent to which the innovative technology has matured and is 'ready' to be put to use. Yet successful innovation also depends upon what could be



called *institutional readiness*, or the capacity and willingness of key pre-existing organisations and inter-organisational structures to adopt, respond to and utilise novel technologies. For RM to live up to its promise of revolutionising patient care, emerging products must somehow be accommodated within pre-existing regulatory and healthcare organisations that are accustomed to dealing with more conventional medicinal products and services. The REGenableMED project is examining the ways in which relevant

Accessibility of tissues & cells

Lack of standardisation (protocols, safety criteria)

Uncertainty over translational pathway

Inflexible clinical trials framework

Scale-up and logistical difficulties

Inadequate health technology appraisal methods

Potentially reluctant clinical environment

Securing IP

Insufficient investment from venture capital & large industry

institutions and agencies are 'readying' themselves for regenerative medicine, and the various factors that enable and hinder this readying. By doing this, and by drawing on theoretical tools from Science and Technology Studies, the project will develop the notion of *institutional readiness*, which can serve as useful analytical frame alongside technology readiness. Additionally, by doing this the project will produce applicable findings that can inform healthcare policy and commercial strategies aimed at the responsible development and adoption of novel RM therapies.

The REGenableMED research team comprises Andrew Webster, John Gardner and Graham Lewis (SATSU - University of York), Alex Faulkner and Aurélie Mahalatchimy (University of Sussex), Sue Simpson and Sandhay Duggal (NIHR Horizon Scanning Centre - University of Birmingham) and Joyce Tait, James Mittra and Geoff Banda (Innogen Institute - University of Edinburgh).



Bio-Objects and the Boundaries: Final Summary Report

This academic year saw the completion of the Bio-Objects Action. The Action, supported through the EC's COST programme, was very successful in achieving its core aims. These were to develop a novel conceptual framework that can be deployed by a diverse range of disciplines to understand the emergence and implications of new forms of life, and, second, to build capacity among younger scholars to explore this. The conceptual model is 'discipline-blind' and so has enabled network members to engage with its core ideas in a number of very different substantive domains. The funding has leveraged a growing network of younger scholars which bodes well for the future, and led to papers and policy engagement which will not close simply because the formal contract with COST has come to an end. A methodological toolkit based on the two core concepts of



Final debate in Brussels

bio-objectification and bio-identification was finalised during the closing year. The toolkit has enabled the Action to identify a set of questions that can be deployed to interrogate any area of the biosciences especially those that exhibit socio-technical controversy. We have established the main features characterising any bio-object field of inquiry: these are the manipulation of living entities in ways that disturb existing boundaries and thereby formal identities (including, for example, legal statuses). We have distinguished between bio-objectification as a process involving the technical labour expended in the generation of novel biological entities and bio-identification, the wider social (and especially regulatory) processes that police stabilise such entities such that they can be mobilised and have agency in different contexts (such as in IVF clinics, patent offices, regulatory domains, or as licensed products in markets).

The Action has sought to coordinate its activities to influence three



different audiences to disseminate its work, focused around different themes within the biosciences field. Over the duration of the Action, these audiences and themes were respectively a) regulatory/clinical, via a special Workshop on biobanking, located



PhD students discuss bio-objects over a drink

in Bilbao, organised by Iñigo de Miguel (MC member, UPV/EHU) and which involved senior biobanking experts from Spain (including the Scientific Director, BIOEF Foundation) as well as a dissemination visit to biobank staff at Basurto, Bilbao Hospital; b) clinical/commercial audiences, via a special Workshop on regenerative medicine, located in York, organised by Andrew Webster (Chair/MC member, York) and which drew together SME and major Pharma company representatives (eg AstraZeneca) as well as representatives from the UK Stem Cell Bank, and the FP7 project EuroStemCell to explore the clinical routes for regenerative medicine using the bio-objectification framework which was taken up by all speakers; and c) policy-makers, through the Case Study and Bioeconomy Policy Review documents presented at the Brussels December 2014 meeting which was focused especially on understanding how the bio-object model helps identify the (sometimes hidden) choices that shape the development of the life sciences (see bio-objects website).

At the closing conference in Brussels new foci for longer-term analysis were agreed. The main expected areas of work are:

- The process through which we see the simplification of new forms of life and the masking of their complexity: here we see bio-life forms 'black-boxed' in order to make them useable in the lab or in products attracting IP, but which thereby remove heterogeneity and lead to contestable claims about stable bio-objects.
- The need to develop in a highly reflexive way new social experiments and interventions to see how different bio-objectification/bio-identification pathways address social,



Bio-Objects and the Boundaries: Final Summary Report cont...

economic and policy needs

- The need to focus on biodata and how new digital platforms and capacities are reframing the biological and the social
- The need to develop new methodologies that help us to understand the process of acceleration (and perhaps the braking or slowing down) of biological developments, such that forms of biolife might be found outside regulation, in a 'regulatory wasteland'
- The need to focus on the way different bio-objects emerge through distinct choices and the governance challenges this poses, the 'matters of concern' this raises
- The need in the human/biomedical domain especially, though elsewhere too, to focus not only on the lab/clinic relationship shaped by bio-objectification but also the wider implications this has for care (of patients/families) and the feedback between these discrete domains.

Thanks must be given to the many colleagues who have made the Action such a success:

First to the COST Office for all their support over this past 4 years, and especially to Dr Luule Mizera and Leo Guilfoyle, and to our Rapporteur Professor Barbara Prainsack: they have all been exceptionally helpful during what has been a particularly busy time

for them this past year as COST changes to a new form of Association.

Secondly, to all the members of the Action who have enjoyed working together and building the network and its activities, and thanks especially to Ingrid Metzler who was Chair for the first two years, and who kept the Action on track to ensure its main objectives would be realised and procedures followed; to Lena Eriksson who has been a very supportive Vice Chair for the past two years; to the Working Group leads - Tora and Inigo, Niki and Sakari, and Alex and Lonneke (and previously Conor) – who ensured discussions were well organised and maintained focus and direction during and between meetings; to Bettina and her sub-panel for managing the STSMs so professionally; to the authors of the Case Studies and the Policy review; to Srecko Gajovic, neuroscientist and editor for providing the opportunity to prepare papers for the CMJ; to Lucia, Anna-Lydia and Vincenzo, who have been excellent mentors during the PhD training schools, and to all the Local Organisers who have facilitated all our meetings over the past 4 years.

And finally, to Sarah Shrive-Morrison at York who has administered the Action very efficiently over the four years.

Digital Creativity Hub



The five-year Digital Creativity Hub (DC Hub) is a major (£18 million) investment by three UK research councils, four universities, and over 80 collaborative partner organisations to create a world centre of excellence for impact-driven research, focusing on digital games, interactive media and the rich space where they converge. The DC Hub brings together Computer Scientists, Social Scientists, and the Humanities.

The Social Sciences are a key component of the DC Hub, which has the Science and Technology Studies Unit (SATSU) as one of its foundations.

Dr Darren Reed will lead the 'Games for Society' theme and also lead a

project to develop an application that conveys environmental information for members of the public, tourists, and health and tourism professionals. This links to a second project called YorkSense that is based on the installation of an environmental sensor network in York. Darren Reed is undertaking a stakeholder analysis of the users and beneficiaries of this information system.



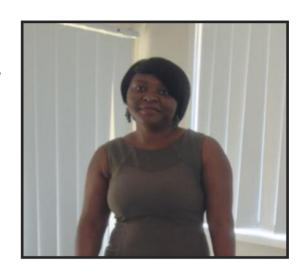


Research Biography Profile

Rina Siyengwa

I joined the University of York in 2014, as an Early Stage Research under the Marie Curie funded CAPACITIE project. I have a scientific social science background and am very interested in environment and sustainable research. I did my Undergraduate degree in my home country at the University of Namibia in Environmental Biology and Molecular and Physiological Biology. Upon completion of my first degree I worked for the Namibian Standards Institution coordinating a technical committee in Environmental Management Systems (EMS). I got an opportunity to learn more about business and the natural environment and the development and adoption of international environmental standards.

In 2010 I moved to the Department of Research Science and Technology (DRST) under the Ministry of Higher Education, where I worked as a Science and Technology Officer for three years. Some of my responsibilities included the identification and implementation of science



projects in the country and facilitating research in the field of Environmental Management and Climate Change. It is through my working experience at DRST that I got the opportunity to work with the community in research. I was part of a team that carried out a national research program for 2 years on the documentation of indigenous medicinal plants; the project was headed by the University of Namibia.

I then left the country to continue with my studies, I was awarded a scholarship by the Australian Government under AUSAID to do a Masters in Social Change and Development (Sustainable Development). The Master's program was focused on environmental issues and different issues affecting people in developing countries, it was a mixture of technical and social issues. I completed my Masters in 2013 with Distinction. This program gave me more insight on how to work with communities in research which I found interesting considering my previous work experience.



After my Masters I was awarded a Marie Curie Sponsorship to undertake a PhD in Environmental Monitoring as Participatory Science. My project is 1 of the 12 projects under bigger project called CAPACITIE. The overall aim of the CAPACITIE project is to produce a new generation of researchers that have the skills to develop and apply cutting-edge technologies to monitor pollutants in the natural environment. While a number of novel technologies already exist, uptake by the end-user sector is slow in Europe due to the burden of regulated methodologies and related issues associated with technologies developed by the academic community which do not meet the specific needs and requirements of end users. In order to develop new effective monitoring approaches for environmental pollutants it is therefore essential to not only focus on technological

developments but also to understand the needs of different users. Therefore the aim of my project is to identify the potential opportunities and barriers to engaging the public (and other stakeholders) in the use of emerging monitoring technologies and techniques, and the implications for, and impacts upon, relevant institutions such as government agencies and product suppliers. This project will be carried out in three different cities (York, Berlin and Seoul). My work links people to Science and Technology.



Output

Publications

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Conference Papers

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Gardner, J. (2015). 'A Sociology of Medical Innovation: Deep brain stimulation & paediatric neurology', Wellcome Trust LABTEC colloquium, Brighton 22nd June 2015.

Gardner, J (2015). 'A sociological study of neuromodulation and the importance of the broad clinical gaze', European Paediatric Neurology Society Symposium on Neuromodulation, Vienna, 25-26 May 2015.



Output

Conference Papers cont...

Gardner, J. & Mahalatchimy, A. (2015). 'REGeneableMED: A social science analysis of regenerative medicine', EUCelLEX 1st International Consensus Conference, Toulouse, 30-31 March 2015

Gardner, J (2015). 'Patient-centred medical platforms & the broad clinical gaze: Deep brain stimulation in paediatric neurology', Departmental Seminar presentation - Centre for Population and Health Studies, University of Edinburgh, Edinburgh, 21 January 2015.

Gardner, J (2014). 'The broad clinical gaze in paediatric deep brain stimulation', BSA MedSoc Conference, Birmingham, 9-11th September 2014.

Gardner, J (2014). 'The broad clinical gaze in paediatric deep brain stimulation', Yorkshire regional BSA MedSoc Conference, York, 15 January 2014.

Johnson, M. (2015). "Hand-Made Detail in a Procedural World". Game Developers Conference (GDC) Europe, Cologne.

Johnson, M. (2015). "Generating Global Cultures and Characters in Ultima Ratio Regum". Nucl.ai Artificial Intelligence Conference, Vienna. (Invited).

Johnson, M. (2015). "Asymmetric Warfare in Video Games: A Military Force without Economic Capital in Command and Conquer." Canadian Game Studies Association Conference, University of Ottawa.

Johnson, M. (2015). "Algorithmic Generation of Global Racial, Cultural, Religious, Architectural and Linguistic Variation." Canadian Digital Humanities Association Conference, University of Ottawa.

Johnson, M. (2015). "Bullet Hell: The Globalized Growth of danmaku games and the Digital Culture of High Scores and World Records." DiGRA 2015, Lüneburg.

Johnson, M. (2015). "Dusk Hour: Depictions of Ecological Collapse and Posthuman Survivalist Ideologies in Command and Conquer: Tiberian Sun." Brave New Worlds: The Dystopia in Modern and Contemporary Fiction Conference, University of Newcastle.

Johnson, M. (2015). "Modelling Cultural, Religious and Political Affiliation in Artificial Intelligence Decision-Making." AISB AI and Games Conference, University of Kent.

Reed, D.J., & Szczepek Reed, B.B. (2014) 'Transitions between participation frameworks within an interactional project: the case of music masterclasses' Paper presented at International Conference on Conversation Analysis (ICCA14), Los Angeles, United Kingdom, 23/06/14 - 29/06/14.

Reed, D.J. (2015). 'Aesthetics of the Performing Body. Part of the 'Aesthetics in Interaction' panel' Paper to be presented at Revisiting Participation. Language and Bodies in Interaction, Basel, United Kingdom, 24/06/15 - 27/06/15. Webster, A. From Evidence to Evidentiaries: Law, Biomedicine and STS, Centre for Law and Medicine, University of Gothenburg, November 15

Reed, D.J., & Szczepek Reed, B.B. (2015). 'Displaying learning in performance settings: The co-construction of learner autonomy.' Paper to be presented at International Pragmatics Association (IPrA) Conference, Antwerp, Belgium, 26/07/15 - 31/07/15.

Rees, A. Attended BSHS Swansea, July 3-6. Organised session on 'Science Futures, Science Past' with colleagues from Manchester, Kent and Sheffield, presented a paper on 'Neanderthals and Narrative: othering the brother (sic) in 20th century fiction'.

Webster, A. Bio-objects: A Life Story, Department of Philosophy, Linguistics and Theory of Science Seminar Series, University of Gothenburg, November 15 2014.

Webster, A. Innovation dynamics and the implications for diagnostic practice, Workshop on Compulsory Care and Forensic Psychiatry, Gothenburg Research Centre, Sweden, November 16 2014.

Webster, A. Innovation, regenerative medicine and redistributed manufacture: a social science perspective, Plenary address, EPSRC Workshop on Targeted Healthcare Production, University of Nottingham, 28th April 2015.

Webster, A. Translational Medicine and STS, Plenary paper, Making Sense of Clinical Translation, Brocher Foundation, Geneva, May 17-19 2015. Webster, A. Bio-objects and the bio-manipulation of life: creating and ordering the unruly, LifeExperiment Workshop, Birkbeck College London, June 1 2015.

Webster, A. Time Lapses: socio-technical exposures, IVF Histories and Cultures Workshop, University of Cambridge (Coordinated by Sarah Franklin), June 22-23, 2015.

Williams, R. (2015) "Blood in the Archive: Anticipatory logics of Umbilical Cord Blood Banking", AHRC Diagnosing Legal Temporalities Workshop, 15 April, University of Kent. (Invited)

Williams, R. (2014) "Bionetworking and co-labour in the UK's Public Stem Cell Inventory", Centre for Bionetworking Conference, 12 November., University of Sussex. (invited)

Williams, R. (2014) "Cords of Collaboration: Platforms and Rhetorics in the UK's Public Stem Cell Inventory", BSA Medical Sociology Conference, 10 Sept., University of Aston.



Output

Open Access Papers

Beer, D. (2015). 'The comfort of a smartphone', Sociological Imagination, 28 May 2015, http://sociologicalimagination.org/archives/17671

Beer, D. (2015). 'Taking a measure of happiness', Berfrois, 20 May 2015, http://www.berfrois.com/2015/05/david-beer-happy-happy/

Beer, D. (2015). 'The new Apple Watch and the problem of our creeping connectivity', Sociological Imagination, 16 May 2015, http://sociologicalimagination.org/archives/17447

Beer, D. (2015). 'Systems of measurement have a productive power in our lives', LSE Politics & Policy, 28 April 2015, http://blogs.lse.ac.uk/politicsandpolicy/the-productive-power-of-metrics/ (This was republished by the Royal Statistical Society).

Beer, D. (2015). 'Real or fantasy, football is now consumed by numbers', The Conversation, 28 April 2015,

https://theconversation.com/real-or-fantasy-football-is-now-consumed-by-numbers-40522

Beer, D. (2015). 'Living with smartness', Open Democracy (Transformations section), 27 April 2015,

https://opendemocracy.net/transformation/david-beer/living-with-smartness (This piece was also republished in The New Turkey).

Beer, D. (2015). 'One hit wonders dominate as social media turns up the pace of the pop charts', The Conversation, 6 January 2015, https://theconversation.com/one-hit-wonders-dominate-as-social-media-turns-up-pace-of-the-pop-charts-35866 (this piece was also published on Scroll.in and www.sbs.com.au)

Beer, D. (2014). 'Walter Benjamin's Voice', Berfrois, 18 December 2014, http://www.berfrois.com/2014/12/david-beer-walter-benjamins-voice/

Beer, D. (2014). 'Sociology's dual horizons', The Sociological Review website, 20 October 2014,

http://www.thesociologicalreview.com/information/news/sociology-s-dual-horizons.html

Fitzgerald, D., Callard, F., & Beer, D. (2014). 'The entanglements of interdisciplinarity: an interview with Des Fitzgerald and Felicity Callard', Theory, Culture & Society open site, 17 September 2014,

http://theory cultures ociety.org/the-entanglements-of-interdisciplinarity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard/linearity-an-interview-with-des-fitzgerald-and-felicity-callard-and-felic

Kane, C.L., & Beer, D. (2015). 'The Aesthetics of Algorithms: An interview with Carolyn L. Kane', Theory, Culture & Society open site, 7 January 2015, http://theoryculturesociety.org/the-aesthetics-of-algorithms-an-interview-with-carolyn-l-kane/

Nikoghosyan, N., & Beer, D. (2014). 'Interview with David Beer', Figure/Ground, 22 September 2014,

http://figureground.org/interview-with-dr-david-beer/

Wetherell, M., & Beer, D. (2014). 'The future of affect theory: an interview with Margaret Wetherell', Theory, Culture & Society open site, 15 October 2014, http://theoryculturesociety.org/the-future-of-affect-theory-an-interview-with-margaret-wetherall/

Public/Guest Lectures

Johnson, M. (2015). "Algorithmic Generation of Global Racial, Cultural, Religious, Architectural and Linguistic Variation." GameCity Nights, National Videogame Arcade, Nottingham (Invited).

Johnson, M. (2015). "A Brief History of Psychology and Video Game AI." Guest Lecture on Undergraduate Psychology Course, University of Bedfordshire (Invited).

Johnson, M. (2015). "The Procedural Generation of Culture". Norwich Gaming Festival, Norwich (Invited).

Johnson, M. (2015). "Codifying the abstract: Defining and Programming a Procedurally Generated Renaissance World." Guest Lecture on Undergraduate Game Design Course, University of Lincoln (Invited).

Other Dissemination Activities

Johnson, M. Freelance writer on game culture/history/criticism for First Person Scholar, Kill Screen, Five out of Ten Magazine, Memory Insufficient and Imaginary Realities.

Johnson, M. Invited to be the new co-host of the Roguelike Radio podcast (~1,000,000 total hits)

Johnson, M. Organized and hosted International Roguelike Developers Conference in association with the National Video Game Arcade (Nottingham, UK).



Doctoral Abstracts

Mark Johnson (Post-Doctoral)

My research is focused on a range of topics in games, gaming and game cultures, including: developing our theoretical understanding of chance, luck and randomness; the history of strategy games and social and political theory in virtual worlds; cultures of competition and professional gaming; roguelikes, procedural generation, and the design of qualitative game mechanics; and the aesthetics and thematics of in-game worlds. I am interested in both the broader cultural impact of games and the communities and subcultures which have arisen around them, and in forwarding the study of games as historically noteworthy media items in their own right. I'm about to begin a three-year postdoc alongside Darren Reed studying games and creative practice as part of the York Digihub research centre, on which I hope to examine many of these ideas.



Rina Siyengwa

Environmental Monitoring as Participatory Science; This project is part of a bigger project called CAPACITIE The overall aim of the CAPACITIE project is to produce a new generation of researchers that have the skills to develop and apply cutting-edge technologies to monitor pollutants in the natural environment. These researchers will also have a detailed understanding of the needs of users of monitoring data and of the social and ethical issues around the adoption and use of selected technologies. Participatory Environmental Monitoring is a monitoring approach that develops partnerships of multiple stakeholders for efficient, effective and socially inclusive monitoring. In order to develop new effective monitoring approaches for environmental pollination it is essential to not only focus on technological developments but also to understand the needs of different users. By doing this, the likelihood those new technologies the adoption of new technologies by end users will be significantly increased. This project is aimed at identifying the potential opportunities and barriers to engaging the public in the use of emerging monitoring technologies and techniques, and the implications for, and impacts upon, relevant institutions such as government agencies and product suppliers. This project will be carried out in three cities York, Berlin and Seoul.



Julia Swallow

This qualitative ethnographic study examines how instruments for screening cognitive function are used and adopted in clinical practice in the process of articulating a classification of Alzheimer's disease (AD). An exploration of how low-technological cognitive screening tools constitute AD is important because of their central role in detecting initial cognitive decline in the 'ageing population'. The study draws upon fieldwork undertaken across a secondary healthcare memory service and a major teaching hospital in the UK. Focusing on the everyday, routine practices and interactions between clinicians, patients and these technologies, the study shows how instruments for screening cognitive function were made provisional, and yet emerged as central mediators for producing knowledge about AD.



Ruchi Higham

My doctoral research examines the challenges of conducting clinical trials in regenerative medicine, specifically stem cell therapies. I have nearly finished my fieldwork, which has included a series of semi-structured interviews with scientists and clinicians involved in stem cell trials, as well as non-participant observation of a 'live' stem cell trial. I am particularly interested in how the concept of evidence is understood by the various actors involved in translational stem cell research, and in how these divergent positons affect the development of new therapies. Another important area that I will be exploring in my analysis is the different and at times conflicting expectations of basic science and the clinic, and the different ways that these two domains deal with uncertainty. Through developing a better understanding of these tensions I hope to not only provide a comprehensive sociological account of stem cell trials in the UK, but also to suggest ways in which such trials could be made more socially (as opposed to statistically) robust.



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