THIRD NORDIC SCIENCE AND TECHNOLOGY STUDIES CONFERENCE

MAY 31 – JUNE 2

ABSTRACTS
Anticipation as practice and culture: Academic work and the many futures that need to be cared for, Ulrike Felt, University of Vienna

Room: Dragonen
Anticipation as practice and culture: Academic work and the many futures that need to cared for

Ulrike Felt, University of Vienna

How do anticipation practices actually shape contemporary academic research cultures? This is the core question addressed in my key note. It will start from the diagnosis that many of contemporary calls for responsible research and innovation also contain a call for anticipation, often captured by definitions such as “systematic thinking aimed at increasing resilience, while revealing new opportunities for innovation and the shaping of agendas for socially-robust risk research.” (Stilgoe et al. 2013) While this is an important thinking about science and technology related futures, I would like to expand these reflections. I will invite you to reflect on a broadening set of anticipatory practices that have become part of academic cultures, on their topologies (space-time characteristics and how time is folded into many processes and objects of our research - see Latour & Serre 1995) and on the many different (and differently scaled) futures that are projected in need to be cared for. This will lead us to scrutinize how this multiplication of anticipatory practices changes institutional, personal, collective and epistemic dimensions of academic work will be at the core. This presentation is embedded in a wider project studying the “Contemporary chronopolitics of academic research”.
WEDNESDAY 31 MAY, 14.00-17.00 PARALLEL SESSIONS

THE (IN-)FORMALITIES OF SYNTHESISING KNOWLEDGE

Chair: Ingemar Bohlin and Teun Zuiderent-Jerak, University of Gothenburg and Linköping University

The Formal-Informal Boundary in Reviewing Practices, Ingemar Bohlin, University of Gothenburg

Where is zika? Exploring the ambiguities of algorithms, counting and judgment, Francis Lee, Uppsala University

Teleological (in-)formalities in the production of a systematic review, Morten Sager, University of Gothenburg

Different knowledge in guideline development; Epistemologies from the field, Teun Zuiderent-Jerak, Linköping University

Room: D 138
The (In-)Formalities of Synthesising Knowledge

Dr. Ingemar Bohlin, University of Gothenburg
Dr. Teun Zuiderent-Jerak, Linköping University

Session abstract:
The concept of evidence-based practice and policy has spawned a broad movement spanning a range of areas, from clinical medicine, dentistry and psychotherapy to education, criminal justice and environmental conservation. At the heart of this movement are formalised methods by which evidence of potential relevance to decision making and professional practice is identified, appraised and integrated. Meta-analysis and systematic reviews have long served this purpose in the quantitative tradition, and methods have been devised for synthesising qualitative research, too. All these mechanisms formalise processes and procedures which previously relied, largely or even exclusively, on professional judgement. The formalisation involved is widely taken to vouch for the quality of the decision support thus provided to practitioners and policy makers. Competence of an informal kind, though indispensable for reaching consensus about the outcomes of formalised procedures and for formulating guidance that is relevant to practice, is often considered a necessary evil rather than an integral part of synthesis processes.

This panel brings together empirical studies of knowledge integration practices in various fields, with papers addressing questions like: What are the effects of increasing demands for formalisation of these practices? To what extent is the exercise of judgement evident in the production of decision support materials? How are formal and informal components related in generative synthesis practices, and to what extent is the boundary between them being reconfigured? What are the consequences of various renderings of (in-)formal knowledge synthesis approaches?

Papers in this session:
The Formal-Informal Boundary in Reviewing Practices, Ingemar Bohlin, Department of Philosophy, Linguistics and Theory of science, University of Gothenburg

Where is zika? Exploring the ambiguities of algorithms, counting and judgment, Francis Lee, History of Science and Ideas, Uppsala University

Teleological (in-)formalities in the production of a systematic review, Morten Sager, Department of Philosophy, Linguistics and Theory of science, University of Gothenburg

Different knowledge in guideline development; Epistemologies from the field, Teun Zuiderent-Jerak, Tema T - Technology and social change, Linköping University
The Formal-Informal Boundary in Reviewing Practices

Ingemar Bohlin
Department of Philosophy, Linguistics and Theory of science,
University of Gothenburg

The background to the introduction of meta-analysis in quantitative American social science in the 1970s was growing discontent with the traditional, narrative form of literature reviews. Subsequently, a variety of formalised methods for synthesising qualitative as well as quantitative research have emerged, and research synthesis is now a well-established field. In medicine, in particular, systematic reviews and meta-analyses are considered the only reliable and respectable methods of summarising the primary literature. In many other disciplines, however, narrative reviews, appearing as journal articles or as chapters in handbooks, annual review series or PhD theses, are the norm. As far as I know, nobody has ever suggested that formal methods of reviewing ought to be employed in STS, for instance.

The question addressed in this paper is why formal methods of reviewing, while institutionalised in some disciplines appear completely irrelevant to others. The concept of practice disciplines provides a partial answer. In professional practice falling under this category, such as that of medical doctors, nurses, school teachers and social workers, demands for evidence-based decision support are very common. However, the boundary defined by the concept of practice disciplines does not coincide with the basic-applied divide. Formalised reviewing practices do not seem to be employed in engineering science, for instance, and play no part in assessments carried out by the IPCC.

Apart from applying research evidence, then, the practice disciplines may be distinguished by involving relations to patients, clients and students. On the other hand, systematic reviews serve a key function in evidence-based environmental conservation, and meta-analysis is an established technique in biology. The boundary between formal and informal reviewing practices is a complicated phenomenon, and understanding its nature is a challenging task.
Abstract for Nordic STS Meeting
Francis Lee, francis.lee@idehist.uu.se
Associate Professor, History of Science and Ideas, Uppsala University, Sweden.

Where is zika? Exploring the ambiguities of algorithms, counting and judgment
This paper explores the ambiguous relation between one the one hand algorithms and counting, and on the other hand human expert judgment in disease surveillance. A point of departure is that formalized knowledge production is commonly described as being deeply dependent on informal judgment. However, as STS scholars well know, a potential problem with this description of knowledge production is that we risk treating the “formal” and “informal” as pre-existing categories.

Consequently this paper asks if there are other perhaps more fruitful ways of thinking about the in/formal? Could we perhaps ask about how knowledge undulates through different processes of in/formalization?

Drawing on fieldwork at the European Center for Disease Control and Prevention, the paper explores three different maps of disease outbreaks—and traces the processes of constructing them. The maps outline where zika, legionella, and salmonella threats exist, but in very different ways: The zika world map is constructed through an algorithm that judges zika presence based on the date of the last reported case. The legionella map is constructed by correlating data from TripAdvisor with reported cases of legionella. And the Salmonella map is constructed based on counting genetic likeness (single nucleotide polymorphisms) of different strains of bacteria—so that cases that were previously seen as separate are now classified as a coherent disease outbreak.

Thus, drawing on ethnomethodological/ANT sensibilities, this paper explores processes of in/formalization—complex foldings of algorithms, counting and judgment—in disease surveillance mapping practice.
Teleological (in-)formalities in the production of a systematic review

Morten Sager

Both the late Wittgenstein and recent scholarship on standardization have shown that formal rules in themselves are insufficient to create social order. Suggestions have been made that formalizations such as guidelines create objectivity by acting as goals to be achieved rather than rules that determine behavior in every detail. This teleological notion of objectivity will be investigated in relation to a systematic review on suicide preventive education programs. The review was commissioned by the Swedish Public Health Agency and finished in the spring of 2017. In the review process the formal rules of systematic reviews were followed, such as formulations of PICO, criteria of inclusion and exclusion, PRISMA diagrams and the quantitative aggregation of results in meta-analysis. The close monitoring of the process reveals how every step of the process required deliberations, judgments and choices between various ways of pursuing the pre-determined rules. One key aspect of the negotiations was the continuous and iterative accommodation to a future intended product. In the paper it is claimed that this teleological imaginary was indispensable in order to find solutions to puzzles that appeared along the way. Several theoretical conceptualizations of the teleological imaginary are suggested and their ramifications discussed. Important questions are to what extent the teleological imaginary is formal or informal in character, that is, whether and how it can be externalized and transferred between humans and possibly also in textual or other non-human format.
Different knowledge in guideline development; Epistemologies from the field

Teun Zuiderent-Jerak
teun.zuiderent-jerak@liu.se

Tema T – Technology and social change, Linköping University, SE

Part of session: The (In-)Formalities of Synthesizing Knowledge

Medical sociologists and STS scholars tend to think that evidence-based medicine privileges randomized controlled trials and meta reviews of them. In contrast, within the guideline development community the importance of basing recommendations in clinical guidelines on different kinds of knowledge is increasingly recognized. Since a narrow definition of evidence limits relevance in clinical, public health and social care practice, some guideline developers discuss the need to think in terms of ‘complex causality’ and explore ‘alternatives to frequency based reasoning’. Methodological infrastructural development, such as that developed by the GRADE working group, does prescribe evermore formal guideline development methods. But paradoxically, this rigidification of formal methods is one of the driving forces behind a thriving interest in philosophy of causation, complexity and inference among guideline developers.

This paper presents some of the work that is going on within a Working Group within the Guidelines International Network (GIN), the professional association of guideline developers, on Appraising and Including Different Knowledge in guidelines (AID Knowledge). This group aims at learning from and contributing to guideline practices that challenge the boundaries between ‘evidence’ and ‘judgement’. It problematizes ideas like the ‘hierarchy of evidence’ that privileges some knowledge on frequentist epidemiological grounds. The papers they submit to leading medical journals cite authors like Ian Hacking, William James and Annemarie Mol. They hold plenary sessions and organise well-attended workshops at annual GIN meetings. Ah, and by the way, I co-founded this Working Group – just to learn that I needed to catch up on my philosophy of science to keep up with its members. AID Knowledge therefore calls attention to generative practices of knowledge synthesising within the guideline development community, while troubling the role of STS scholars when such practices aren’t more formalist but more epistemological than expected.
CARE AND TINKERING

Chair: Lisa Lindén, Stockholm University

Between concrete and abstract: creating illustrations to elicit reflections about materiality in dementia care, Helena Kjellgren, Karolinska Institutet

HPV vaccination campaigns and the temporalities of care, Lisa Lindén, Stockholm University

Matter out of time: on the precarious work of not wasting perishables, Sebastian Abrahamsson, Copenhagen University

Repurposing health data for preventive healthcare, John Mark Burnett, IT University of Copenhagen

Room: D206
**Between concrete and abstract: creating illustrations to elicit reflections about materiality in dementia care**

In dementia care, human relations are often described as the most essential. While there are intangible dimensions of these relations, STS scholars have aptly illuminated care as a practice in which materiality needs to be continuously ‘tinkered’ with.

Yet, how do caregivers understand materiality in everyday care activities? With a background as a designer my approach to these issues has been visual, rather than verbal, and from observations in a dementia unit I created illustrations of everyday objects. The illustrations were intentionally ambiguous in that they could be understood as referring to concrete objects, yet abstract enough to be open to interpretation. Utilizing these illustrations, I conducted eleven individual interviews with caregivers concerning their work in a dementia unit at a nursing home. The interviews were analyzed using a phenomenographic approach.

The illustrations were interpreted differently by the caregivers, which meant that the interviews were simultaneously steered by prompting cards and individual interpretations. A salient feature was that the illustrations tended to elucidate reflections about particular residents, things, and situations in the unit in which the caregiver described how s/he acted. These reflections sometimes demonstrated tension between care policies and the experimental ‘tinkering’ caregivers did in response to certain situations. The caregivers’ spoke about the importance of seemingly minor material relations, as well as they identified ethical dilemmas embedded in these situations. It was indicated that insights about materiality were often passed on informally. Thus, it seems that illustrations can offer a way to discuss various aspects of materiality with caregivers. These findings invite for discussions about how to incorporate caregivers’ ongoing reflections about ‘material tinkering’ in daily care practices.

(284 words).
HPV vaccination campaigns and the temporalities of care

This presentation builds upon the work presented in my PhD thesis *Communicating Care: The Contradictions of HPV Vaccination Campaigns* (Lindén 2016, Arkiv förlag). In this work, I examine three state-funded human papillomavirus (HPV) vaccination campaigns in Sweden. The study is situated within the intersection of STS and feminist theory, and more specifically in feminist STS discussions on the politics of care in technoscience (e.g. Martin et al. 2015). In the study, I approach care as a multilayered, contextual and more-than-human phenomenon. I discuss how care is articulated and made by, and through, a range of actors, such as county council professionals, who try to communicate care to girls and their relatives, as well as material devices, such as an “HPV app”, a Facebook campaign site and a vaccination trailer. In this presentation, I empirically draw upon analyses of digitally mediated communication between different publics and county council professionals on the Facebook site and of interviews with county council professionals working with the campaigns. I will particularly elaborate on the study’s findings concerning temporal dimensions of care, and how these findings may contribute to our understanding of public health and health communication initiatives in STS.
Abstract for the third Nordic STS Conference

Sebastian Abrahamsson, SAXO Institute, department of Ethnology, Copenhagen University csa@hum.ku.dk

Title: Matter out of time: on the precarious work of not wasting perishables

This paper is a conceptual intervention, complicating the notion that what is waste/disorder/dirt is a matter of space, placing and (symbolic) boundary making. It first reviews the literature in waste studies that draws on Mary Douglas’ distinction between dirt/polluted matter and order, suggesting that this distinction is only useful to discuss waste to the extent that one does not consider the role that perishability plays in deterioration. Foods (and their different temporalities) and those who handle it challenge this distinction in three senses. 1) Foods are different and the ways in which, for example, a soup becomes “polluted” by a fly or a spilled glass of wine, is different from the ways in which an orange becomes “polluted” by being placed in a garbage bin. The orange may be saved due to its skin, whereas the soup fly may or may not be acceptable the wine soup has become a new “whole”. 2) Foods also challenge the spatial metaphor through deterioration and perishability, by insisting on being cared for in various ways. Many techniques and technologies are aligned with this: packaging, cooling, cutting, canning, separating, drying etc are practices that are meant to extend and prolong the “life” of foods and stop deterioration. While some foods are kept alive through spatial separation (canned beans, frozen meat) the organizing logic is not necessarily spatial but temporal: they are separated so that time will not affect them. 3) Finally, foods challenge the spatial logic by actually becoming inedible and dangerous. The organic materiality of foods challenges both the symbolic and the spatial separation between order/disorder, dirt/matter in place. In this sense, any effort to avoid wasting, and put a halt to deterioration, will only ever be a temporary, precarious achievement requiring a lot of effort, work, techniques and technologies. In an effort to tease out some of the specificities involved in the efforts to work with perishable materialities I draw on exemplary situations from fieldwork on practices of saving and wasting foods, using the concept of “matter out of time”.

Keywords: food waste, care, materiality, everyday life, consumption
Repurposing health data for preventive healthcare

Health data is a site of profound experimentation in Denmark, imbuing new life and vitality to the politics of the social contract between citizen and state.

The paper presents an empirical study of a health data experiment initiated within the Danish healthcare system. It investigates how emerging practices of predictive profiling problematise roles and responsibilities in healthcare, and explores how (data) politics are produced in new and unforeseen ways.

Health data on 250.000 citizens from Central Region Denmark has been aggregated to provide input for the co-creation of a predictive tool for healthcare based on machine-learning technology. This ongoing experiment is conducted within a public-private regional innovation network, MTIC Consortium, and seeks to reduce acute hospital readmissions through prevention. Put differently, the aim is to predict future events in order to govern citizens in the present.

Based on a quasi-ethnographic approach and drawing on Actor-Network Theory, the paper shows how intensified use and reuse of sensitive health data leads the renegotiation of access, citizen rights, roles and responsibilities. In this way, predictive models are not merely means of making sense of reality, they shape particular realities with specific politics. What data might suffice the comforting yet elusive prospect of predictive inference (and algorithmic accuracy) is unclear. This ambiguity gives rise to a problematic of relevance, namely: how to dissect and respect categories of personal, sensitive and relevant data? This problematic highlights how both citizens and their abstractions (in the form of data) may require care in their own ways.

This empirical investigating contributes to concurrent understandings of data politics and governance in the age of big data. It adds new insights into the novel relations being formed between data bodies, preventive healthcare, and the governance of life itself.
WEDNESDAY 31 MAY, 14.00-17.00 PARALLEL SESSIONS

NEW BIG SCIENCE AS AN INFRASTRUCTURAL AND COLLABORATIVE CHALLENGE

Chair: Kerstin Sandell & Katherine Harrison, Lund University

*Coordinating Big Science: An Ethnography of Detector Parts for the European Spallation Source*, Ivanche Dimitrievski, Linköping University

*Big data management and knowledge production in Big Science: following the development of the European Spallation Source*, Katherine Harrison, Lund University

*The indispensable human condition: instrument scientists in experimental system*, Kerstin Sandell, Lund University
Paper Proposal for the 3rd Nordic STS Conference, Gothenburg

Author:
Ivanche Dimitrievski, PhD

Institutional affiliation:
Linköping University, TEMA Technology and Social Change (TEMA-T)

Title:
Coordinating Big Science: An Ethnography of Detector Parts for the European Spallation Source

Abstract:
This paper centres on the topic of coordination in the context of emerging big science. Scholarly work in regard to this matter typically proceeds from the assumption that big science differs from conventional projects in terms of ‘complexity’ – that is, in being geographically, temporally, and structurally a distributed organisation, involving multiple stakeholders – and it therefore requires special coordination procedures to address it (Flyvbjerg, 2014). Hereby, coordination is rendered as distinctly a formal managerial effort, having little to do with the ordinary, day-to-day scientific and technical practices on the bottom. To address the latter, this paper reports an ethnographic study of the practices of coating detector blades for the European Spallation Source – a widely proclaimed big science facility for research using neutron scattering, currently under construction in Lund, Sweden. To what extent and in what ways is ‘complexity’ addressed as a ‘coordination problem’ in this context? What practical procedures are employed in the coating process for resolving specific such ‘problems’? What role do expectations, visions, and the imagination play in coordinating across multiple sites and stakeholders? Drawing on document analysis, interviews and participant observation, this paper casts light on the relationship between technoscientific and social order in the context of big science. It demonstrates that ‘big science’ is not only ‘coordinated’ by managers but importantly also something accomplished through ordinary everyday technical practices.
Big data management and knowledge production in Big Science: following the
development of the European Spallation Source

Katherine Harrison, Lund University & University of Copenhagen

Some of the largest quantities of data produced in today’s data-dominated world occur as the result of experiments taking place at so-called Big Science facilities. However, histories of Big Science have tended to ignore how the collection, processing and storage of data produced at these facilities shaped the knowledge produced there. This aspect of Big Science remains relatively invisible even today, although growing popular awareness of the power of big data coupled with changing technologies and increasingly stringent requirements from research funders on sharing data is driving a sea-change.

In this paper I look at how management of data has been discussed in histories of Big Science compared with today. I argue that the significance of big data has been overlooked and I make a case for considering big data (and management of this) as playing an integral role in Big Science as we now understand it. I support this claim by examining big data more closely in terms of how it shapes knowledge production with particular reference to the currently-under-construction European Spallation Source (ESS). The ESS represents a rare opportunity to observe the design and development of a Big Science facility, including the infrastructure and technical support related to data management.

The increasing volume and complexity of data generated by experiments at Big Science facilities has posed new challenges for researchers and technical staff alike. A growing demand from researchers for technical support in relation to data management is driving formalisation of the role of data management within facilities. Drawing on interviews with Group Leaders at the Data Management and Software Centre of the ESS, this paper will present material from an ongoing research project on data management in Big Science.
In this paper I will explore how the instrument scientist could be incorporated into the conceptualization of experimentation offered by Hans-Jörg Rheinberger – experimental system. In the conceptualization of the experimental system there seems to be a replication of the image of the sole, genius, scientist, playing with his (sic) experimental equipment (in Rheinberger’s vocabulary the technical conditions) to explore the unknown (the epistemic object). In experimentation at New Big Science facilities the instruments are complex enough for most visiting scientists not to be able to fully know them during their limited beam-time. The intimate knowledge instead is embodied by the instrument scientist, often not only working with the instrument every day, but also having been part of designing it and/or upgrading it. From fieldwork and interviews with instruments scientists at ESS and MAX IV in Lund I will ask: How can this emerging ‘human condition’ in experimental system be understood?
MEDICINE AND EXPERTISE

Chair: Boel Berner, Linköping University

Two-dimensionality as a tool of analyzing Epistemic Communities: The case of ellaOne and the European Medicines Agency, Urban Strandberg & Lena Caspers, University of Gothenburg

Decision-making in early clinical trial launch, Hanna Grankvist, Linköping University

The politics of blood: Science, law and paternity tests, Boel Berner, Linköping University

‘You can’t stop the march of knowledge’: Civil society critiques of clinical trials in India, Salla Sariola*, Roger Jeffrey, Amar Jesani and Gerard Porter, University of Turku

Sites of Boundary Work and the Formation of Expertise in Everyday Self-Care, Harley Bergroth, Johanna Nurmi, Suvi Salmenniemi and Pia Vuolanto, University of Turku

Room: K001
Paper Proposal, 3rd Nordic STS Conference in Gothenburg

Authors:

Urban Strandberg, Senior Lecturer, Department of Political Science (University of Gothenburg) urban.strandberg@gu.se

Lena Caspers, Research Assistant, Department of Political Science (University of Gothenburg) lena.caspers@gu.se

Abstract:

Two-dimensionality as a tool of analyzing Epistemic Communities: The case of ellaOne and the European Medicines Agency.

The concept of Epistemic Communities as specific groups of experts that are involved in policy-making and use shared normative and principled beliefs to push for their policy aims has been applied to many fields of international policy-making. It is especially interesting to analyze in contexts where individual experts’ judgements and interpretations of scientific evidence may be intertwined with social, cultural or even religious beliefs that reflect national or regional traditions, and where there is an inherently blurred boundary line between political and scientific parts of the policy-making process. This article analyzes the Committee for Medicinal Products for Human Use (CHMP) at the European Medicines Agency (EMA) as a possible Epistemic Community. Previous research has shown that there is a limit as to the circumstances under which an Epistemic Community can act and exist. Utilizing the emergency contraceptive ellaOne as an illustrating example, and based upon interviews with eight members of the CHMP, this article introduces a two-dimensional approach to analyzing the limits of Epistemic Community activity.
The launch of clinical testing poses perennial challenges for decision-makers—especially those operating in novel research arenas. The stakes of trial launch are high, entailing an escalation of commitment to a particular clinical translation trajectory, exposure of human subjects to poorly characterized interventions, and expectations on the part of patients and research communities. Despite these high stakes, there is little to guide decision-makers on the scientific and ethical evaluation of early phase trials. In the absence of guidelines and reliable evidence, how do investigators, independent experts and others protect the interests of volunteers and the integrity of investigations when evaluating launch of clinical development? Four questions are investigated in this paper. First, what role does preclinical efficacy research play in decision-making surrounding trial launch and design? Second, what sorts of preclinical evidence drive decisions concerning trial launch? Third, how do investigators, reviewers, and others negotiate interpretations of preclinical evidence in light of well-known biases and distortions? Fourth, are there other evidentiary or moral factors that can—or should—inform trial launch?

To investigate, in-depth interviews were conducted to analyze the experiences, perceptions and attitudes of preclinical and early phase clinical investigators in the novel medical arena of cell therapies for Parkinson’s disease. The chosen area, cell therapies for Parkinson’s disease, is a contentious research area for three reasons: (1) it involves fetal or embryo derived tissue, (2) previous applications resulted in unexpected graft-induced dyskinesias in a subpopulation of patients, and (3) trials are likely to enroll patients with recent disease onset. Hence, it shed light on how the presence of public controversy surrounding medical interventions inflects both the processes and the outcomes of key decisions in trial initiation and design.
Addiction experts in public arenas: From scientific knowledge to lived experience

How does one solve social and health related problems in society? Many would endorse the approach that proper and sound knowledge about the problem in question is crucial to enable relevant and suitable solutions. Arenas that put scientific and expert knowledge in contact with the public debate and understanding are fundamental for spreading such knowledge to the society. Such arenas and their often popular scientific representations are important and useful means for communication to and interaction between actors of health related problems: other researchers, practitioners, clinicians, patients, and the public. But what is this knowledge? And whose knowledge is appropriate? This study investigates an arena positioned as an initiative for collecting research and expert knowledge to create better interventions and solutions for problems of addiction. The analysis focuses the power relations in coproduction of knowledge, and emphasizes primarily two things. First, the typical problematic addicted actor is bundled off to the periphery in favor of a new target group: the children. Second, the expert role is contested; the traditional expert and scientific knowledge is partly fading and muted in favor of experience-based knowledge when NGO’s and certain lay persons’ knowledge is magnified. This brings a change in the scope for future interventions and their recipients: from scientific and expert knowledge addressing interventions for persons with addiction related problems to the lived experience of laypersons addressing all actors operating in the addiction field.
Sites of Boundary Work and the Formation of Expertise in Everyday Self-Care

Criticism towards orthodox medicine and official health care systems has gained increasing ground in many countries over the past decade. This, together with the shift of public health care systems towards a mixture of public and private, has opened up space for the growing markets of self-care that draw on knowledge traditions other than evidence-based medicine and biomedical frameworks.

This paper focuses on boundary work, i.e. everyday struggles over knowledge and expertise in practices of self-care on three sites: biometric self-tracking practices, alternative and complementary medicine, and vaccination hesitance. Drawing on original multi-sited ethnographic fieldwork in Finland, a Nordic welfare state with traditionally strong public health care system, we investigate the ways in which the boundaries between biomedical knowledge and other types of knowledge are being maintained, negotiated, and legitimated. More specifically, we explore (1) the types of knowledges employed in everyday self-care and how these knowledges are produced, gathered and evaluated, (2) how they relate to biomedical systems of knowledge and expertise, and (3) how biomedical knowledge is appropriated, rejected, contested and molded in self-care practices.

The presentation is based on over 30 in-depth interviews and participant observation with practitioners of complementary and alternative medicine, users of self-tracking devices, and vaccination hesitant individuals and families. Thus, we shed light on how practices of self-care work in complex ways to question and reconfigure prevailing notions of science, evidence and expertise. Our findings suggest that some societal groups call for a complete reform of care directed from above. Yet others are actively building up partnerships to find ways to collaborate between public and private, and official and unofficial health care systems, and to synthesize different forms of knowledge, including biomedical evidence-based medicine, professional knowledge, and self-help expertise.
The politics of blood: Science, law and paternity tests

Boel Berner, Technology and Social Change (Tema T), Linköping University

How is medical knowledge about what is “in the blood” constructed? What happens when this knowledge leaves the laboratory to enter various social arenas, to define individuals and groups, and influence (and be influenced by) politics and ideology? What is the role of experts and how are conflicts between different knowledge claims acted out?

These questions are addressed in an analysis of what happened when scientific knowledge of the inheritance of blood groups was introduced into legal considerations of disputed paternity during the Interwar and early post World War II years. The background in Sweden was a law in 1917, which gave a child born out of wedlock the right to both a mother and a father who should pay for its support. Blood tests could from the 1920s establish who was not the father with a 15% probability, rising when new blood groups were discovered in the 30s and 40s. The results were disputed but accepted as evidence by the Supreme Court from 1930 onwards (but not always by the lower courts). I see this movement as an instance of biomedicalization – from the idea that a child should have a father to it having the right (biological) father, as established by science.

The paper traces the medical, legal and political trajectory of blood tests in the public sphere and discusses the different interpretations of “truth” within science and law. There were international differences, too, between Continental European and Anglo-Saxon legal systems in why and when blood tests were accepted in paternity cases; these differences are discussed in terms of different views of paternity, the role of experts within different legal system, and the differing degree of “elasticity” in legal practices when it comes to accepting new kinds of evidence.
‘You can’t stop the march of knowledge’: Civil society critiques of clinical trials in India

Salla Sariola*, Roger Jeffery, Amar Jesani and Gerard Porter

*University of Turku, Finland

The emergence of international clinical trials in India has been surrounded by controversy. Our research traced voices of civil society organisations and resistance that opposed global trials in the country at a time when increase was at highest (2010-2011 and beyond). Contrary to the narrative of resistance to Randomised Controlled Trials as hegemonic forms of knowledge production discussed elsewhere, members of civil society organisations in India expressed confidence in RCTs as a method.

Instead, they were opposed to hierarchies in pharmaceutical assemblages and the commercialisation of research. Activism focused on promoting social justice for research participants as well as for India as a nation; with parliamentary and judicial support, the civil society organisations lobbied for tighter ethical regulations which were introduced by the Indian government in 2013. This exacerbated a decline in the number of global trials carried out in the country.

This paper shows how and why civil society organisations were able to change local research regulation beyond a formulaic approach to research ethics towards their vision of social justice. We put forward a unique case study of science and health activism where, because of their non-fundamentalist stance towards the Randomised Controlled Trials methodology and lack of wholesale denial of international research activity, civil society organisations were able to craft an alternative narrative and direction to the clinical trials industry and bring international commercial research industry under greater control.
FUTURES, TEMPORALITIES AND ROBOTISATION, SESSION 1 OF 2

Chair: Alan Irwin, Copenhagen Business School

*Sounding the alarm: ecologies of knowing in fathoming futures*, Stephanie Lavau, University of Melbourne

*A Case on Speculative Design as a Method of Science Communication*, Anna Paukova, National Research University Higher School of Economics (Moscow)

*Framing renewable energy interactions – using futures to bring to light technological competition in the Linköping city bus system*, Amelia Mutter, Linköping University

Room: K002
A Case on Speculative Design as a Method of Science Communication

Anna Paukova

National Research University Higher School of Economics (Moscow)

The methodology of speculative design has been developed at the intersection of design practice and future studies and forecasting. It allows for reflection about the future in terms - and forms - of mundane objects, which do not exist yet but might meet certain needs of tomorrow (Montgomery, Woebken, 2016).

We claim that it can be successfully applied within the field of science communication because the methodology meets the requirements of dialogue and participation models (Hetland, 2014) and can serve several purposes at once: 1) fostering the discussion on a certain topic among actively engaged participants (primary audience); 2) creating the set of speculative design artefacts for the projects which are aimed at engaging wider – secondary - audience (exhibitions, transmedia online projects etc); 3) providing the opportunity for enriching research feedback, as long as the artefacts are becoming a valuable source of data itself.

In our case, undergraduate students from different specializations (HSE, Moscow) have been invited to participate in a non-graded art-research project on the topic of choice overload (Schwartz, 2004), where we tried to adopt the methodology of participatory experiential futures workshops (Candy, 2010). We introduced participants to some of the choice overload literature, as well as to the speculative design way of thinking. As a result, they were expected to develop a concept and/or a prototype of a not-yet-existing object/technology which might help people to deal with choices in the near future.

We hope to share the results of the project and discuss some methodological issues, such as facilitating participants’ motivation, building up the prompts for the creative process etc.
Sounding the alarm: ecologies of knowing in fathoming futures
Dr Stephanie Lavau (University of Melbourne)

Animals have long figured in efforts to sense environmental threats and warn of potentially catastrophic futures, from the monitoring of declining fish populations to signal the industrial pollution of European rivers in the 18th century, to the 20th century practice of using canaries as sentinels for dangerous gases in coal mines. In contemporary practices of environmental science, management and policy, certain species are formalised as biological ‘indicators’ that signify current environmental condition, track environmental change, and foreshadow ecological futures. Future threats that are more or less imperceptible to human senses and/or undecipherable by scientific instruments – climate change, radiation, pollution, emerging diseases – are instead made detectable through the bodies and behaviours, distributions and deaths of animals.

Animals are thus practised as anticipatory technologies through predominantly visual techniques within formalised ecologies of knowing. In this paper, I invoke Helmreich’s (2016, xxii) concept of “sounding” as means of “rattling a common sense that usually operates in the domain of the visual, in the register of the panoptic view from above”. The paper is informed by a multidisciplinary project that intersected fieldwork approaches of STS, ecology, sound and visual art, in exploring and experimenting with the ways in which the environmental condition of the River Dart is apprehended through ‘signs of life’, such as the aquatic snail *Radix balthica*. In “sounding” the alarm, I attend to mingled senses (Serres 2008) and indicative uncertainties in these practices of fathoming futures.
Framing renewable energy interactions – Using futures to bring to light technological competition in the Linköping city bus system

Amelia Mutter - Linköping University, Department for Thematic Studies, Technology and Social Change

In the current climate change debate, transportation is viewed as a particular challenge to overcoming fossil-fuel dependence. The emphasis placed on the need for renewable energy in transport has led to competing expectations of the fossil-fuel free future. This paper will examine multiple future visions surrounding biogas and electricity as competing and complimentary technologies in Linköping, Sweden. In this municipality, biogas has established a strong foothold driving 100% of public city buses. Despite large-scale investment and infrastructure build-up suggesting a hopeful biogas future, another technology is often hyped as the best pathway toward sustainability, threatening the biogas-based system. Electric vehicles have emerged as a strong competitor in line with the national future imaginary. This paper will examine how decision-makers frame alternative fuel sources within the current and future city bus system. It will seek to understand how electric and biogas bus technologies are viewed as competitive or complementary with a focus on what role the technologies play in actors’ visions of the future. This paper will follow key stakeholders in Linköping municipality, utilizing interviews and participant observation at an on-going electric bus scenario project. The aim of this paper is to discuss how the electricity-driven future has attempted to unseat the biogas-dominated future in the Linköping case, with a focus on how this relates to the national socio-technical imaginary. How do the interactions between these two technologies play out in each vision of the future? How do these interactions influence actors’ meaning-making processes, especially with respect to sustainability? These questions will be addressed in relation to individual actors’ visions of the future.
**THURSDAY 1 JUNE 09.00 – 10.30 KEYNOTE TALK**

*Social studies of expertise: science, policy... and economy?*, **David Demortain**, INRA - Laboratoire Interdisciplinaire Sciences Innovations Soci et es (LISIS)

Room: Dragonen
Social studies of expertise: science, policy... and economy?

David Demortain, INRA - Laboratoire Interdisciplinaire Sciences Innovations Soci et es (LISIS)

Scientific expertise, or science-for-policy more broadly, has historically been a rich field of study for the sociology of scientific knowledge and science and technology studies, indeed one of the terrain on which some of its key claims and concepts were forged. Work in that area was driven by an abiding interest in the use of science in policy, the particular forms of knowledge that emerged in the intermediary space between research and policy, the mutual construction of science and policy. Now, the recent surge of "ignorance" studies, historical investigations in corporations' manufacturing of doubt tactics, public controversies about "conflicts of interest", all point to considering the economy as an integral part of stories of the construction of expert policy knowledge. The talk will raise a number of illustrations pertaining to the area of regulatory science, and articulate what looks like a theoretical challenge for the field: that of triangulating science, government and the market.
STS AND DEMOCRATIC POLITICS, SESSION 1 OF 2

Chair: Irina Papazu, Copenhagen Business School

Democracy in action: publicity media as care-takers of publics, Andreas Birkbak, Aalborg University

Taking environmental participation seriously: when and why is participation meaningful?, Linda Soneryd and Göran Sundqvist, University of Gothenburg

Parliamentary procedure and the objectivity of science: Re-reading Max Weber, Kristin Asdal and Bård Hobaek, University of Oslo

Enacting legitimate concerns: an agnostic approach to stakeholder participation in environmental planning and governance, Jonathan Metzger, Linda Soneryd and Sebastian Linke, KTH Royal Institute of Technology and University of Gothenburg

On the notion of data publics in digital controversy mapping, Anders Kristian Munk, Aalborg University

Room: D138
STS and democratic politics

Panel organizers:
Irina Papazu, Assistant Professor, Copenhagen Business School
Anne Kathrine Pihl Vadgaard, IT University of Copenhagen
Andreas Birkbak, Assistant Professor, Aalborg University Copenhagen
Linda Soneryd, Associate Professor, University of Gothenburg

Abstract
Politics has been conceptualized as an incredibly broad term in STS (Brown 2015). But what is the relationship between STS analyses of politics and ambitions for a politics that can be called democratic? While politics and the political have been widely explored, there has been a tendency to assume that democratic politics is an ideal available to guide analyses and interventions.

The purpose of this panel is to question this assumption and ask what democracy comes to look like if it is allowed to emerge through the analysis rather than taken as a starting point or pre-conceived ideal.

We find this challenge topical, yet underexplored in current STS research. Recent work has suggested connections between notions of radical democracy and the STS interest in knowledge controversies, based on the idea that democracy must start from the acknowledgement that disputes cannot be settled by referring to technical expertise (Barry 2013). At the moment, however, such assertions raise more questions than they answer (Marres 2012). How can democratic politics be understood and studied based on the empirical-conceptual repertoires and methods of STS?

One way to approach democratic politics from an STS perspective would be to take inspiration from Latour’s dictum to describe ‘science in action’ (Latour 1987). Such an effort would require a redescriptions of democratic political institutions and concepts, paying close attention to the situated practices and entanglements that their operations require - a ‘democracy in action’ approach.

How do we study and re-describe such central categories of political life as the electorate, the community, or the public, without reifying or delegitimizing them? This question is especially urgent in a time when democratic politics, foundational to many contemporary societies, seems to be endangered and under attack from many sides. What risks are involved, if any, in unpacking institutions and practices assumed to secure modern democracy? And, conversely, under the current circumstances, do we dare not to unpack the workings of our systems in time to learn more about their workings and shortcomings?

Suggested papers
• Andreas Birkbak, AAU: "Democracy in action: Publicity media as care-takers of publics”
• Irina Papazu, CBS: "Renewing Samsø: Re-conceptualizing politics as a process of community renewal”
• Linda Soneryd and Göran Sundqvist, GU: "Taking environmental participation seriously: when and why is participation meaningful?”
• Anders Kristian Munk, AAU: "On the notion of data publics in digital controversy mapping”
Democracy in action: Publicity media as care-takers of publics

Andreas Birkbak, Assistant Professor, Aalborg University Copenhagen

The investigation of institutionalized practices such as elections offers a pertinent way to ground democracy ‘in action’ (Vadgaard 2016). But an STS-inspired interest in democratic politics should also attend to how things happening between and outside of elections are qualified as democratic. Specifically, theories of deliberative and participatory democracy highlight the democratic importance of public debate taking place between elections. Studying this part of democracy in action is important because it helps overcome the fiction of an individual voter able to express an independent political will in the voting booth (Cochoy and Grandclément-Chaffy 2005). At the same time, the notion of public debate usefully complicates the opposite idea that voters are simply informed or even manipulated from an outside. The immediate problem, however, is where to ground a study of public debate in action. I propose that a key site for investigation is publicity media. This is not only because media technologies such as newspapers and social media are already associated with public debate, but because media play a central role in formatting and specifying how people become engaged in public issues. However, studying publicity media is complicated by the notion of mediation, in so far as it invokes the illusion of “double-click” – the undistorted transfer of information (Latour 2013, Citton 2014). I propose the notion of care may help resist this trap by highlighting how neither producers or audiences are in control of media practices. I suggest that such an approach to publicity media as involved in a ‘caring’ for publics between elections can benefit from the rise of digital media, which have been associated with a blurring of the distinction between audiences and content producers.
Taking environmental participation seriously: when and why is participation meaningful?
Linda Soneryd and Göran Sundqvist

Participatory approaches in environmental governance are often proposed of leading to more robust assessments and decisions. However, in this paper we argue that such a positive assessment is dependent on how the object of participation is understood and enacted by involved participants.

Public participation in environmental regulation has been a central issue for STS scholars. A strong focus has been on who has what kind of relevant competence for the issue at stake, or what kinds of meanings and identities are at play in these processes. A more profound analytical focus on the nature of the issue has been lacking. One exception from this is Marres' suggestion that studies on participation should focus more on “the issue”.

In this paper we further develop the focus on what participation is about – the issue at stake – by using the distinction between “negotiable” and “non-negotiable” questions of concern. From this distinction we provide means for unpacking and analysing the variable meaningfulness of participation. In short: participation is less meaningful when the issue is understood as being “non-negotiable” and more meaningful when “negotiable”.

We illustrate our framework with examples from the environmental field in which public participation has been promoted as of importance: nuclear waste management (as an example of a non-negotiable issue) and water management (as an example of a negotiable issue). The two examples are not seen as negotiable or non-negotiable in themselves, rather this is an effect of different science-policy contexts.
Parliamentary procedure and the objectivity of science: Re-reading Max Weber

Does STS need Max Weber? Yes, this paper argues – and aims to argue how – and why – by a close study of parliamentary procedure and a re-reading of Weber’s work on scientific objectivity. In doing this we aim to go beyond the standard reading of Weber as a proponent of methodological individualism and the importance of separating facts and values in science and politics. As is often the case, re-reading classics reveals a different picture: highly interesting takes on the study of politics, of scientific objectivity, and the relationship between the two. Taking our cue from a recent revival of interest in Weber as a political thinker, this paper will discuss the claim that Weber’s conception of scientific objectivity was inspired by his detailed studies of parliamentary procedure. More than simply philosophical perspectivism, he also built on an agonistic view of political struggle bound to procedural rules as he had studied it in the Westminster system.

Weber’s work on parliament is concerned with the procedural tools available to balance and control different kinds of knowledge. He studied scientific and political processes in parallel, in ways that clearly resonate with later work in STS. He avoided the reduction of politics to power play, empty speeches, or simply the other side of the science/politics distinction. Perhaps the most promising avenue this opens up is a push to pay close attention the details of political procedure and institutions. These form elaborate arrangements worthy of close study, no less than the apparatuses of scientific knowledge production. Based on our own analysis of the Norwegian parliament at the turn of the 20th century, this paper will discuss Weber’s possible contribution to a more nuanced conception of politics within STS.
Title
Enacting legitimate concerns: an agnostic approach to stakeholder participation in environmental planning and governance

Abstract
From the 1990s and onwards environmental planning and governance has undergone a broad participatory turn. Today participatory arrangements based around the notion of ‘stakeholders’ are therefore an integral part of such processes. This paper proposes an agnostic approach for studying the effects of such arrangements, with a particular focus on their democratic de/merits. Drawing on previous research within planning studies and STS we suggest that such concerns cannot be fruitfully addressed on a purely theoretical level and that any meaningful analysis of participatory arrangements therefore must take into regard concrete and situated enactments of legitimate stakeholders and concerns. This implies studying the variegated effects of diverse and often conflicting rationales and infrastructures for stakeholder involvement at a particular place and time, and in relation to a specific issue. Such investigations bring into focus situated effects of inclusion and exclusion as well as de/legitimization of specific actors and concerns. Throughout the paper we utilize two case studies, from spatial planning and fisheries management, to empirically illustrate our argument. We conclude that it is of paramount importance not to take as given the democratic de/merits of participatory ambitions and procedures.

Authors
Jonathan Metzger, Division of Urban and Regional Studies, KTH Royal Institute of Technology
Linda Soneryd, Department of Sociology and Work Science, Gothenburg University
Sebastian Linke, Department of Philosophy, Linguistics and Theory of Science, Gothenburg University
On the notion of data publics in digital controversy mapping

Controversy mapping emerged in STS as a method for teaching basic SSK and ANT to engineering students without a theoretical deterrent. Map the entanglements between science and politics faithfully and agnostically, then we can have a discussion about constructivism afterwards. Since the early 1990's when the method was first conceived, two radical changes have arguably reshaped the practice and purpose of controversy mapping in STS. Firstly, the advent of digital mediated public inquiry (on social media and the web more generally), and its accompanying suite of natively digital methods (Venturini 2011, Rogers 2012, Marres 2015), has meant new empirical ground for the controversy mapper to chart. Secondly, the onto-political turn in STS (Law 2009) and the notion that researchers can engage in ‘critical proximity’ (Latour 2003) with their objects of study, offers new interventionist roles for controversy mappers who can now see themselves as stuarts or caretakers of good and productive public inquiry. Controversy mapping habitually draws on a Deweyan notion of the public as one sparked into being by a common matter of concern (see especially Marres 2007), but what happens to that notion when the public is datafied as digital traces? Can we imagine a public that performs inquiry on its own process of inquiry? And how does the data public afford new opportunities for intervention to the controversy mapping. Drawing on a set of recent case examples, the paper proposes to explore these questions.

Anders Kristian Munk
VALUES AND VALUATION, SESSION 1 OF 2

Chair: Francis Lee and Isabelle Dussauge, Uppsala University

Risk containment practices and the problem of connectedness in a global world: A textual approach, Tone Druglitrø, University of Oslo

Smart city citizens – How database infrastructures count and enact citizens differently, Michael Hockenhull and Maria Cohn, IT University of Copenhagen

Valuation studies and urban studies: A fruitful marriage?, Heiti Ernits and Stefan Molnar, RISE Research Institutes of Sweden

Assessing academic careers: The valuation of publications in economics, history and medicine, Björn Hammerfelt, University of Borås

The Little Tools of Large Scale Visions: Seeing Like a Firm., Hilde Reinertsen, Kristin Asdal and Bård Hoebek, University of Oslo

Room: D241
Title: Risk containment practices and the problem of connectedness in a global world: A textual approach

The paper examines the crucial role of texts in doing global risk containment. Drawing upon recent insights in STS on the potential of texts as empirical fields and analytical resources, the point of departure for the investigation is that texts do not only represent and describe, but also do valuation work. Texts actively engage in ordering and valuation by naming, categorizing, separating, drawing together actors and objects, and in doing so take part in building moral economies of connectedness and disconnectedness. By examining the textual realities of specialized, technical, global agencies such as the World Health Organization (WHO) in the event of a viral outbreak, the paper provides insight into how so called networks of data collection emerge as infrastructures for global risk containment practices, and how it involves intricate valuation work. In particular, it examines how the problem of connectedness emerged as an issue for the WHO in the late 1980s in the event of the outbreak of Ebola in research monkeys, and the strategies and practices that were foregrounded to meet the challenges of what was described as a new global modernity where humans and non-humans were continuously moving across borders, producing new pathogenic threats. The paper places perspectives on risk containment (including biosecurity studies) that is concerned with how communicable diseases are being managed and mismanaged in conversation with perspectives on valuation concerned with how values are being constructed, negotiated and/or maintained.
This paper explores how smart city infrastructures enact citizens through practices of counting and valuation, including traditional methods treating them as objects, and in novel ways, framing the citizen as co-producers and users of data, or ‘prosumers’. The paper examines two distinct Copenhagen infrastructure projects; the City Data Exchange (CDE) and the open city data portal, data.kk.dk. Using an explorative quali-quantitative approach, the authors investigate the enactment by mapping the datasets, their types and their relation to the citizen - what counts enough to be counted. The ways in which the organisations behind the infrastructures engage citizens to interact directly and indirectly are also studied, and interviews with relevant actors are used to explore the background context. A relational model of data informed by Actor-Network Theory is employed as a theoretical lens through which to view the findings. The authors argue that the relation which the publicly-driven portal seeks to establish with the citizen is on the one hand one of being the object of multiple counts, from socioeconomic status to traffic, but on the other hand one of ‘enmeshment’ with the infrastructure of counting itself. Thus, the key actors behind the portal are attempting to reshape the traditional relation of counting to one that can be likened to that of the ‘prosumer’. By hosting events such as hackathons, central actors invite citizens to engage with the portal, and consume as well as produce data. In contrast to this, the private and for-profit CDE infrastructure primarily enacts citizens as either generators of data traces to be used by others or as benefactors of improved efficiency and innovation in services. The CDE thus enacts a version of the citizen as a commodity or passive recipient to be counted as a resource to be commoditized for the benefit of building relations to companies using the CDE, rather than an active participant. The two infrastructures, it is argued, represent different ways of envisioning relations between database infrastructures and citizens. In both cases, data is used as a relation-building tool in line with the purposes of the respective infrastructures: the public data.kk.dk attempts to enact citizens as prosumers whereas the private CDE enacts them as resources. By investigating these modes of relation building, the authors hope to contribute to the understanding of the potentially new epistemological reality of smart cities and their infrastructures, and how they enact the citizen in new ways.

Authors:
Michael Hockenhull, PhD Student, IT-University of Copenhagen
Marisa Cohn, Assistant Professor, IT-University of Copenhagen
Valuation studies and urban studies: A fruitful marriage?

Heiti Ernits PhD candidate at RISE Research Institutes of Sweden and University of Gothenburg (School of Public Administration)

Stefan Molnar, PhD candidate at RISE Research Institutes of Sweden and Chalmers University of Technology (division of Science, Technology and Society)

The last few years we have seen the emergence of a new research field called “valuation studies” devoted to the study of “valuation as a social practice”. Drawing upon amongst others science and technology studies, organizational theory and economic sociology, researchers in the field have studied everything from the life sciences and medicine to cultural regional development and business innovation. However, there are very few studies that explicitly focus on urban planning (e.g. Glucksberg (2014) and Farías (2015))

Even though phenomena resembling valuations have previously been studied within planning research, e.g. through theories of moral judgment (Campbell 2002), we argue that the fields of valuation studies and urban studies can be brought into a fruitful conversation with one another on how the enactment, negotiation and materialization of value(s) takes place in urban planning. In addition, we argue that the ‘new materialist turn’ in planning theory (Beauregard 2015) can become a central part in such a conversation.

Empirically, the paper draws on three case studies in the Swedish cities of Mölndal, Göteborg and Borås. We will show how urban planning processes engage a range of subjects, objects and means of valuations in an attempt to negotiate and translate values “into action and stone, on the process of translating desires into results” (Czarniawska and Solli 2001: 7).

Czarniawska, Barbara and Solli, Rolf (2001), Organizing metropolitan space and discourse (Liber Ekonomi, Malmö).
Glucksberg, Luna (2014), 'We Was Regenerated Out”: Regeneration, Recycling and Devaluing Communities', VA, 2 (2), 97-118.
Assessing academic careers: The valuation of publications in economics, history and medicine

Björn Hammarfelt, Swedish School of Library and Information Science (SSLIS), University of Borås
bjorn.hammarfelt@hb.se

Reputation and recognition gained through publications has been a crucial merit for career advancement in academia since the birth of the research university in the late 18th century. The ability to publish research is instrumental both for gaining recognition within a specific field of research, and for the possibility of getting a permanent position at a university or a research institute. Yet, how publications are valued in the context of evaluating careers is so far an understudied topic. Through a content analysis of referee reports (‘sakkunnigutlåtanden’) in three disciplines — biomedicine, economics and history — this paper analyses how externalities are used to evaluate publication oeuvres. Specifically the analysis focuses on how referees use 'judgment devices' (Karpik 2010), for example bibliometric indicators or book reviews, to assess the value of publications. All three fields emphasise similar aspects when evaluating: publication prestige, temporality of research, reputation within the field and disciplinary boundaries. Yet, how these facets of quality are evaluated, and the means through which they are assessed differs between disciplines. Moreover, research fields orient themselves according to different temporal horizons, i.e. history looks to the past and economics to the future when research is evaluated. The findings also suggest that it might be misleading to overemphasise tensions between the use of indicators or other externalities, and ‘pure peer review’. Rather, I suggest that the use of judgment devices should be seen as integrated within a larger set of evaluative practices. How these practices are formed in relation to disciplinary traditions, evaluative infrastructures and policy recommendations is therefore a question of great importance when assessing the quality of research.
In current debates over the future of the Norwegian marine industries and the promises of the emerging “bio-economy”, the potential for a six-fold increase in value creation is a much-sited vision. This influential number was first introduced by the report *Value creation based on productive oceans in 2050* (hereon: “the 2050-report”), published by the research institution SINTEF in 2012, and has since become a widely accepted political goal. In this paper, we analyse the 2050-report in detail, asking: How does the report undertake valuations that together produce the potential six-fold increase? We show how these valuations are a combined quantitative and qualitative excersise, enabled by a set of analytical tools retrieved from the business sector (notably *value chain analysis* and *SWOT analysis*) that were developed at the US business schools and in common use among business consultants worldwide.

Given that the 2050-report informs high-level political decision-making, this begs the question: What happens to politics and the political when its traditional tools of macroeconomic planning and management are replaced by the little tools from the business schools? We argue that rather than *seeing like a state*, the report’s specific tools entail *seeing like a firm*, which in turn invite politicians to attain an investor’s gaze. This, we suggest, makes the realisation of the new bio-economy a much different endeavor than other large-scale state-led projects of decades past – it may even amount to a potentially radical transformation of the core functions and workings of social-democratic governments. Investigating documents such as the 2050-report closely and critically is thus of key importance for understanding this ongoing transformation.
CARE IN TRANSFORMATION. ARTICULATING ALTERNATIVES FROM WITHIN

Chair: Nete Schwennesen & Anna Mann, University of Copenhagen

Generative Collectives in Argentinian Care Trans*Formations: Alternatives from a Different ‘Within’, Sonja Jerak-Zuiderent and Teun Zuiderent-Jerak, Linköping University

When self-tracking moves to physical rehabilitation: Articulating modes of doing good in local arrangements of care, Nete Schwennesen, University of Copenhagen

“I Hate the ‘Urgh’ of Prolonged Dying!” Problems and Initiatives in a Dialysis Unit, Anna Mann, University of Copenhagen

What good comes from insights in telecare practices?, Annemarie van Hout, Windesheim University of Applied Sciences

Room: F417
Care in Transformation. Articulating Alternatives from Within

In these years, the health care sector is undergoing multi-faceted changes; abstract ideals of autonomy, empowerment and patient-centeredness have entered clinical practice, while the structures within which patients are seen and treated are simultaneously reorganized along ideals such as efficiency and transparency. New medical technologies and tools for diagnosis and treatments are developed at a rapid pace, and are being more widely distributed in both clinical and non-clinical settings. This all happen against a backdrop of financial cutbacks and a scarcity of resources. Health care professionals face the effects of these changes and respond to them on a daily basis. They negotiate, tinker and experiment with, re-imagine and invent – the way they are seeing and treating patients, the things and technologies they use, the knowledge they mobilise and produce, and the structures and constraints they are embedded in. In this process, new “goods” become enacted and new forms of “good care” emerge (Pols, 2004; Mol, Moser, Pols, 2010; Schwennesen & Koch, 2012). This panel presents empirically rich studies on the creative ways in which health care professionals respond to and experiment with the changes they face in their day-to-day work and the new professional and patient subjectivities and relationships that take shape in this process. We also wish to discuss the various conceptual and methodological resources we can draw on to explore the possibilities of articulating alternative ideals and critique that emerge from within health care practices themselves. Hence, the panel contributes to ongoing conversations in STS on “care”, “goods” and “values” embedded in health care practices and the possibilities of interventions that STS methods and research make possible, by making them available for recognition, appreciation and assessment as well as for critical reflection and discussion.
Generative Collectives in Argentinian Care Trans*Formations:
Alternatives from a Different ‘Within’
Sonja Jerak-Zuiderent & Teun Zuiderent-Jerak
sonja.jerak-zuiderent@liu.se & teun.zuiderent-jerak@liu.se
Tema T – Technology and social change, Linköping University, SE

Part of session: Care in Transformation. Articulating alternatives from within

European STS-informed interview question:
“Did anyone raise cost effectiveness arguments when arguing for this [Argentinian trans* health] law? I mean, giving trans* the right to change their passports without requiring bodily modifications could reduce the need for expensive surgery, or?”

Baffled Argentinian policy makers’ reply:
“Well, why?! This is such a small community that we’re really not talking about a lot of money.”

Italian hotel employee in Chivilcoy, AR:
“If the trans people get more human rights, I’m fine with that.”

Chivilcoy GP and head of inclusive consult:
“I see that differently: more human rights for them means more human rights for me.”


A grid town. Single storey houses. We’ve reached Chivilcoy. Hosts to one of the leading teams in trans* care in Argentina. In Chivilcoy. 60 thousand inhabitants. Statistically speaking that means 30 trans* people. And if trans* care is a matter of human rights you can’t expect them to move to Buenos Aires, though only a two-hour drive.

The teams’ biggest success: 1) a quota agreement with the municipality and local companies for 15 employments. Improving the health of trans* people means getting them jobs; 2) a large LGBTIQ rainbow-flag mural on the town square, next to the police station and the church. That is where we’ll celebrate tonight. Celebrate sexual diversity. In Chivilcoy.

This is a story about trans* care that isn’t about specialized medical teams but about integrative action. No cis-male-endocrinologists but a trans*woman-nurse. No university medical center but a town square. No Euro STS ‘issue politics’ but political health action by generative collectives. A place for STS to learn about its limits and preoccupations by studying alternatives from a different ‘within’.
When self-tracking moves to physical rehabilitation: Articulating modes of doing good in local arrangements of care

In this paper I explore what happens when self-tracking technologies and devices travels into the context of the health care sector and contribute to the ongoing transformation of care in physical rehabilitation. By unpacking the processes through which a self-tracking technology (ICURA) is put to use in two different organisational settings of physical rehabilitation in Denmark, I articulate two modes of doing good as they are played out in the two different settings. I define modes of doing good, as a temporal way of ordering practice in entities which together form a pattern of relational meaning directed towards 'the good'. I articulate such modes in relation to the specific kind of relationships patients and health care providers establish with and through the technology and the ways in which patients and professionals are affected by its use. I show how local arrangements of physical rehabilitation, come to establish a new geography of care, which determines what the technology becomes (friend or foe), how it comes to act (competent/incompetent) and its ability to affect and respond to particular bodies.
“I Hate the ‘Urgh’ of Prolonged Dying!” Problems and Initiatives in a Dialysis Unit

Since the emergence of dialysis as a treatment for kidney failure in the late 1960s, a lot has changed. People on dialysis live longer and develop other diseases in this process. At the same time, more and more old people reach the end stage of renal disease that is usually treated with kidney replacement therapy. A so-called “greying of dialysis” (Cameron, 2002) has happened.

Drawing on a set of sensitivities developed in ethnographies on care (Pols 2004; Mol, Moser, Pols 2010), the paper presents ethnographic materials from ongoing fieldwork in a hospital in Vienna (Austria). In this hospital, dialysis nurses and nephrologists have started a project, which they call SupportivNET. Its aim is, so the description states, to provide old and/or multi-morbid patients with “meaningful care” by replacing the treatment goal of “quantity of life” with “quality of life.” Tracing the activities that nurses and doctors engage in on a day-to-day basis, the paper will tease out how a problematisation of established procedures occurs and an alternative form of care emerges. Good care for people whose kidneys no longer work, the paper will suggest, is not only an issue to be discussed in a societal debate about values in medicine (Kaufmann 2015). It is also a practical achievement to bring about in mundane goings-on that constitute the provision of healthcare in particular situations and sites.

Through the case of the mundane problems and initiatives on a dialysis unit, the paper, thus, opens up questions about the relation between critique and alternatives that our informants voice and practice and their articulation with STS methods and sensitivities as we study and care about care.
What good comes from insights in telecare practices?

Nursing practices profoundly change with the introduction of technology. Over the past few years we have studied different nursing practices in which webcams were used. We conducted ethnographic research techniques, observing and interviewing nurses and patients, to fully understand telecare practices. We found how nurses become absent professionals, as bodily presence from either party is no longer conditional. We saw how technology can help to gather information, but at the same time leads to loss of information, as the room is not shared anymore. We described the changing role of materiality in care relations. We pointed out differences between nurses’ expectations of technology and those technology practices. We saw how good care is challenged and changes, which is not debated on by the care professionals, nor by professions and patients. We articulated differences in care, brought forward dilemmas of good care and discussed how all of this changes nursing knowledge.

So where does all of this puts us scientists? In what way can we transport this knowledge? Who should be involved? With whom to discuss? In what context did we draw conclusions? In this paper I want to discuss what good comes from insights in nursing telecare practices. I want to show what it means for the nursing profession and for (nursing) scientists and discuss they relate to each other, and even more important, to their context. How can our research, or this kind of research, help the nursing profession to care for itself, in order to care for others.

Annemarie van Hout,
AMC/University of Amsterdam
Medical Ethics, department of General Practice
and
Research Group IT-innovations in Health Care,
Windesheim University of Applied Science, Zwolle, The Netherlands
THURSDAY 1 JUNE, 11.00-13.00 PARALLEL SESSIONS 2

BODIES IN/AND STS SESSION 1 OF 2

Chair: Kristin Zeiler, Josefin Persdotter & Linda Weichselbraun, Linköping University and University of Gothenburg

Writing in the snow vs peeing like an old man, Ericka Johnson, Linköping University

Welfare technologies and aging bodies – various ways of practicing self-reliance, Anne Marie Dahler, University College Lillebælt

Introducing menstrunormativity, Josefin Persdotter, University of Gothenburg

On steroid politics: sex, medicine, and athletic metamorphoses in Finland 1950-1976, Sari Irni, University of Turku

Fertility-making through egg donation technologies, Mathilde Lykkebo Petersen, University of Southern Denmark

Room: K001
“Bodies in/and STS”

We propose a thematic panel that explores bodies in/and STS. What happens when bodies meet technologies and science(s)? What are the particularities of studying bodies from/within STS-perspectives? What methodological tools can be used to further include bodies and bodily matter as active subjects in our research? How can theories from STS and feminist technoscience studies contribute to studies of bodies in/and technology? What other theories/perspectives could we integrate, and how can studies of the body contribute back to these theories?

Through hormonal, urinating, menstrual, embryonic and ageing bodies, and cross-fertilizations of STS, feminist technoscience studies and (queer) phenomenology, the included presentations explore bodies and embodied subjects, and the boundaries and normativities that surrounds/bounds them. What bodies are made to fit in, and which are marginalized? What happens when bodies, and parts of bodies, turn into objects of scientific, technological and medical practice?

Altogether, the panel includes scholars from Denmark, Finland, Norway and Sweden. It aims to nourish a creative and constructive discussion on theoretical perspectives and research methods that can be used to encompass the multiplicitious co-shaping/co-production of bodies, subjectivities, normativities and technologies.

The thematic panel is organized by Josefin Persdotter and Linda Weichselbraun, PhD Students in sociology and STS at Department of Sociology and Work Science, University of Gothenburg, in co-operation with Ericka Johnson, Senior Lecturer, Tema Technology and Social Change, Linköping University.

Contact info, panel organizers:
Josefin Persdotter: josefin.persdotter@gu.se
Linda Weichselbraun: linda.weichselbraun@gu.se
“It is probably the prostate that is haunting him,” wrote a Swedish urologist recently, describing a patient who presented with diffuse symptoms in the lower pelvic area. And this phrase awoke no contention. In the discursive context of a dry, medical journal, it is apparently unproblematic to talk about the prostate as a gland that haunts. Like a ghost, the prostate is a well-hidden gland, hard to find, hard to measure, and hard to access. Yet it is also very visible in discourses of aging masculinities, and particularly tangible in bodily practices like urination. Here the prostate comes out into the open, becomes a site of pathology and of pathos. This paper examines how the male body is discursively opened to allow the prostate to become a known and active subject. Based on interview material with men experiencing prostate issues and health professionals caring from prostate concerns, this paper explores narratives of how way a changed urination practice pushes the embodied male subject outside of the ‘normal’ category, for whom our built environment provides bathroom facilities. It analyses the experience of being made aware of urination needs and how this is connected to a changing, aging masculinity. Using theories of affect, this paper examines the emotional work that the prostate does in discourses about aging masculinities through the practices of urination. It wonders how a body part can haunt, and what function this haunting serves.
Welfare technologies and aging bodies – various ways of practicing self-reliance

Anne Marie Dahler, Ph.D student
Afdeling for Anvendt Velfærdsforskning
University College Lillebælt
Niels Bohrs Allé 1
5230 Odense M

Abstract
In contemporary policy strategies (and in research as well), welfare technologies are framed as a solution to the welfare states in terms of the challenges of demographic changes. Technologies are supposed to reduce or substitute the work of care-workers, and thereby reduce attrition in care-workers, reduce costs and at the same make elderly people self-reliant and independent. In this paper I suggest, that this way of framing how welfare technologies works with elderly people hold an instrumental view on technologies as well as on bodies, and need to be challenged. Drawing on theories of subjects as interacting, materiel and embodied, and on technologies as material agents that mediate actions, the guiding question in this study is how self-reliance is practiced in the lives of elderly people using welfare technologies. The study is based on interviews with 8 elderly citizens in a Danish municipality, who have been provided a wash toilet and often also other technologies as part of their welfare service package; 8 home care assistants from the municipality; and a technical assistant who installs the toilets. The study shows how self-reliance is practiced in various ways; self-reliance is practiced in specific areas of life linked to the specific life story and body of the elderly citizen; self-reliance is situational as it is practiced in specific situations during the day/week; and self-reliance is relational, as it is practiced in relation to specific persons and things. Implications of these findings are discussed in relation to implementation of welfare technology as well as to forms of governance appropriate for embodied elderly citizens and technologies.
Title: Introducing menstrunormativity

The concept *menstrunormativity* is introduced as a way to talk/think/research about social and scientific understandings and technologies of menstruation and their effects on menstruation as phenomena. The concept encircles constructions of “natural”, “normal” and “right” ways to menstruate and be/feel/act as menstruator and enables discussing what *menstrualities*, menstrual potentialities, and what menstrual “Others” menstrunormativity produces.

Based in a material-semiotic understanding that underlines the entanglement and inseparability of nature and culture the concept is developed including both the biological/physiological/material and social/cultural aspects of menstruation. When thinking through menstruation, “the physical body cannot, and should not, be absent” and there is a need to develop tools capable of “includ[ing] the physical body in discussions about the cultural body” (Newton 2016:51). Menstrunormativity is suggested to encompass the system(s) of social constructions that posit “right”, “natural” and “normal” ways to menstruate and be/feel/act in a menstrual body. It encircles assumptions of menstrual normalcy and thus of menstrual deviance. The concept is discussed as a way to talk/think/research about social and scientific understandings/constructions/technologies of menstruation and their effects on menstruation. Menstrunormativity is intended to provide a tool to discuss processes of inclusion and exclusion within menstrual discourse, and see what menstrual possibilities are rendered possible, or impossible, what menstrual “Others”, i.e. those who do not fit into given standards of normalcy, challenging menstrunormativity in both physical and behavioral ways, are produced and how do they retaliate?
1. Title
On steroid politics: sex, medicine, and athletic metamorphoses in Finland 1950-1976

2. Presenter
Sari Irni (sari.irni@utu.fi)

Sari Irni works as a University Lecturer in Gender Studies at the University of Tampere, Finland. During 2015-2017 Sari is on research leave at University of Turku, Turku Institute for Advanced Studies (TIAS). Their current research interests include feminist theory, affective transdisciplinary encounters, science studies, non-human animal studies, material feminisms, and political histories of sex hormones.

3. Institutional Affiliation
Turku Institute for Advanced Studies
Gender Studies
University of Turku

4. Abstract
In this paper, I explore high-performance athlete bodies with the notions of “metamorphosis machine” (Patton 2000, 110) as well as with Haraway’s (2016) proposals to make “oddkin” and to “stay with the trouble”. I concentrate on the public and medical accounts of the use and effects of steroids during the period of 1950-1976 in Finland. This period, in particular from 1960s onwards, has been in international sports studies analysed from the perspective of the development of modern sports medicine, anti-doping regulation and, from the perspective of gender, chromosomal sex tests. I argue for a need to grasp more fully the trouble-making related to steroids, including the accounts of steroid risks of the time, as well as the politics related to them. I include in this analysis in particular, the threat steroids seemed to pose not only to fairness of sport or the health of athletes, but to the binary understanding of gender and to the very boundaries between human and non-human. I suggest that for this task, it is useful to explore the emerging steroids as contributing to a sort of hormonal metamorphosis of athletes’ – in this case in particular men athletes’ – bodies, resulting in trouble with the very boundaries of acceptable, gendered, human life.

5. Key words
binary sex, bodies, hormones, metamorphosis, sport, steroids, staying with the trouble

6. Technical requirements
powerpoint
Fertility-making through egg donation technologies

This paper investigates how egg donors come to experience their own fertility through the clinical encounters in egg donation processes. Through a feminist STS framework I argue that the specific body-technology entanglements that take place in the clinical process of egg donation produce the egg donors’ own sense of fertility.

An egg donor – a woman who donate her egg cells for another woman’s fertility treatment – go through a process of hormonal treatment and a clinical procedure that involves specific clinical and technological encounters. Through this process the woman’s eggs become visible and evaluated, as well as measured and counted. Her fertility and bodily cooperativeness is central to the egg donation process. Her bodily signals (e.g. menstrual cycle) and hormonal balance, the hormonal treatment (medication) and the clinical (technological) procedure entail complex intra-actions of technological, bodily and clinical agencies. Combining a new materialist framework (Barad 2007) with a sensory ethnographic approach (Pink 2015; Vannini, Waskul, and Gottschalk 2012), I explore how the egg donors’ sense of their own fertility is produced by and through specific body-technological entanglements in the clinical settings of egg donation. How is the sense of ‘high fertility’ obtained (or in some cases lost), and how does the technological equipment in the clinic play into the evaluation of the egg donor’s fertility? Who and what have agency (and authority) in the production of egg donation fertility?

The paper is based on empirical material from a sensory ethnographic field study on egg donation in Danish fertility clinics and is part of my research on how the experiences of egg donors are produced through the egg donors’ engagement in clinical encounters.

Matilde Lykkebo Petersen
PhD student,
Department for the Study of Culture,
University of Southern Denmark
matilde@sdu.dk
FUTURES, TEMPORALITIES AND ROBOTISATION, SESSION 2 OF 2

Chair: Alan Irwin, Copenhagen Business School

Robotization- then and now, Barbara Czarniawska & Bernward Joerges, University of Gothenburg

Anthrobotic Intelligence as a Response to Artificial Intelligence, Luis de Miranda, The University of Edinburgh

Controlling the mess: Autonomous driving in the city, Göde Both, University of Cologne / TU Braunschweig

Room: K002
The paper presents the first part of a three-parts project in which we analyze the fears and hopes related to robotization in workplace situations since the coining of the term “robot” to the present media hype around it. Did they overall remain the same or have they changed, and if yes, did the changes reflect actual changes in robotics? In the first part of this project, we trace possible sources of the media hype – the (mostly economic) reports and forecasts on robotization from 2013 on. We then turn our focus to the treatment of robotization in popular culture, based on the assumption that it impinges more on public opinion than social sciences. Considering the enormity of the material involved (novels, films, comics etc.), we choose only groundbreaking works that have undoubtedly been popular practically all over the world. They all belong to a genre known as science fiction, or its close cousin “speculative fiction”, beginning with Karel Čapek’s R.U.R. (1920) and ending with Neal Stephenson’s Seveneves (2015). The second part of the project will analyze the media coverage of the topic in the years 2013-2016. In a final part we confront results of the two analyses with social scientific works on the same topic. We expect to find evidence of a “circuit of culture” (after Johnson, 1986-7), in which the three spheres of culture impact each other in a circular way. It could be, however, that recent developments in robotics will radically change contents of the circuits in years to come.
Spectacular results have recently increased hopes and fears regarding Artificial Intelligence. The development of robotics and digital intelligent systems is presented in the media, alternatively, as a new Eldorado, or an imminent damnation of humanity in which the loss of jobs or skills, the uprising of machines, and cyberterrorism attacks are among the dominant threats. In this paper, I will argue that the term ‘artificial intelligence’ is dangerous in itself, because it seems to obliterate the supposedly natural human factor, and focuses on machine capacities, suggesting that intelligence could be a purely technical activity. I will advocate what I have taken to calling an anthrobotic perspective, and try to define what could be an ‘anthrobotic intelligence’.

The hypothesis of anthrobotics proposes that: 1 - the merging of humans and machines is nothing new, but rather a long-term anthropological factor that predates the invention of digital computers; 2 – to understand socio-technical systems, we should look at the collective compound man-machine as a unit that is prior to its parts and distinct from them. Under this frame, an anthrobotic intelligence would be both human and algorithmic at the same time, in the same space. In our world of digital artefacts, it would designate specific worldviews — webs of beliefs and behaviours — that are produced by the merging of computers and social interactions.

Our cooperation with machines generates and influences specific levels of understanding, agility, belief, organization, behaviour. This perhaps cannot be perceived on an individual scale, but by looking at different types of organized groups, or anthrobots. Not unlike Mary Douglas’ grid-group theory, I will explain how there can be universalist, creative, conformative, or autonomist kinds of groups, each with a specific esprit de corps, and a specific agentic motivator: duty, drive, discipline, or distinction. Each group will define intelligence differently.


L de Miranda, ‘Is a New Life Possible? Deleuze and the lines, Deleuze Studies, 7(1), 106–152.

Controlling the mess: Autonomous driving in the city

by Göde Both (goedeboth@gmail.com), University of Cologne, Germany

In 1939 General Motors’ “Futurama” exhibit promised self-driving cars by 1960 (Wetmore 2003). Today, autonomous driving is a sociomaterial phenomenon which does not exist outside of more or less controlled environments but which is widely claimed to be emergent. For example, the scientific foresight unit of the European Parliament lists autonomous vehicles as the first of ten technologies "which could change our lives" (Van Woensel et al. 2015). They promise autonomous driving will significantly improve automobilities (Featherstone, Thrift, and Urry 2005) in terms of fuel efficiency, traffic flow and safety. Currently, many voices speculate over the potential “impacts” of self-driving cars. However, there is little empirical research on the present realities of autonomous driving in urban traffic (Brown and Laurier 2017).

Between June 2012 and November 2015 I conducted ethnographic fieldwork among a collective of computer scientists and their computational enhanced cars in Germany. I did videography during test-drives in urban traffic, interviewed safety drivers, and analyzed technical reports. Traditionally, experiments in robotics are conducted under the controlled conditions of closed laboratory environments. By contrast, test-drives in everyday city traffic are accomplished with heterogeneous actants, such as driver-car hybrids, bike-rider hybrids, pedestrians, vegetation, lane markings, signs, and weather conditions.

My research is mainly situated within conversations on robotics and artificial intelligence in STS (e.g. Collins 1995; Suchman 2008). Following Suchman’s approach of human-machine configurations (2007), I ask what imaginaries of driving are realized in the sociotechnical assemblage of a self-driving car and what are the consequences of these imaginaries?


STAS AND DEMOCRATIC POLITICS, SESSION 2 OF 2

Chair: Andreas Birkbak, Aalborg University Copenhagen

Prospective Health Innovations: Where Does Responsibility Lie for the Public?, Dominique Grimard, Lehoux, Miller and Gauthier, Institut de recherche en santé publique de l'Université de Montréal

Renewing Samsø: Re-conceptualizing politics as a process of community renewal, Irina Papazu, Copenhagen Business School

Technoscientific Controversies in the Classroom: Vehicles for Citizenship Education and/or Citizen Science?, Mark Elam, Åsa Mäkitalo and Anne Solli, University of Gothenburg

Talking about Citizen Science, Christopher Kullenberg, University of Gothenburg

Room: D138
Prospective Health Innovations: Where Does Responsibility Lie for the Publics?


1) * MSc., Research Assistant, Institute of Public Health Research of University of Montreal (IRSPUM), P.O. Box 6128, Branch Centre-ville, Montreal, Quebec, H3C 3J7 CANADA dominique.grimard@umontreal.ca, Tel: (514) 343-6111 ext. 4566; Fax: (514) 343-2448

2) Ph.D., Full Professor, Department of Health Management, Evaluation and Policy, School of Public Health, University of Montreal, Institute of Public Health Research of University of Montreal (IRSPUM), University of Montreal Chair on Responsible Innovation in Health,

3) Ph.D., Associate Professor, Institute of Health Policy, Management and Evaluation, University of Toronto

4) Ph.D., Associate Professor, School of Industrial Design, University of Montreal

Responsible Research and Innovation (RRI) calls for a departure from the traditional “moral division of labour” by including multiple stakeholders and institutionalizing their engagement (1). Public engagement is thus pivotal to the mission of RRI and the fulfillment of its inclusiveness dimension (1-4). One of the key motivations for this reorganization of “moral labour” is to develop our collective capacity to steer the development of technology toward important societal needs and challenges (1, 5, 6). To accomplish this, RRI also emphasizes the necessity for anticipation and responsibility toward the future (2-4). The aim of this paper is thus to examine how members of the public conceive of the relationship between responsibility and prospective health technologies.

We organized four face-to-face deliberative workshops and an online forum wherein participants were invited to comment on scenarios involving three fictional technologies in 2030 and 2040. Our analyses describe how participants anticipated these technologies’ impacts and further debated the value of the fictional technologies in their prospective context.

Their arguments converged mainly around two conditions. The first is that the use of technology should be embedded within professional care and services because it must reside within humane and professional action. The second condition is about the respect of individual freedom and privacy and the importance for users to have the ability to accept, reject or adapt technologies.

These findings indicate how the public sees professional entitlements and regulatory arrangements as conditions for the responsible development and use of new technologies. By clarifying what technological direction shall be avoided and who shall act responsibly, these conditions emphasize our participants’ understanding of society as much as their understanding of science. We therefore conclude that for new technologies to be deployed in socially responsible ways, public engagement methods should be developed alongside public governance and regulatory strategies. (299 / 300 words).
References


Renewing Samsø: Re-conceptualizing politics as a process of community renewal

How are we to understand politics if antagonism (Mouffe 2005) and disagreement (Rancière 1998) have no parts to play? Through the case of Samsø, Denmark’s Renewable Energy Island since 1999, I seek to expand our theoretical understanding of politics, usually conceptualized as a conflict-ridden process, an “unpleasant” (Brown 2015) battle between diverging interests.

I investigate and attempt to turn this understanding of politics around by engaging the case of Samsø, where I conducted ethnographic fieldwork in 2013 and 14.

The rural island community of Samsø managed to become self-sufficient with renewable energy over a ten-year period, notably without sparking much controversy or disagreement among the islanders. The results of the project were not simply wind turbines, district heating plants and solar systems but also new jobs, a heightened level of activity on the island and hope for the future, and, I argue, through the process and accomplishment of the Renewable Energy Island project, a strengthened sense of community and confidence among the islanders.

By viewing the island as a climate laboratory invested in creating and revitalizing communities not only locally but nationally, regionally and globally, I ask: if indeed such a process of renewal must be understood as a political process and the island’s energy transition as an inherently political event, what can Samsø teach us about the workings of politics and local democracy as enacted in practice? This is politics not as election result or ideological struggle over values, ideals and the distribution of goods, but as the down-to-earth but significant activity of creating something new together.
Technoscientific Controversies in the Classroom: Vehicles for Citizenship Education and/or Citizen Science?

Mark Elam, Åsa Mäkitalo and Anne Solli, University of Gothenburg

The use of technoscientific controversies in school science education is relatively commonplace today and not particularly controversial. This is a reflection of how an educational concern with exploring the interconnections between science, technology and society (STS) dating from the 1970s has gradually mutated since the late 1990s into an enlarged programme of ‘functional’ scientific literacy enacting science education as ‘citizenship education’. This programme which has had a growing impact on national curricula acknowledges the close entanglement of science and engineering practices with social and political concerns and aims to draw on controversies to cultivate student’s powers of responsible reasoning and judgement in order to prepare them for active participation in technoscientific debates and decision-making. To this end, controversies in the classroom are firstly conceived of as training grounds and the means to the higher end of cultivating ‘content-transcending knowledge’ about the nature of science and scientific knowledge production to be subsequently applied throughout adult life.

In this paper we describe and reflect over a teaching experiment we have carried out at a Swedish upper secondary school where student engagement with controversies is both elaborated upon and partially redefined. Controversy mapping has emerged as a research-based model of student inquiry within higher education (an educational version of actor-network theory) dedicated to mobilizing digital tools and methods to visualize complex technoscientific issues contributing both to their further articulation and public legibility. By pioneering the introduction of this educational technology into a school context we have moved classroom engagement with controversies ‘upstream’ while also rendering it more practical and ‘hands-on’. Rather than confronting students with controversies already framed, or perhaps even simulated, in pre-prepared teaching modules, controversy mapping equips students with the means to observe and chart the basic contours of an on-going issue for themselves. Thus, rather than citizenship education, classroom engagement with controversy comes to more closely resemble citizen science training and an introduction to digital inquiry as a means to help clarify and appropriately simplify contentious issues for self and others.

Reflecting on our modest intervention into school science education we compare and contrast the alternative kinds of ‘citizens’ and generic competences or ‘literacies’ that classroom engagement with controversy envisions and enacts and assess the possibilities of productively combining these different forms of learning activity in educational practice.

Corresponding author: Mark Elam (mark.elam@gu.se)
Talking about Citizen Science

Christopher Kullenberg

Dept. of Philosophy, Linguistics and Theory of Science

University of Gothenburg

This article analyses the amalgamation of values between democracy and science as expressed by citizen scientists in online conversations. Departing in a large dataset of Twitter interactions (N=90,334) collected over a period of more than 500 days, attention is specifically drawn towards the sometimes contradictory issues of scientific ethos in relation to the rationale of a "science for the people". In STS literature, this line of conflict has often been conceptualised in terms of a clash between scientific- and lay expertise, especially in cases where contested knowledges have wider political consequences. In this study, the dimension of volunteer engagement in science is added, arriving at a partly new problem; the role of the non-scientist as a knowledge producer in science.

Analysing the conversations reveal contrasting lines of development in contemporary citizen science, between on the one hand the institutionalisation and centralisation of projects initiated by scientists, and on the other hand, the community-driven citizen science activities that depart in local, often environmental, issues.

Furthermore, the results indicate that the notions of "community" and "public engagement" are often intertwined and can designate both the volunteer participation of non-scientists in science, here often seen as as an ethos of sustaining scientific reasoning. However, these concepts also describe values of social justice generated outside the institution of science, in which the scientific method becomes a means rather than an end. Here critical voices often point to the insufficient inclusion in academia, its problematic relation to industry and its unwillingness to share laboratory and data infrastructure that could help social justice movements in their struggles.
INNOVATION

Chair: Karl Palmås, Chalmers University of Technology

Innovation Science and the moving justification of publicly funded research, Joakim Juhl, Aalborg University

Innovating futures, Alan Irwin & Linda Soneryd, Copenhagen Business School and University of Gothenburg

Exploring what role the university can play in organizing interaction between researchers-users-business in order to use engineering knowledge to improve sports, Ida Hermanson, McKelevy och Zaring, University of Gothenburg

Governance of medical research and innovation - Lessons from a recent crisis in regenerative medicine, McKelvey, Saemundsson and Zaring, University of Gothenburg

FAIRPHONE: social construction of ‘fairness’ and changing conception of ethical-modular smartphone, Paulius Volikas & Lisa Karlberg, Copenhagen Business School

Room: D141
The notion of large-scale publicly funded research has a comparatively brief history that dates back to the American post WWII era. Although publicly funded research persists, the justification for its undertaking has changed as much as the societies within which it takes place. Known science governance models, Curiosity-driven research and mission-driven research that stem from the America postwar era diverge from contemporary developments that instead are increasingly characterized by a pronounced role of private corporations’ interests. By drawing on insights from a recent Danish collaboration between publicly employed scientists and private companies, two decades of Danish science governance, and widely circulated western ideas of research and innovation, I compare imaginary formations surrounding publicly funded research and innovation that operate at different levels in order to analyze how criteria for public justification has changed. While the analysis points out some of the significant discrepancies that are contained within these different imaginary formations, the more pertinent objective is to establish a starting point from which to discuss the moral parameters that constitute the political spaces for publicly funded science and innovation.
Innovating futures

Alan Irwin, Department of Organization, Copenhagen Business School
Linda Soneryd, Department of Sociology and Work Science, Gothenburg University

This paper addresses the relationship between innovation processes, governance challenges and socio-technical visions of the future. A number of specific examples – including the potential development of ‘Graphene City’ in Manchester – will be drawn upon for this purpose.

On the one hand, the very idea of innovation conjures up a sense of the multiple possibilities linked to social and technical change. On the other, these multiple futures in practice are often presented in decidedly singular terms so that what they omit becomes as significant as what they actually include. Particular attention will be paid to the relationship between these ‘innovation futures’ and more mundane forms of governance. In exploring this relationship, one can ask questions such as:

How do certain visions of the future come to appear more plausible, persuasive and realizable than others?

How do these projected futures relate to present action?

What do they mean for ideas of politics and democracy – and for socio-technical governance more generally?

A particular concern in this paper will be the relationship between these innovation futures and our sense of the political. Often presented in distinctly non-political and unreflective terms, projections of the future – and related calls for us to take action today in the interests of tomorrow – necessarily suggest forms of social and political change. Accordingly, how ‘the political’ is made (or not made) in this context becomes an important topic for discussion. Equally, and looking ahead in more positive terms, one can inquire whether the gaps between these potential futures and the experience of ‘lived presents’ opens up the possibility for a ‘politics of emergence’.
Abstract
Emerging new technology require an innovation network and organizational structures as well as integration of research, users and public policy which are supposed to give access to valuable resources (Chesbrough, 2006; Perkmann et al., 2013). Universities have to be seen as strategic actors, as an organization, and their role is changing in society and it may be useful to consider the university as an organization, trying to position themselves to obtain resources and set goals (Deiaco, Hughes, & McKelvey, 2012). Previous studies have emphasized more research of how and why academics engaged with the society in terms of providing three types of knowledge-intensive services: education, research and societal interaction (McKelvey & Zaring, 2017). However, literature on university-industry collaboration has paid little attention to societal interaction and how a university can create organizational structure to reformulate their engagement with the society and industry (Alexander, Miller, & Fielding, 2015). The working research question for this paper is "Exploring what role the university can play in organizing interactions between researcher - users - business in order to use engineering knowledge to improve sports?.
This working paper is based on a case study of Chalmers Sport and Technology, a platform where researchers engage with universities, industry, public policy, students and society to undertake advanced sports-related research. The data consist of 7 interviews transcripts, field notes from 7 observations and document studies of 70 newspaper, articles and press from the period 2011-2017. The study shows that the university adopts unconventional strategies in their attempt to establish structures for academic engagement with the society. Findings indicate that this platform act as a facilitator for innovation and gives insights into how universities can engage users, collaborative research and governing bodies within equestrian sport in order to recruit students, create new research areas, commercialize knowledge and goodwill.
References


Governance of medical research and innovation - Lessons from a recent crisis in regenerative medicine
McKelvey, M., Saemundsson, R., and Zaring, O.
Institute for Innovation and Entrepreneurship, Gothenburg University.

Within the field of regenerative medicine radical steps are taken, by combining knowledge advances in engineering and medicine, in an attempt to relieve human suffering and save lives. However, such an approach is not without risks and crisis that lead to questions about its legitimacy are common, especially in prestigious and fast-moving fields (The Lancet 2014, van Hoorden 2011).

A recent Swedish television documentary tells the story of the thorax surgeon Paolo Macchiarini at the Karolinska Institute and his attempts to develop a new procedure for replacing parts of the trachea by growing stem cells on both biological and synthetic scaffolds. Originally presented as a groundbreaking achievement documented in prestigious medical journals and hailed by the press, it is now seen by many as a reckless and unethical experimentation supported by research fraud. Four members of the Nobel Prize committee in Physiology or Medicine have resigned. The Vice-Chancellor of the Karolinska Institute has resigned. Police investigation is in process. A former minister and head of Swedish police is investigating whether unethical research practice can be verified. At the same time The Lancet (Horton 2016) has published a comment on why they have not retracted his article. While the Macchiarini crisis is not unique it raises many interesting questions about the governance of medical research and innovation in general, and regenerative medicine in particular.

The purpose of this paper is to identify and conceptualize the governance challenges related to major advances in medical research and innovation. Based on a previous conceptual model to explain technological collaboration (McKelvey et al 2015), this paper uses the case of regenerative medicine and of the crisis surrounding Macchiarini and the Karolinska Institute to identify three challenges facing policy makers and researchers.

This paper is framed through theories of the specific site of medicine as an area for innovation. Recent research on medical innovation has focused on explaining how and why medical innovation emerges through heterogeneous and dispersed actors, such as hospitals, firms and universities, interacting through sequences of problem-
finding, and problem-solving, processes (Metcalfe et al 2005). In this research special attention has been given to the role of clinical practice and its mutual interaction with biomedical science, but at the same time noting the role of the physician in mobilizing and guiding industrial innovation (Blume 1992, Hopkins 2006).

In this particular setting, we then apply and develop theories of governance and co-evolution of knowledge in medicine to describe the system challenges (McKelvey et al 2015). Our conceptual model of the governance of technological collaboration recognizes that different types of organizations are involved in the production and use of knowledge, where each has a different set of incentives and networks. However, the governance requires the development of common norms and institutions for the collective action. In other words, the collective action is mediated by interacting, where common norms and institutions are developed that regulate behavior and help create a common good.

The challenges that we identify and will describe in this case are: Firstly, role of research funding, especially the concentration of funding into strategic areas. The hiring of an internationally acclaimed researcher, Macchiarini, coincides with a strategic investment in regenerative medicine by the Karolinska Institute supported by large government grants for research excellence in selected fields. High concentration of research funds, strong pressures for success, and global competition for talent put strains on existing systems of governance of research and innovation for which it was not designed.

Secondly, the specific nature of interface between medical research and practice. The close connection between research and practice is commonly believed to be one of the strength of medical innovation. In many cases university departments and university hospitals employ the same people, which means they are involved both in research and practice. However, there are different rules within medical research and clinical practice in terms of experimentation. How should procedures, and knowledge, by transferred from research to practice and how should the results transferred back to research? Furthermore, these issues play out in a larger context, which involves development of stem cell technology and intellectual property rights to commercialize the technology.

Thirdly, the emergence of medical innovations also leads to systemic problems due to the rapid development of knowledge. Due to their evolutionary nature medical
knowledge and innovations may give rise to irreducible systems based on how bottlenecks direct the focus of attention in order to solve critical problems. Furthermore, as the search for new medical knowledge has a strong ethical dimension, is sought for the common good, and to a large degree funded by public funds, oversight is required for what bottlenecks should be attended to and how. This oversight is proved by a governance regime, which includes both formal and informal elements.

Given the nature of the current discussion about the Macchiarini crisis the most likely response is to strengthen the oversight and regulation, including monitoring, related to the interface between medical research and practice. The focus will be on universities and hospitals without consideration of other actors involved in the production and use of medical knowledge. We argue, based on our conceptual model, that this may have the adverse effects of introducing bottlenecks in the system.

The main challenge for policy makers and researchers is to understand what actors are involved in the system, at regional, national and international levels, and how best to interact in order to create mechanisms of self-regulation that benefit each type of actor and the system as a whole.

References


FAIRPHONE: Social Construction of ‘Fairness’ and Changing Conception of Ethical-Modular Smartphone

Paulius Volikas
Copenhagen Business School
pavo15ab@student.cbs.dk
Solbjerg Plads 3, 2000 Frederiksberg, Denmark

Lisa Karlberg
Copenhagen Business School
lika15ac@student.cbs.dk
Solbjerg Plads 3, 2000 Frederiksberg, Denmark

Abstract:

In theory, contemporary smartphones are essentially computers incorporating calling functions, rather than the other way around. The interest in the topic arises from an emerging understanding that innovation in the smartphone industry is reaching its peak, or has arrived at it already (Mundy, 2016). At its core, this statement assumes that for innovation to continue to be innovation, smartphone manufacturers and producers have to continuously introduce new and disruptive technologies. The emergence of a so-called modular smartphone is one of such development, illustrating the disruptive technological advancement in the smartphones market. ‘Fairphone 2’, a second-generation modular phone produced by a Netherlands-based start-up Fairphone, is considered to be one of the first modular phones on the market. This paper focuses on the producer Fairphone, and their phone model

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1 Correspondence concerning this article should be addressed to Paulius Volikas

2 This understanding of smartphones is based on similar definitions proposed by Campbell-Kelly, Garcia-Swartz, Lam, & Yang, (2015)
Fairphone 2 as its primary subject. The paper attempts to highlight unexplored perspectives of the innovation of Fairphone. Using the theory of a social construction of technology (SCOT) as well as Michel Serres’ philosophical work\(^3\), the analysis displays how applying such views enriches the topic of innovation in regards to the specific case of Fairphone. The paper argues that Fairphone as a company becomes innovative not solely via the produced phone but also by creating a forum of reflection, with the aim of teaching consumers the implications of their role in technology, in accordance with Bijker’s conclusion on Science and Technology Studies (2001). Finally, the paper concludes that the company offers a fair phone, in terms of an open source hardware and software, provision of workshops and democratic community, as well as ethical standards. As a result, Fairphone exemplifies the call for the democratization of technological culture.

Keywords: Fairphone, Modular Smartphone, Innovation, Social Construction of Technology

\(^3\) Primarily concept of Quasi-Object; found in chapter “Theory of the Quasi-Object” in The Parasite
THURSDAY 1 JUNE, 14.00-16.00 PARALLEL SESSIONS 3

WELFARE AND TECHNOLOGY, SESSION 1 OF 2

Chair: Doris Lydahl, University of Gothenburg

*The databased production of learning: new technologies in the system of education*, Ernst D. Thoutenhoofd, University of Gothenburg

*Humans and nonhumans in integration management*, Andreas Diedrich, University of Gothenburg

*Inclusive physical and digital spaces in vocational rehabilitation*, Gunnar Michelsen, VID Specialized University

*The costs of neglected children in a market of caring*, Ida Schrøder, Professionshøjskolen Metropol

Room: D206
The databased production of learning: New technologies in the system of education

Abstract submission to Nordic STS 2017 (Gothenburg)

Ernst D. Thoutenhoofd
Faculty of Education
The University of Gothenburg
ernst.thoutenhoofd@gu.se

My paper reports on new technologies of education that appear to aim at the mass-production of a general ‘will to learn’, an idealised and abstract devotion to learning that is both homogeneous and positive in the precise sense of being free of psychological resistance.

I will offer an example of a ‘will to learn’ being produced in action, by describing an educational technology called school-wide positive behaviour support (SW-PBS). Originating in US psychiatry, PBS is being trialled in various other Western countries, including Norway and Sweden. The technology is an evidence-based social science product that includes, aside from strict regulation of teacher-pupil interaction, routine school-wide collection of behavioural data and intervention loyalty measures. PBS interventions seek community subscription through pre-intervention group consultation and other co-opting techniques.

These new technologies do however change the nature and experience of learning, in the direction of correspondence with a scientifically formulated efficiency. Their intervention brings the system of education a step closer to something that is dear to us as human beings, namely the interlocking of intelligence (knowledge of the general, ‘we’) with private consciousness (knowledge of the particular, ‘I’). Since Aristotle, it has been thought that individuals enrich their inner life through learning, and so fashion into unique personalities that have *virtue*: ethical and moral strength. Precisely that virtue is now the target of educational technologies.

My paper aims to pinpoint discomfort with the idea of learning itself being opened to technological intervention, a prospect that via new technologies of education is writ large on the horizon of social systems.
Humans and nonhumans in integration management

In light of the recent ‘refugee crisis’ in Europe and elsewhere increasing calls have been made for a more ‘effective’ management of migration and integration of recent immigrants on the labour market and in society (see e.g. Swedish Govt. Letter 2008/09:24; European Commission, 2010). Existing studies have usually focused on policy implementation (see e.g. Geiger & Pécout, 2011) and have largely neglected the everyday ‘doing’ of integration management in practice. However, ‘integration’ is managed in every type of setting imaginable – classrooms, workshops, laboratories, offices, stores, public spaces – and with the support of a plethora of people, (mundane) objects and quasi objects. As Dugdale (1999) has suggested, it is in and through these assemblages that decisions are made and actions unfold. This focus on mundane objects is a valuable lesson from Actor-Network Theory (ANT). Yet in both the apologetical and critical studies of integration management, this key feature of organising has, with some few exceptions, been largely ignored. I will here address this shortcoming by exploring a labour market project sponsored by the Swedish government, which sought to introduce a novel procedure for integrating recent immigrants more effectively into the labour market and into Swedish society – by having their prior learning recognised and validated. The project ran from 2009 to 2011, and its goal was to ‘test the validation procedure on 400 immigrants’. Similar to many past ‘integration’, ‘managing diversity’ or ‘gender equality’ projects, it failed to achieve its goal. It could, in fact, be accused of being just another one of the countless
activities, projects, and programmes studied so often, paying lip service to ideas of
diversity and equality, while the day-to-day organising practices remain intact and
unchallenged (see e.g. Czarniawska & Höpfl, 2002). Notwithstanding its modest
results, however, VINN did temporarily connect, in novel ways, a range of actions
and actors – state agencies, companies, and other public and private organisations – in
support of the idea of managing integration by validating recent immigrants’ prior
learning. The paper will examine the role of the multitude of objects, quasi-objects,
and other agents/actants implicated in the everyday “doing” of integration
management and the consequences of such organising practices for the individuals
and groups involved.
Inclusive physical and digital spaces in vocational rehabilitation
Gunnar Michelsen
VID Specialized University. gunnar.michelsen@gmail.com

This paper describes and discusses factors related to the working environment that promote the inclusion of job seekers with cognitive impairments. Vocational rehabilitation for job seekers with cognitive impairments is undertaken in adapted working environments. The working environment is a synthesis of the practices that are developed in the enterprise, in physical premises and digital spaces.

Job seekers with cognitive impairments, for example Asperger’s syndrome and/or ADHD, have greater challenges in entering the labour market compared with other groups with impaired functional capacity (Hansen, 2009). The importance of social skills, a more complex and dynamic working life and modern methods of organizing work, such as groupwork or teamwork in smaller groups with a flat structure, constitute some of the reasons for these challenges (Hawkins, 2004) (Attwood, 2007).

The paper builds on research following two adapted rehabilitation programmes for job seekers with cognitive impairments. Empirical data were collected through ethnographic/praxiographic fieldwork in enterprises offering the rehabilitation programmes (duration 24 months) (Mol, 2002). The empirical material from this multiple case study is discussed using the concepts of ‘scenario’ (Callon, 1987), and ‘affinity space’ (Gee, 2004) from geography and Science, Technology and Society (STS).

The paper describes how the rehabilitation scenario in the enterprises is constructed to help participants to work on something that interests them, in a space where they can develop coping strategies and with access to technology that can enable them to find work as IT professionals in the future. Further, the study points to how development of an individually adapted and familiar digital interface, as well as access to a digital space in which the job seekers can be relatively autonomous, were crucial.

The study finds that factors such as job tasks, the community of a shared diagnosis and interests, and the fact that the working environment includes physical space that can be characterized as affinity space, contribute to inclusion and the development of coping strategies.
Sources


The costs of neglected children in a market of caring

By: Ida Schrøder
PhD. Student
Copenhagen Business School, Department of Operations Management
Is.om@cbs.dk

The main aim of the paper is to show how priceless children (Zelizer, 1994) are kept priceless, even though they figure as million kroner expenses in the spreadsheets of the local government. This is done by adding insights from the literature on management accounting as a practice to the praxiographic approach of Annemarie Mol (2002). By foregrounding the costing work done be human and non-human actors as a central activity (Miller and Power 2013) in child protection work this interdisciplinary approach exposes a different kind of economic exchange than what has earlier been studied.

The paper is based on one year praxiography of costing work related to a child protection department in a Danish local authority. A family (let’s call them the Jensens) was followed, as it moved through places where decisions were made about the future lives of the two children. Whenever costs showed up, I would find a way to follow them. This unfolded as situations as different as the constantly changing numbers of numerous spreadsheets on a computer screen to the devastated scream of a mother as she slams the door at the end of a meeting with her children’s case worker.

The paper argues that costing work takes many shapes. It, for instance, authorizes places and people to invest money in children in need of extra care. When made into a value, though, costs become opposite to caring. This doesn’t happen to the detriment of caring, as often claimed (Bracci and Llewellyn 2012). Rather, the separation is what allows for parents as well as case workers to be relieved from individually taking on the responsibility of the endless amounts of public money spent on child protection services. Thus an aim of the costing work is to maintain the children as priceless.
VALUES AND VALUATION, SESSION 2 OF 2

Chair: Francis Lee and Isabelle Dussauge, Uppsala University

*Storytelling and citizen participation in planning processes: a case if cultural preservation in Sweden*, Elena Bodganova & Linda Soneryd, University of Gothenburg

*Constructing art market exchanges: a study on the marketization of street art*, Hanna Borgblad, University of Gothenburg

*Societal Impact of Social Research: An overview of Finnish discussion*, Juha-Pekka Lauronen, University of Helsinki

*Fetuses as instruments of health: The uses and exchanges of fetal tissues for vaccine research in postwar Sweden*, Isabelle Dussauge, Uppsala University

Room: D241
Storytelling and citizen participation in planning processes: a case of cultural preservation in Sweden.

Elena Bogdanova (Gothenburg University and University of Borås)
Linda Soneryd (Gothenburg University)

In this paper we will discuss storytelling as technology of stakeholder involvement in the field of architectural restoration and heritage protection in Sweden. The process of valuation of buildings and areas that are subject to renovation, restoration, rebuilding or demolition has become an arena for contestation and legitimation of the judgments of value, and in the recent decades was framed by politicians as a question of democratic participation. Following the requests from the Swedish government, cultural heritage professionals attempted to introduce different models of citizen participation in decision making based on storytelling. The most controversial cases relate to modern buildings such as the areas of the Million Project in Sweden: the traditional art historical approach to valuation does not always provide judgments of value that give voice to all interest groups. In this presentation we will address both the potential and the problems that occur while using storytelling as a tool of citizen participation and in the process of the legitimation of judgments and decisions, “which includes the contestation and negotiation of value as well as its diffusion, stabilization, ritualization, consecration, and institutionalization” (Lamont 2012, 205).
Constructing art market exchanges: a study on the marketization of street art

This study builds on existing discussions on commercialization of art and tensions in art markets. Focus is directed to a fundamental aspect of markets – the exchange. I will specifically study what practices that are involved to create exchange objects of street art. This art form’s transformation into exchangeable market objects is interesting as it regards artworks that traditionally are attributed with characteristics that seem to contradict possibilities of market exchange: they are immobile, ephemeral, anti-commercial, illegal and lack ownership properties.

Within the controversy of transforming street art into exchangeable market objects, the study emphasizes three particular sub-controversies of exchange. First, it regards the practices with which street artworks become materially accessible as exchange objects to new owners, both as mobiles and as murals. Second, the artworks not only need to be produced, they need to get exchange values. This part of the exchange process regards valuations and pricing. Third, considering the illegitimate or illegal legacy of street art, the study looks at practices of legitimization that aim to overcome this controversy.

Previous art market research commonly positions arts and markets in a dichotomous relationship. It almost appears as these polarized structures exist by nature, that they are essential to the existence of art and of markets. Rather than agree to an essentialist and ostensive explanation of the relationship that reproduce these antagonists as taken-for-granted positions, I suggest that constructivist market studies, building on the STS literature, provides a perspective where it is possible to trace potential dichotomies as a performative outcome of practices. A flat ontology makes room for a pragmatic departing point. Street art worlds associate with craftsmanship and physical form. It is necessary to include materiality in the study of art market practices, and explore what performativ power humans and nonhumans have in market construction. This ethnographic study’s fieldwork material consists of interviews, observations and archival material such as newspapers, policy documents, social media and curatorial texts.
Societal Impact of Social Research: An overview of Finnish discussion

Research impact assessment has become an over significant practice in funding organizations. The Government of Finland is aiming for more strategic and performance-based research allocation. Structural changes in the knowledge production system and the increasing demand for accountability have caused pressure to emphasize the science – society relation and instrumental utility of basic research. This study asks, how societal impact of social research is understood in academic and science expertise regarding Finnish research evaluation and allocation. This study aims to analyze the rationale of societal impact of social research by content analysis of interview, policy and evaluation data. The data consists expert interviews (12+2), research evaluation reports, policy documents and conference material (SIS2016). The interviewees are the key Finnish research evaluation, research policy and evaluation methodology experts (12) including, academic researchers, science administrators, evaluation implementers and two international experts (UK, Sweden). The discussion is connected to pluralism and commercialization of knowledge production and applicability of research in post-academic norms (mode 2). This analysis provide an overview of the concept of societal impact of social research, its practices and utilization in the Finnish research evaluation system. In addition, the study links prescriptive research evaluation methodology to research policy point of view. The results will be reflected with respect to international research evaluation policy and practices and they are expected to complement the Scandinavian perspective on research impact assessment. The analysis is in progress.
Fetuses as instruments of health: The uses and exchanges of fetal tissues for vaccine research in postwar Sweden.

Human fetuses were used on a relatively large scale in public research on viruses and the development of vaccines in the 1950s and 1960s in Sweden. A central institution for that research was the State Bacteriological Laboratory (SBL) in Stockholm, where a group of scientists were working towards the eradication of polio and the development of other vaccines. Whereas the use of human fetuses (and human tissues) in research was not subjected to the same regulations as today, and was by no means illegal, abortion (a condition for the obtention of fetal materials) and its legal conditions was still a recurrently controversial issue in Sweden. Therefore the use of human fetuses for medical research for a public good (such as scientific progress, protection of the population’s health, etc.) prompts many questions. Was this practice controversial? What came to count as ethical or unethical behavior? Why, or why not? What conflicting values were mobilized and/or enacted in and around these practices?

Whereas these questions are still empirically unanswered, I attempt to think with Tone Druglitrø’s notion of an ethical infrastructure in order to understand what work, institutions, values or standards were partaking in making this potentially controversial use of fetuses research acceptable, or synonymous with acceptable notions of a common good.

The project is part of the research program Medicine at the Borders of Life: http://medicalborders.se.
DATA, COUNTING AND NUMBERS

Chair: James Maguire, IT-University of Copenhagen

“On the advantage of a collection of numbers”: understanding methodological change in official statistics through ethnography, Baki Cakici, Goldsmiths, University of London

Organizational tensions in the quest for a data-driven Tax Administration, Bastian Jørgensen, IT-University of Copenhagen

Locating the Dataverse: The Rise of the Stately Corporation, James Maguire, IT-University of Copenhagen

Child governance through circulating of data, Lars Bo Andersen, Ask Risom Bøge and Peter Lauritsen, Aarhus University

Standardizing knowledge within social sciences and humanities, Linda Sile, University of Antwerp

Standardising the ‘Good Student’: Adaptability and Algorithms in Danish School Testing, Laura Høvsgaard, Copenhagen Business School

Room: E202
“On the Advantage of a Collection of Numbers”:
Understanding Methodological Change in Official Statistics Through
Ethnography

Baki Cakici
b.cakici@gold.ac.uk
Goldsmiths, University of London

In 1832, Charles Babbage proposed the collection of “The Constants of Nature and of Art”, a list of diverse phenomena organised into twenty categories to be counted and measured, ranging from atomic weights and the conductive power of electricity, to the quantity of air consumed per hour by humans, and the number of books in public libraries at given dates. During the same period, he was also developing the difference engine, a machine for computing and printing tables of numbers. Babbage’s constants and engines exemplified a rationality which emphasised counting and measurement as essential means for legitimate knowledge production, also evidenced by the Statistical Society of London’s interest in the establishment of regular censuses throughout the 1800s.

Moving to the present, methodological developments in official statistics such as big data analytics have once again led to an interest in making use of data from diverse sources such as social media and mobile phones. Several European National Statistical Institutes have established groups studying big data methods, and started recruiting data scientists.

By reading these two moments in the history of official statistics in parallel, I build on the understanding that methods enact subjectivities and populations. In other words, counting a population does not merely list what already exists “out there”, but actively engages in its construction, bringing it into being. Drawing on material collected through a collaborative ethnography of five European National Statistical Institutes as part of the ARITHMUS project, I argue that changes in official statistics methods have social and political implications for those being counted, and that analyses of past census methodology can help guide social studies of contemporary quantification methods.
Abstract: Organizational tensions in the quest for a data-driven Tax Administration

This paper explores which organizational logics that are a part of the strategic goal to become a data-driven organization. Being data-driven implies a believe in data and its ability to help solve a range of organizational challenges, but what does this mean in practice and what challenges arise in the process?

In the Danish Tax Administration it is a strategic goal to become a data-driven tax administration. Among other things this has resulted in a new IT department referred to here as “data & analytics”. The department’s goal is to produce analytical methods and data models to be used in the wider organization. The department though, has experienced challenges when they attempt to integrate data models into the organization.

In this paper it is hypothesized that the challenge of integrating data models from one department into the wider organization can include differences in organizational logics across departments.

The concept of a data-driven organization and organizational logics will be explored through ethnographic methods of participant observation and interviews. The fieldwork will have its point of departure from the “data & analytics” department, and follow a data models “lifecycle” from development to the integration into the wider organization. Focusing on the tensions that arise in different phases of the “lifecycle” and across different departments may reveal differences in organizational logics. This paper seeks to contribute to STS through investigating the epistemologies associated with data in a public organization, and insights into the concept of a data-driven organization.

Author:
Bastian Jørgensen, PhD Fellow, IT-University of Copenhagen
Locating the Dataverse
The Rise of the Stately Corporation

As major cities continue to disproportionately accumulate the vast capital flows that enter nation-state borders, regional areas continue to face existential crises. This is why news of Apple’s $1 billion dollar, 166,000 square meter data center on the west coast of Denmark – the biggest foreign capital investment in the country’s history – has excited imaginaries of prosperity, progress and regional transformation. Such globally expansive tech companies now hold out the promise of providing what states are increasingly finding it difficult to offer; jobs, infrastructure and viable futures. While there is much talk about the problems of the corporate state what remains less discussed is the rise of what we would tentatively like to call the “stately corporation.”

Through a preliminary examination of Apple’s deal to develop one of the world’s largest data centers in western Denmark, this paper analyses the materialities and politics of data and digital infrastructures in times of the “stately corporation.” With a critical eye towards such techno-political interventions, and an analytical sensitivity to data as relational, we suggest that the move towards globally distributed, yet locally situated, digital infrastructures sheds light on how data and its transformative potentials are becoming ever more embedded into the modes by which other relationships form and unfold.

We do this by analysing how data storage facilities are not only sites of assemblage that gather the photos, music and personal data of billions of globally dispersed users, but how they also offer a perspective on how entities such as the state, local government and high tech corporations are under constant reformulation in a rapidly transforming dataverse.
The ongoing digitization of the Danish welfare system is generating large amounts of data on citizens.

This development has, amongst others, prompted debates over the utilization of data (e.g. how to improve the knowledge foundation of welfare services) and the displacement implicated by data (e.g. how the relationship between private citizens and the public system is affected and transformed).

This paper explores the utilization and displacement of data relating to Danish children in two cases: 1) the generation of data on children’s learning, well-being and development in the public school system, and 2) the generation of data on the measures taken towards vulnerable children in the Danish social system.

In both cases, the data circulates locally between children, parents and welfare professionals but also extends to municipalities, ministries and other governmental bodies where they are meant to inform policies and monitor the efficiency of services.

The paper follows the circulation of data between these diverse actors and investigates: a) how actors are ‘interested’ in data, b) how they establish relevance from data and c) how they navigate incoherences or contradictions with other forms of knowledge.

To organizers: this paper could fit any panel related to themes of evidence programs, big data, knowledge based decision making, surveillance, digitization, and so forth.
Standardising knowledge within social sciences and humanities

Linda Sile
Centre for R&D Monitoring, University of Antwerp
Campus Middelheim – E.107. Middelbeimaan 1 – 2020 Antwerp, Belgium
Linda.Sile@uantwerpen.be

In present research practices increasingly reliant on (digital) data infrastructures, standardisation has become a key player directing the ways of knowing the world around us. A typical example of standardisation from the library and information science practice is the use of bibliometric indicators to describe research processes - the quantitative side of STS. Bibliometric studies of science are unimaginable without a standardisation of publication types, academic disciplines, and other aspects. These seemingly technical concerns acquire a rather political character when attempts are made to aggregate publication metadata not only across institutions (e.g., SwePub: http://swepub.kb.se/), but also across countries. In the last couple of years, there has been an policy-driven discussion on a setup of a single comprehensive database for research output in social sciences and humanities for all of Europe1. Acknowledging the normative character of standardisation, questions emerge about the potential inequalities that standardisation on such a large cross-national scale may produce.

In a bid to explore such potential inequalities I have investigated European databases and repositories for research output within the social sciences and humanities. My initial findings point to notable variation in database setups. Given this, it is easily imaginable that the design of a single European database will benefit some at a cost for others. Yet, is inequality the inevitable consequence of database design? Is a democratic or tolerant standardisation that respects differences also possible? With these questions in mind, I present for discussion some early findings from a study on databases for research output within social sciences and humanities.

Keywords: standardisation, databases, bibliometrics, social sciences and humanities.

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Standardising the ‘Good Student’: Adaptability and Algorithms in Danish School Testing

In 2006, the Danish Parliament passed a bill making national tests a mandatory assessment tool in public schools (*Folkeskolen*). The annual digital test is one of several initiatives that arose from a review conducted by the OECD in 2004, which concluded that Danish schools need to establish an ‘objective evaluation of students’ in order to improve ‘proficiency standards’. Accordingly, the national test can be seen as a political response to improve the *standard* of Danish Schools and has become a central metric in school evaluation.

The national test is a digital testing system which has incorporated an *adaptive algorithm* into its functioning. This adaptability feature is characterized as producing a more “accurate” test because it adapts each question’s difficulty level to the student’s performance throughout the testing scenario. In effect, proponents argue that one of the test’s strengths is that each student sits an individually “tailored” test. As a calculative device the algorithm is part of what generates the standard for when a student is considered to be ‘good’ and as such it has become a key actor in making the school a more measurable entity.

While it is most often the case that algorithms are a ‘hidden’ feature within computational systems, in the case of the Danish national test, the algorithm’s adaptability makes it, in fact, a much discussed feature of the testing system. While this paper examines the mechanisms through which the algorithm works, it pays particular attention to its adaptability, analysing the broader assumptions and values that are incorporated within it. At the same time the paper investigates the collateral effects of adaptive thinking, that is, it examines what else is being made adaptive (students, teachers, principles, the school, the municipality, the nation) with and alongside the algorithm.
Chair: Ericka Johnson, Josefin Persdotter & Linda Weichselbraun, Linköping University and University of Gothenburg

*From embryonic bodies to scientific objects*, Helena Franzén, Uppsala University

*Bodies, subjectivities and normativities: On the need for a cross-reading of feminist technoscience studies and feminist phenomenology*, Kristin Zeiler, Linköping University

*Embodying the aquatic ape theory: freediving, yonic breath and the use of science*, Sara Malou Strandvad, Roskilde University

*The “female turn” in evolutionary biology- a science study of shifting canonical knowledge 1980-2000*, Malin Ah-King, Stockholm University

Room: K001
Helena Franzén (Department of History of Science and Ideas, Uppsala University)

From embryonic bodies to scientific objects

In Europe, there is a long tradition in the medical sciences to prepare anatomical specimens out of human bodies and body parts. Adults, children, and fetuses were skeletonized, taken apart, and/or preserved in alcohol. With the emergence of embryology, in the 19th century, embryos were also subjected to scientific enquiry. The main instrument involved in this was the microscope, as well as the microtome, with which the embryos were sliced into thin layers, to be studied through the lens. How can this be conceptualised in relation to the dynamics between women’s reproductive bodies and medical knowledge production in the early 20th century?

With the situated case study of the practices and collection at the department of anatomy, Uppsala University, and a feminist technoscience approach, this paper will explore how the transformation of embryonic bodies to scientific objects could be understood in terms of intersectional relations, using PoV-technique, thus reading quotes from different involved actors as part of the presentation.

In the early 20th century, the embryological research was scaled up, in the sense of a more intensified collecting process, since embryos were the raw material and much needed as reference and teaching basis. In Uppsala, a focused effort was initiated to collect human embryos and by using formal and informal networks, there was a flow of embryonic bodies from all over the country to the department. They were obtained from for example the bodies of deceased pregnant women at the autopsy table of the pathological department. The medical arena was a mainly male dominated sphere, but there were women present as students and technical assistants, whom along the formerly pregnant women all were involved in the production of scientific specimens.
Name and affiliation:

Kristin Zeiler (Biträdande professor; Pro Futura Scientia Fellow)
Department of Thematic Studies: Technology and Social Change
Linköping University

Title of talk:

Bodies, subjectivites and normativities: On the need for a cross-reading of feminist technoscience studies and feminist phenomenology

Abstract:

Concerns with embodied or enacted normativities have been voiced from within STS and feminist technoscience studies. Studies have examined ontologies and normativities in dieting practices (Mol 2013) and HPV vaccination campaigns (Lindén 2016); they have shown how norms about ability and disability are expressed, enacted or subverted in discourses on rehabilitation and rehabilitation practices (Moser 2000; 2006). To me, such studies care about (among other things) how assumptions, norms or values can be incorporated into, expressed and enacted by/through discourses, technologies and bodies within semiotic-material practices, and with the co-emergence of technologies, subjectivities, normativities.

These are also matters of care in feminist and queer phenomenology, and scholars in these strands have examined assumptions and norms that we may live by, express, enact, and at times question and transform in relation to, for example, surgery on children born with intersex anatomies, surgery on congenital twins, or breast cancer treatments (Zeiler 2013; Weiss 2014; Slatman 2014). They have examined how the singular body, with a particular sex, of a particular age or ability, can help shape our embodied selves, and attended to lived experiences of non-normativity, invisibility, or marginalisation (Weiss 1999; Young 2005; Ahmed 2006; Zeiler and Käll, eds, 2014).

Despite (some) feminist technoscience and feminist and queer phenomenology sharing a norm-critical concern, seeking to denaturalise taken-for-granted assumptions and norms, and engaging with subjectivity in ways that take us beyond dichotomies of subject vs object, discourse vs materiality, and culture vs nature, there has been limited exchange between them. This paper explores the analytic gains of reading insights from a cross-reading of them, treating them as resources for contemporary theorizing on the co-shaping of normativities, subjectivities, and technologies. Such a cross-readings, I argue, has the potential to open up for a novel ethico-political take in the study of medical and other practices.
Embodying the aquatic ape theory: Freediving, yogic breath and the use of science

In 1960, the marine biologist Sir Alister Hardy proposed the aquatic ape theory: that human adaptations arise from a time when our ancestors lived in watery habitats. Since then, the theory has been dismissed several times, most recently after David Attenborough re-launched the theory in the BBC Radio 4 series The Waterside Ape in 2016.¹ While such scientific disputes are of course interesting in themselves, this presentation will look into a specific offspring of the aquatic ape theory, namely its application in freediving: a sport of breath-holding in water for as long time, as long distance or as deep as possible. Freedivers explain the naturalness and beneficial results of their sport with reference to the aquatic ape theory. Hence, this disputed evolutionary theory provides freedivers with a frame of reference where death defying endeavors appear instinctive (for example holding your breath up to 11 minutes), and techniques from pranayama yogic breath allows for this to become a trained capacity. In that way, the application of the aquatic ape theory in combination with breathing techniques from yoga allows freedivers to constantly push the limits of what is traditionally considered the limits of being human, whereby elite freediving athletes becomes an interesting object of study for scientists investigating cardiovascular changes, reduced skin blood flow, increased lung volume, and spleen contraction. With examples from an on-going study of freediving, this presentation will look into the peculiar mixture of yoga, science, and a disputed evolutionary theory that comes together in the progression of an action sport that consists in relaxation and underwater meditation; a post-industrial leisure activities that offers mediated returns to contemporary constructions of nature and serenity.

¹ http://www.ibtimes.co.uk/sorry-david-attenborough-we-didnt-evolve-aquatic-apes-heres-why-1581752
POST-TRUTH AND IGNORANCE: WHAT ARE THE THEORETICAL IMPLICATIONS FOR STS?

Chair: Johan Söderberg & Kerstin Sandell, University of Gothenburg and Lund University

Strategic ignorance – The return of Ideology Critique?, Johan Söderberg, University of Gothenburg

Contemporary use and abuse of science – a challenge for feminist technoscience studies, Kerstin Sandell, Lund University

Economic assumptions in hi-tech finance: Strategic ignorance or financialised logics?, Kean Birch, York University

Blowing in the Wind: Renewable Energy Politics in Australia and Sweden, Darrin Durant, University of Melbourne

Engaging the post factual by means of science & technology studies – explicating the strengths of the poly factual, Peter Danholt, Aarhus University

Room: D206
Post-truth and ignorance: What are the theoretical implications for STS?

Increasingly concepts like post-truth, alternative facts and agnotology (induced ignorance) are seeping into our STS world. For a long time now the epitomized activity of STS work has been to explore and theorize how facts are made – while, without really having to state it, relying on that the facts we deconstruct are ‘good enough’ facts, accepted as reliable or even seen as truths.

In this panel we will take issues with the theoretical and analytical implications for the STS field when truths are actually lies, facts are easily disproven yet spread and used, and wilful ignorance is abounding.

The panel is divided into two sessions. The first will focus on epistemological and theoretical questions, while the second will consist of case studies of mainly produced ignorance.

Coordinators: Johan Söderberg and Kerstin Sandell
Strategic ignorance – The comeback of the devil in theory of knowledge

Johan Söderberg

Associate Professor Theory of Science, Göteborgs Universitet

Is ignorance due to an absence of knowledge or is it due to intentional acts of deception? This epistemological question echoes an older theological dilemma concerning the existence of evil in a world once made by an omnipotent and good Creator. Evil has variously been put down to the absence of God or to the presence of a devil. For the enlightened, scientific mindset, ignorance is an absence, an unchartered terrain or empty cavity, waiting to be filled up through scientific inquiry. This outlook is curiously mirrored in theories about scientific knowledge of structuralist/post-structuralist descent, where the notion of the subject, and, hence, “interest,” has been expelled. Consequently, neither the scientific mindset nor this strand of STS theory can make sense of absences of knowledge that are systematic and/or intentional in character. Examples of such absences multiply, notably the denial of climate change funded by oil companies such as Exxon-Mobile. It seems as if the Manichean version of epistemology is taking a revenge on Augustinian epistemology. In the presentation, I will ask what are the theoretical implications of this for STS. With strategic ignorance on the rise, the devil is back in theory of knowledge. It calls for a theory of the devil, that is to say, a return to the tradition of ideology critique.

Abstract is part of the panel: Post-truth: What are the theoretical implications for STS, Johan Söderberg & Kerstin Sandell
Contemporary use and abuse of science – a challenge for feminist technoscience studies

Kerstin Sandell, Kerstin.sandell@genus.lu.se
Gender Studies, Lund University

In this paper I will explore two trends that I argue pose significant challenges to feminist technoscience studies as a knowledge-producing endeavour. The first is Sweden democrats’ use of figures as facts, with the hope of changing society into a fascist one. The other is the investment in natural science research infrastructure with the hope of solving societies most pressing problems.

Sweden democrats have a persistent use of statistics as part of their political message, where they rely on the legitimacy that science gives to figures as facts. This forces ‘us’ to show that their figures are wrong, and thus arguing that figures can be facts. This I think is an effort for many feminist technoscience scholars, as they/we have invested in studying how scientific facts are made, turning ‘us’ irrevocably critical to figures as (positivist or realist, apolitical) facts.

The other trend is that of big investments in (natural) science infrastructure, as the two large-scale facilities under construction in Lund (ESS and MAX IV). These are heavily invested with hopes of solving some of contemporary societies most pressing problems – sustainability, health, energy, security. The core practice is, again, the natural science experiment, using the very same epistemological foundations that we are forced to defend in the face of the Sweden Democrats. Although here the feminist technoscience scholar might want to study the stabilization of facts in science and further argue that the research endeavours presented as science hides a depoliticization of contemporary problems. And, not to forget, channels money into male dominated scientific areas.

I will argue that feminist technoscience studies as part of science are facing a double challenge of on the one hand finding ways to defend figures as facts and on the other to stay committed to a constructivist understanding of science and of science as politics by other means.
PANEL:

Post-truth and ignorance: What are the theoretical implications for STS?

ABSTRACT

Economic assumptions in hi-tech finance: Strategic ignorance or financialised logics?
Kean Birch
Senior associate
Innovation Policy Lab, University of Toronto

There is a need to analyse techno-economic assumptions in science and technology studies. These configure political, policy, social, and financial decisions as understandable, possible, and doable in light of the prevailing techno-economic regime. In relation to hi-tech sectors like the life sciences, for example, promissory narratives and assumptions about future value help financiers to make and perform valuations of new businesses. These promises could represent forms of strategic ignorance in that they enable financiers to make judgements in conditions of extreme uncertainty (e.g. difficulty identifying successful firms). However, they could also reflect assumptions derived from financialised logics in which particular forms of techno-economic knowledge (and ignorance) come to shape notions of innovation, value, and societal benefit. This paper draws on theoretical and empirical insights from the life sciences in order to illustrate how these dynamics impact science, technology, and innovation more broadly. It will finish by looking at the implications these insights for understanding rentiership in technoscientific capitalism.
In both Australia and Sweden the wisdom of wind power is in much dispute. People debate the economics or the energy security and so forth. As STS scholars we enter such debates equipped with something like what Daniel Sarewitz called an understanding of the ‘excess of objectivity’: science is so good at providing evidence that combatants can deploy expertise to pre-established ends. Hence we are unsurprised that expertise appears incapable of settling the wind power dispute. Should we thereby adopt some kind of social scientist version of Roger Pielke Jr’s ‘honest broker’, where we aim only to expand the scope of another’s choices? What would that imply in Sweden, where the viability of wind power is questioned, with some suggesting declining electricity prices will curtail wind farm investment and others saying that statistics actually point to a flourishing industry? When the issue is future oriented, can there be anything wrong with expanding the field of choices to consider, and thus expanding the scope of democratic input? But is the same logic so persuasive when the issue is right now, interpreting an event under-way or recently concluded? In Australia, a massive storm hit the State of South-Australia in September of 2016, knocking over 22 electricity transmission grids and triggering a State-wide black-out. Almost immediately the Australian Prime Minister and several of his conservative party loyalists blamed wind power for the black-out, a stance soon shown to be at odds even with the government’s own advice. In this case, do we need some kind of sociology of cherry-picking, where we ask about the way choices can be curtailed by misinformation? How many misinformation campaigns does STS have to see before the honest broker role starts looking a little suspect?
Engaging the post factual by means of science & technology studies – Explicating the strengths of the poly factual

Presenter: Peter Danholt, Centre for STS-studies, Aarhus University

The concept of the post factual society has been proposed as a contemporary condition and as a condition where every knowledge claim and fact may be challenged and relativized. Prominently and currently exemplified by U.S. president Donald Trump’s expressions of ‘fake news’ and ‘alternative facts’. This situation brings about discussions about how to counter the post factual and re-claim the authority of knowledge.

In this presentation, I will present how STS by some is argued as parenting the post factual, but furthermore and conversely, I will argue that the post factual can be challenged by means of STS. I will visit arguments and positions made by STS scholars such as Bruno Latour, Donna Haraway, Isabelle Stengers and Barbara Hernnstein Smith in order to explore the rhetorical and conceptual terrain of the post factual. I will point out how the post factual might be better conceptualised as the poly factual condition and that this is closely related to the technological infrastructures and material aspects of knowledge production and diffusion of knowledge. Lastly, I will argue that a recourse to classical epistemological standards is part of the problem, not the solution. Instead the ontological approach to understanding knowledge production central to STS is required.
The "Female Turn" in Evolutionary Biology – a science study of shifting canonical knowledge 1980-2000

Malin Ah-King, Department of Ethnology, History of Religions and Gender studies, Stockholm University.

Abstract
This project explores how the international evolutionary research community radically shifted perspectives on the role of females in evolutionary biology. The project aims at understanding the histories, social dynamics and epistemological norms producing this shift in canonical knowledge.

Sexual selection, the evolutionary theory concerning sex differences, is both an expansive and controversial field. Theoretically, females were long expected to gain no benefit from mating with more than one male. Since 1980, evolutionary biologists' views have undergone a radical shift following the findings that females often mate with multiple males. Early polyandry research was male-focused, followed by increased interest in questions pertaining to females. This "Female Turn" may be conceived as a controversy coming to a closure. In this three-year project, I will use methods developed in Sociology of Scientific knowledge, specifically controversy studies and boundary-work, to analyze scientific publications, scientific debates and oral history interviews. My theoretical point of departure is feminist science studies, sociology of science, science philosophy, history of evolutionary biology, and gender studies.

This project will illuminate the interaction between society and the scientific process of evolutionary research on sex at a hitherto unexamined crucial turn, thereby contributing significantly to the international forefront of feminist science studies.
THURSDAY 1 JUNE, 14.00-16.00 PARALLEL SESSIONS 3

ENVIRONMENT AND ENERGY, SESSION 1 OF 2

Chair: Saampa Hyysalo, Aalto University

From corporate to collaborate social responsibility, Linda Madsen, University of Freiburg

Greening the shipping industry: how to study a public-private partnership from an STS-perspective? Irene Øvstebø Tvedten, University of Oslo

The multiple realities of energy efficiency targets in construction, Catherine Willan, Paul Ruyssevelt and Michelle Shipworth, University College London

Room: K002
FROM CORPORATE- TO COLLABORATE SOCIAL RESPONSIBILITY

ATTENDING TO THE MATTERS OF RESPONSIBILITY IN NGO-INDUSTRY COLLABORATIONS

Linda Madsen
Albert-Ludwigs-Universität Freiburg
linda.madsen@soziologie.uni-freiburg.de

Within the context of the expanding fish farming sector, this paper aims to explore how matters of Responsibility, as in corporate social responsibility (CSR), are enacted through industry-NGO collaborations. The on-going expansion of the fishery- and aquaculture sectors – often referred to as the Blue Revolution – bears multiple promises. Thereby, feeding a growing human population, promoting economic growth and securing marine resources.

Like the preceding Industrial-, Green- and Livestock Revolution, the Blue Revolution is associated with adverse environmental effects, which are shared matters of concern for industry and environmental organizations. Under the uniting trope of corporate social responsibility, partnerships between industry and NGOs are becoming increasingly common.

Such NGO-industry partnerships have been widely criticized, but the critics fail to ask: What exactly are these actors responsible for? The objects of Responsibility, or the matters at stake in CSR, remain untouched; there is a striking absence of attention on the matters of Responsibility per se.

Drawing on analytical resources from the field of science and technology studies (STS) where the formation of issues (Asdal 2008; Madsen 2015; Marres 2007; Moser 2008) and socio-technical processes of ordering have been thoroughly examined (Law 1994; Madsen 2015; Mol 2002), this paper sets out to explore how matters of Responsibility are being re-enacted within industry-NGO collaborations.
Abstract

Irene Øvstebø Tvedten
PhD candidate
Centre for Technology, Innovation and Culture, University of Oslo

Greening the shipping industry: How to study a public-private partnership from an STS-perspective?

This study explores a public-private partnership that aims to enable a transition to sustainability in the Norwegian maritime sector, by stimulating the use of alternative sources of energy in an industry currently dominated by diesel and heavy-fuel-oil (HFO). Such a study could easily have gone on a quest to tell a classic story about how public-private interaction take part in the construction of ‘green shipping’. However, this presentation will underline the importance of looking beyond such predefined categories in the study of hybrid organizational forms, and rather direct attention to how political situations are grounded in material forms. When we attend to these material objects, we find that the story about a potential transition in Norwegian domestic shipping is not only situated at the intersection of ‘public’ and ‘private’, but at an array of intersections. This study looks at how the mentioned partnership constitutes an assemblage of material artefacts and technologies. It sets out to analyse the calculations central to the partnership’s efforts to promote a specific transition in the maritime sector. In this transition, the fuel LNG (Liquefied Natural Gas) plays a key role, due to its potential to reduce emissions compared to diesel and HFO. However, a set of more or less influential actors try to prevent the continued implementation of LNG in Norway, arguing that LNG is not a low-emission fuel, but a fossil fuel. Driven by an intention to practice a disciplined and reliable form of expertise, the public-private partnership works to counter this uncertainty surrounding LNG through the practice of calculation. Based on a premise that calculation is about the construction of externalities, this study is concerned with the ways in which the partnership’s calculations construct a division between the political and the non-political, stabilizing LNG as a low-emission, green, transition fuel.
Title: The multiple realities of energy efficiency targets in construction

Making our building stock more energy efficient is a key pillar in Europe’s response to climate change. In the UK, government has sought to incentivise energy efficiency in the construction industry through contractual targets for public buildings. However, despite the use of specialist energy modelling software, and financial penalties for failure to meet the energy targets, the resulting buildings do not always perform as efficiently as they were predicted to. STS has been little-used in construction research, but offers an ideal tool to uncover how practices in construction teams may be affecting energy outcomes.

Through a partnership with a major European construction company, qualitative case study data has been gathered from commercial documents, interviews with staff, and observations of teams at work. Using concepts from the ‘ontological turn’ in STS, the research explores the ways in which energy-related targets are enacted amongst the many and diverse actors in case study construction teams. The findings suggest that diverging practices within the construction teams may be shaping different realities of energy targets. The failure to identify or coordinate these effectively may in turn lead to a risk of sub-optimal building performance.

This examination of the ontological complexity of building energy targets applies STS to new fields of academic interest, but also has practical implications for the realisation of public policies to improve the energy performance of the building stock for the future.
FRIDAY 2 JUNE, 09.00-10.30 PLENA PANEL

POST-TRUTH AND IGNORANCE: WHAT ARE THE THEORETICAL IMPLICATIONS FOR STS?

Chair: Johan Söderberg & Kerstin Sandell, University of Gothenburg and Lund University

Strategic ignorance – The return of Ideology Critique?, Johan Söderberg, University of Gothenburg

Contemporary use and abuse of science – a challenge for feminist technoscience studies, Kerstin Sandell, Lund University

Economic assumptions in hi-tech finance: Strategic ignorance or financialised logics?, Kean Birch, York University

Blowing in the Wind: Renewable Energy Politics in Australia and Sweden, Darrin Durant, University of Melbourne

Engaging the post factual by means of science & technology studies – explicating the strengths of the poly factual, Peter Danholt, Aarhus University

Room: Dragonen
Post-truth and ignorance: What are the theoretical implications for STS?

Increasingly concepts like post-truth, alternative facts and agnotology (induced ignorance) are seeping into our STS world. For a long time now the epitomized activity of STS work has been to explore and theorize how facts are made – while, without really having to state it, relying on that the facts we deconstruct are ‘good enough’ facts, accepted as reliable or even seen as truths.

In this panel we will take issues with the theoretical and analytical implications for the STS field when truths are actually lies, facts are easily disproven yet spread and used, and wilful ignorance is abounding.

The panel is divided into two sessions. The first will focus on epistemological and theoretical questions, while the second will consist of case studies of mainly produced ignorance.

Coordinators: Johan Söderberg and Kerstin Sandell
Strategic ignorance – The comeback of the devil in theory of knowledge

Johan Söderberg
Associate Professor Theory of Science, Göteborgs Universitet

Is ignorance due to an absence of knowledge or is it due to intentional acts of deception? This epistemological question echoes an older theological dilemma concerning the existence of evil in a world once made by an omnipotent and good Creator. Evil has variously been put down to the absence of God or to the presence of a devil. For the enlightened, scientific mindset, ignorance is an absence, an unchartered terrain or empty cavity, waiting to be filled up through scientific inquiry. This outlook is curiously mirrored in theories about scientific knowledge of structuralist/post-structuralist descent, where the notion of the subject, and, hence, “interest,” has been expelled. Consequently, neither the scientific mindset nor this strand of STS theory can make sense of absences of knowledge that are systematic and/or intentional in character. Examples of such absences multiply, notably the denial of climate change funded by oil companies such as Exxon-Mobile. It seems as if the Manichean version of epistemology is taking a revenge on Augustinian epistemology. In the presentation, I will ask what are the theoretical implications of this for STS. With strategic ignorance on the rise, the devil is back in theory of knowledge. It calls for a theory of the devil, that is to say, a return to the tradition of ideology critique.

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Sweden democrats have a persistent use of statistics as part of their political message, where they rely on the legitimacy that science gives to figures as facts. This forces 'us' to show that their figures are wrong, and thus arguing that figures can be facts. This I think is an effort for many feminist technoscience scholars, as they/we have invested in studying how scientific facts are made, turning 'us' irrevocably critical to figures as (positivist or realist, apolitical) facts.

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There is a need to analyse techno-economic assumptions in science and technology studies. These configure political, policy, social, and financial decisions as understandable, possible, and doable in light of the prevailing techno-economic regime. In relation to hi-tech sectors like the life sciences, for example, promissory narratives and assumptions about future value help financiers to make and perform valuations of new businesses. These promises could represent forms of strategic ignorance in that they enable financiers to make judgements in conditions of extreme uncertainty (e.g. difficulty identifying successful firms). However, they could also reflect assumptions derived from financialised logics in which particular forms of techno-economic knowledge (and ignorance) come to shape notions of innovation, value, and societal benefit. This paper draws on theoretical and empirical insights from the life sciences in order to illustrate how these dynamics impact science, technology, and innovation more broadly. It will finish by looking at the implications these insights for understanding rentiership in technoscientific capitalism.
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Engaging the *post factual* by means of science & technology studies – Explicating the strengths of the *poly factual*

Presenter: Peter Danholt, Centre for STS-studies, Aarhus University

The concept of the post factual society has been proposed as a contemporary condition and as a condition where every knowledge claim and fact may be challenged and relativized. Prominently and currently exemplified by U.S. president Donald Trump’s expressions of ‘fake news’ and ‘alternative facts’. This situation brings about discussions about how to counter the post factual and re-claim the authority of knowledge.

In this presentation, I will present how STS by some is argued as parenting the post factual, but furthermore and conversely, I will argue that the post factual can be challenged by means of STS. I will visit arguments and positions made by STS scholars such as Bruno Latour, Donna Haraway, Isabelle Stengers and Barbara Hernnstein Smith in order to explore the rhetorical and conceptual terrain of the post factual. I will point out how the post factual might be better conceptualised as the *poly factual* condition and that this is closely related to the technological infrastructures and material aspects of knowledge production and diffusion of knowledge. Lastly, I will argue that a recourse to classical epistemological standards is part of the problem, not the solution. Instead the ontological approach to understanding knowledge production central to STS is required.
THEORY AND METHOD DEVELOPMENT

Chair: Daniel Normark, Uppsala University

*ANT as a descriptive methodology for design practices: The concept of “network within”,* Alive Mattozzi and Laura Lucia Parolin, University of Southern Denmark

*Understanding conceptual vestigiality within social sciences from an ecosystem perspective*, Rene Brauer and Mirek Dymitrov, University of Surrey

*Voluntourism as a site of scientific practice? A need for STS?*, Benedict Singleton, Swedish University of Agricultural Sciences

*Agonistic meritocracy and the coral of a research institution*, Daniel Normark and Olof Ljungström, Uppsala University

Room: D203
ANT as a descriptive methodology for design practices: The concept of “network within”

If the entanglement among designed things and the social has always been STS’s interest, only recently the attention has been focalized on design practices (Binder et al 2011; Ehn 2012; Latour 2008; Storni 2012, Storni et al 2015, Volonte’ 2015). In particular, Bruno Latour proposes a role Actor Network Theory in helping design disciplines to shift their attention from the result to the becoming process mapping, and thus making it public and also discussable, the multiple steps that allow an assemblage to come together and the various controversies that issue from there (Latour 2008; Latour and Yaneva 2008). ANT has been used to show the collective non modernist vision of design, contrasting it with a modernist vision of the designer as individual hero (Storni et al. 2015), also because it helps to show how designing involve an entanglement of what are considered the separated realms of social and technical (Danholt and Halse 2016) but also it helps to show how democratic, ecological and political issues are entangled (Storni et al 2015).

All these processes can be traced in detail through ANT gathering methodology - summarized in the principle of symmetry and in the maxim “follow the actor”. Nevertheless, it seems that STS and ANT have been not so able to develop a descriptive methodology in order to actually account for these processes and especially for the relevant role artifacts play in it, despite the fact that ANT had developed methodological categories and models that allows to do that - for instance the script and Latour’s infralanguage (Akrich 1992; Akrich and Latour 1992; Latour 1992). Lately ANT has, indeed, focused much more on the tension between the empirical and the conceptual (Jensen 2014), than on the mediations allowed by the methodological level.

This paper aims to show instead how ANT can provide a methodology to account for the role of artifacts in design practices. ANT, can not only provide descriptive categories, but also provide an articulation to issues such us how to take into account the role of materials. ANT has indeed allowed social sciences not only to take artifact into account, but also to account for them, for their mediating role, for their agency.

We propose to take into account the network within of an actor. Only by taking into consideration the “network within” it is possible to account for the various translations an actor faces, i.e. the way in which the network that constitutes a given actor is re-articulated by entering a relationship with other actors-networks. A consequent actor-network approach cannot assume beforehand which are the actors-knots of the network, and above all, it cannot assume beforehand their dimension, scale, consistency, and cohesion: if each knot is by itself a network, it is often necessary to describe what we could define the “network within” that constitutes each actor.

We will do all that by considering design practices observed in the course of diverse ethnographic fields.
Understanding conceptual vestigiality within social sciences from an ecosystem perspective

René Brauer a  Mirek Dymitrow b

a University of Surrey, Faculty of Arts and Social Sciences; School of Hospitality and Tourism Management, GU2 7XH Guildford, Surrey, UK; r.brauer@surrey.ac.uk

b University of Gothenburg; School of Business, Economics and Law; Department of Economy and Society – Unit for Human Geography, P.O. Box 630, 405 30 Gothenburg, Sweden, mirek.dymitrow@geography.gu.se

Abstract

Given that conceptual frameworks always guide our thoughts, judgments and actions, the ways in which we relate to concepts are crucial for how we organize the society. The different ‘turns’ in social sciences (linguistic, cultural, performative, ontological, material, etc.) have had enormous impact on conceptual development, including efforts to re-conceptualize, modify or abandon ‘old’ concepts (e.g. class, gender, race, etc.). Nevertheless, despite fierce criticisms, some concepts have managed to “[survive] the onslaught of material reality and philosophical repositioning” (Cloke & Johnston, 2005:101). In biology, this property is known as vestigiality, where it refers to genetically determined structures that have apparently lost most or all of their ancestral function, but have been retained in spite of evolutionary development. With regard to social sciences, the epiphenomenon of vestigiality is seldom reflected upon and hence less understood, despite the fact that continued use of denunciated concepts is likely to exert undesired impact on knowledge production within any given discipline. As such, understanding vestigiality as an aspect of conceptual development is not only important in assessing how concepts develop; it can also yield insights into the human influence on knowledge production without invoking “context” (cf. Asdal, 2012).

Departing from an actor-network theory perspective, in this presentation we sketch out a theoretical framework for understanding vestigiality in a social-science context using the parable of an ecosystem. By merging socio-material components with psychological factors, such a move acknowledges that conceptual developments are evolutionarily contingent upon both internal (motivations, biases, cognition) and external forces (materiality, power, group behavior). Departing from the ecosystem idea, we elaborate on 12 drivers most likely to regiment the academic enactment of vestigiality.

Keywords
Concepts, vestigiality, knowledge production, ANT, ecosystem


Title: Voluntourism as a site of scientific practice? A need for STS?

Abstract: Experience is key in a number of professions. Indeed, the value of experience is such that in many fields it is increasingly professionalised – those who can pay to have ‘experiences’ of value later in the careers. Partially in response to this demand, volunteer tourism ‘voluntourism’ has become increasingly prominent. Voluntourism in many ways is similar to ecotourism – tourists pay for experiences that are both enjoyable and (in theory) make a positive contribution wherever they take place. Concomitant with the growth of voluntourism a body of research has emerged. This paper presents the results of a scoping review of the literature on voluntourism. It notes that research focus has focused particularly on ‘international development’ and ‘conservation’ voluntouristic experiences, with an emphasis upon voluntourists’ motivations and experiences, alongside work on the political ecological implications in different parts of the world. However, limited attention has been paid to voluntourism as a site of scientific practice. This omission is perhaps surprising as various organisations now provide opportunities for aspiring scientists to gather relevant professional experience and knowledge through collecting data and attending courses. This may take several forms including the acquisition of concrete scientific knowledge alongside tacit, embodied knowledge. Voluntourism is thus one path towards ‘enskilment’ within certain scientific fields. As such, it may thus be hard to draw lines where ‘science’ begins and ‘tourism’ ends in certain cases. This scoping review concludes with a call for the use of STS concepts and methods in future discussions of voluntourists and voluntourism.

Benedict Singleton
Postdoctoral Researcher
Swedish Biodiversity Centre
Swedish University of Agricultural Science
Uppsala
Sweden

Email:Benedict.singleton@slu.se
The aim of this paper is to understand a research organization, Karolinska Institutet, by following the interessement\(^1\) through time, from its inauguration 1810 to the present conflicts and scandals. Hence we hope to take “the social” of KI seriously – getting under the skin of the organization in an effort to say what the organization(s) is/are. We will show that the form and function of KI changed through time, while also maintaining some of the aspect of previous layers of identity. At least four different stages – different overlapping ontologies if you like – co-exist and compete within the monster of Karolinska Institutet.\(^2\) Looking at Czarniawska’s way of presenting LSE, we will follow the creation of KI as a result of articulations and negotiations by relevant actors at each locally contingent time.\(^3\) To paraphrase Law & Singleton KI is an organization that does not look like an organization because our methods are not geared up to detect or know it.\(^4\) Finally, KI, in its current form, becomes comprehensible as a coral, acephalic and rhizomatic, rather than the “research hotel” that competing organizational ontologies try to label it, thereby adding to the list of topological forms of the social.

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\(^3\) Barbara Czarniawska “Emerging Institutions: Pyramids or Anthills?” Organization Studies, 2009 vol. 30 No. 4: 423–441

BOUNDARIES AND TAXONOMIES

Chair: Torben Elgaard Jensen, Aalborg University

Why bombers bomb: exploring the case of the Danish telephone bomber, Torben Elgaard Jensen, Mette Simonsen Abildgaard & Johan Simonsen Abildgaard, Aalborg University

Cheese topography, Kasper Ostrowski, Aarhus University

Collaboration without consensus – Free and Open Source Software as boundary object, Reinhard Anton Handler, Karlstad University

The meaning of scientific natural history collections in biodiversity research, Henk Koerten and Peter van den Besselaar, Vrije Universiteit

Room: D206
Abstract for the Nordic STS conference, Gothenburg 2017

Why Bombers Bomb: Exploring the case of the Danish telephone bomber

Torben Elgaard Jensen (presenter), Aalborg University Copenhagen, Denmark
Mette Simonsen Abildgaard, Aalborg University Copenhagen, Denmark
Johan Simonsen Abildgaard, National Research Centre for the Working Environment, Denmark

When bombs explode in public spaces, one of the first thoughts that come to mind is the possibility of a terrorist act. The rapid arrival of such causal hypotheses is a key feature of how possible causalities are presently negotiated between police investigators, the press, expert commentators, members of the public, politicians, legal authorities and others.

In this paper we explore the construction of causal explanations in situations of great public danger and concern. To gain a measure of analytical distance to the causal explanations that are currently prevailing, we will work through the historical example of the Danish ‘telephone bomber’, who committed a series of bomb attacks from 1977-78 in Copenhagen. We explore how authorities, the media and the bomber himself generated a long list of causal explanations through the period of attacks as well as during the subsequent police investigation and trial.

In the final part of the paper, we contrast the rather unruly dynamics of causal attribution in the telephone bomber case to STS studies of other sites of causal negotiation such as the laboratory (Latour & Woolgar 1979) and the court room (Lynch & Jasanoff 1998).
Abstract
Through ‘cheese topography’ this paper investigates how naming practices within the cheese industry might aid our understanding of attitudes towards procurement and geographical claims evoked - in particular within a Nordic setting. Departing from a comparative analysis of cheese names in the soil-orientated and highly regulated French market, the innovative and less rigidly demarcated American market and the evolving Nordic market, this paper offers insights on the nature of Nordic cheese topography and value-adding geographical claims made in the current food-scape. I argue that the prevalent south European and American ways of evoking geographical claims differ on a number of factors. Communal soil orientated practices overtly aligned with the judicial and political prerequisites of official geographical indications dominate the South European strategies. In the US cheese names are creative, whimsical and geographically equivocal. In the absence of geographical designated labels - personal competence, independent stewardship and innovation are highlighted. The Nordic region seems to evoke a hybrid agenda including nationally circumscribed names. To broaden our understanding of recent Nordic gastro transitions and to instill considerations on a particular Nordic agenda, this hybrid is investigated through cheese naming practices.

Keywords
Cheese names, geographical claims, topography, Nordic foodscape
Reinhard Anton Handler, Karlstad University

Collaboration without consensus - Free and Open Source Software as boundary object

Free and Open Source software (FOSS) has become a popular research object amongst scholars from various disciplines. Within the last decade studies from the humanities critically assessed the social, political, economic and cultural significance of non-proprietary software. By doing so, these studies (just to name a few: Coleman, 2013; Kelty, 2008; Weber, 2004) have a perspective in common that highlights the debates and differences among its participants.

This contribution adds to the growing body of these critical software studies by focusing on the divergences in FOSS, employing the concept of a boundary object (Star & Griesemer, 1989). Interviews conducted at FOSDEM (Free and Open Source software developer meeting) show that the non-consensual setup of FOSS lets people from different communities of practice use it as a common point of reference (Chrisman, 1999) while allowing different standpoints, opinions, motivations, and values.

These differences can be categorised on three levels: The disagreements between advocates of Free and Open Sources software is nothing new. However, the humanities’ focus on peer production, and personae such as the geek, the hacker and the activist have overshadowed that FOSS pairs amateurs and professionals. The growing professionalising of FOSS brings forward the important contributions by entrepreneurs, lawyers, community managers, and – not least - for-profit software companies. Lastly, this analysis concerns the coordination of particular non-proprietary software development projects, exemplifying that participants are granted to leave collaborative projects by copying (forking) the source code, disentangling from a project in order to use the same code as the basis of a new project.

By considering these three levels, this paper asks whether FOSS can be conceived as cooperative work that links communities together in collective activities and identities or an alternative set of terms needs to be adapted to capture FOSS and its potential social consequences.

References

The meaning of scientific natural history collections in biodiversity research

Henk Koerten and Peter van den Besselaar, Vrije Universiteit Amsterdam

h.koerten@vu.nl

Diminishing biodiversity has become a global concern, its assessment requires a research-data infrastructure disclosing contemporary and historical data sources with an obvious role for natural history museums holding specimen collections as well as digitally stored DNA data. Natural history collections will be digitized, creating a virtual taxonomic environment where new research questions can and will be asked (Godfray, 2002; Schindel, Miller, Trizna, Graham, & Crane, 2016).

‘Specimens are a lot like words. They don't mean anything unless they're in the context of a sentence or a system, and their meanings are extremely promiscuous.’ (p. XIII)(Asma, 2003). This quote suggests taxonomic order itself provides meaning, which could also be treated as situational. Curators intentions to collect might be a combination of selfish (fulfilment of personal desires), scientific (testing hypotheses) and marketplace (utilitarian to biology) intentions (Hine, 2008) (p.214). These observations suggest the relationship between a taxonomist of a specific field and the specimen collection is not straightforward, while it is common to depict the curators profession in rather neutral connotations (Bowker, 2000). It gives rise to the question of how collections are being used: would the relationship between taxonomists and natural history collections vary across taxonomic fields? Would for instance the view of an entomologist on taxonomic collections be different from the zoologist view? And would a paleontologist see other uses of natural history collections than geologists?

That question will be answered by analyzing a collection of qualitative interviews with geologists, entomologists, micro-paleontologists, botanists and marine zoologists. By doing that, we are able to show variations of meaning and use of natural history collections among taxonomic fields, which will have impact on how digitized and virtualized natural history collections will be used to assess biodiversity (Schindel et al., 2016).

References
ENVIRONMENT AND ENERGY, SESSION 2 OF 2

Chair: Saamps Hyysalo, Aalto University

Making a governable thing: uncertain classifications of post-fracking waste in Poland., Aleksandra Lis och Agata Stasik, Adam Mickiewicz University and Koźminki University

Energy Internet Forums as Transition Intermediaries., Saamps Hyysalo, Joni Juntunen and Mari Martiskainen, Aalto University

Doing what no one else wants to do – understanding citizen support for a nuclear waste repository in Östhammar, Sweden., Hannes Lagerlöf, University of Gothenburg

Room: K002
dr Aleksandra Lis, Adam Mickiewicz University, Poznań

dr Agata K. Stasik, Koźminski University, Warszawa

Making a governable thing: uncertain classifications of post-fracking waste in Poland

Management of waste produced in shale gas exploration activities is one of the main challenges and risks identified by experts. While many companies agreed to disclose the content of their fracking fluids and create a publicly accessible registers where they name all substances they use, the issue of managing post-fracking waste has not gained the same level of attention, public scrutiny and efforts to make it transparent for the public. On the contrary, there have been some cases of waste disposal in rivers or abandoned fields.

At the same time, residents and NGO activists have been raising concerns about waste treatment at local public meetings. Moreover, classification of the post-fracking waste in bureaucratic regulations has still not been achieved in Poland, it has rather been suspended together with the project of shale gas development. It is not certain whether it should be classified as industrial or communal waste and what symbol should it be assigned in the official classifications. This paper provides a preliminary analysis of interviews carried out with experts and administration officials in Poland about post-fracking waste with a theoretical objective of better understanding how an externality of shale gas exploration is made, or prevented from being made, into a governable thing. The paper shows how actors negotiate between making this externality visible or invisible, what kind of technologies they apply to classify, frame and stabilize or destabilize it in the bureaucratic context of waste governance in Poland.
Energy Internet Forums as Transition Intermediaries
Samps Hyysalo, Aalto University, Finland
Jouni Juntunen, Aalto University, Finland
Mari Martiskainen, Spru, University of Sussex, UK

Sustainability transition is underway in the energy sector. The landscape factor of climate change continues to push for rapid and deep cuts in greenhouse gas emissions. Many key renewable technologies needed for the transition are past their pre-development and initial take-off phase and the competition between new and old energy forms is increasingly run in an arena of mainstream deployment and adoption. This state of affairs in energy transition has led to renewed interest in roles that citizens play in energy transition as consumers and users.

We to examine the activities which citizen users perform and what is their import for energy transition. Our focal point of enquiry is the S-RET dedicated Internet forums, which have emerged in several European countries. They present a new type of energy community in contrast to previously identified community energy and grassroots innovation communities found since the early stages of energy transition. Whereas the traditional community energy has been locality bound and premised on sharing of finance and produce, the new citizen energy communities are geographically dispersed, share the interest in the same class of technology and in digitally mediated infrastructure without committing to shared finance or produce. Earlier studies on these Internet forums have established their catalyst roles for diffusion of S-RET technology and in user innovation within them, and the present paper examines their overall import for understanding how citizen users, together with their peers, contribute to energy transition as emerging user side intermediary actors.
Abstract for: Nordic STS Conference 2017

Doing what no one else wants to do – understanding citizen support for a nuclear waste repository in Östhammar, Sweden

Hannes Lagerlöf

Most communities would not volunteer to host a repository containing high-level nuclear waste. Still some do, even with citizen support, which is the case in Östhammar, Sweden. This paper examines how this support is maintained and how Östhammar has become and remained the country’s designated site for disposal of the waste. It is proposed that existing theory on nuclear communities is indeed helpful, but that such theory either does not address, or fully explains, local citizen support for the nuclear activities. The nuclear oasis theory does not focus specifically on such support but rather on nuclear communities as unequal, geographically remote, environmentally degraded and disadvantaged sites where nuclear enterprise roams freely. In addition to not focusing on the support, this theory also seems somewhat misguiding as Östhammar is situated close to a large city, not more degraded, nor more unequal, than the average Swedish municipality. The industry awareness theory on the other hand describes nuclear communities as entrepreneurial innovators seeing potential where others see useless waste, that economic dependency is of secondary importance, and that they have ‘integrated the industrial activity and cognitive understanding into their local culture’. These claims are, however, not underpinned by in-depth empirical research and, hence, tell little of what constitutes this ‘cognitive understanding’ and ‘local culture’ more precisely. Building on fieldwork in Östhammar, this paper makes an empirical contribution to the study of nuclear communities, but also contributes theoretically by addressing the underdeveloped aspect of citizen support in nuclear communities.
Chair: Doris Lydahl, University of Gothenburg

Numbers of care and control. Changing logics of the person identity number in Finland, Marja Alastalo, Ilpo Helén & Merja Kinnunen, University of Eastern Finland

The entrepreneurial configuration of users in the independent living programmes for people with Down Syndrome; a heroes’ story, Joan Moyà-Köhler, Fundacio per a la Universitat Oberta de Catalunya

Translating value-based healthcare into practice, Peter Danholt, Claus Bossen & Morten Bonde Klausen, Aarhus University

Room: K001
Numbers of care and control. Changing logics of the person identity number in Finland

Many states assign identification numbers to govern people living permanently in their territory and jurisprudence. In most cases, the national identification numbers are used only for a single purpose such as social insurance or taxation and the related databases. In our presentation, we explore the person identity number (PIN) as a technology of governing people and societies specific to the Nordic welfare states. The Nordic deployment of identification numbers is unique because the single PIN is used throughout public administration and widely in transactions in private business.

We draw on ethnographic observations, interviews and policy documents collected for our studies on the making and using of PIN in the Finnish population registers and social and health services. Our analysis of this data suggests a considerable change in the functioning of PIN. Originally, PIN was a ‘social security number’ that gave a person access to health and social services and allowances. It also functioned as an instrument of the state to collect, maintain and coordinate public registers and to compile register-based statistics. Gradually, the PIN became the code a person required to have access not only to public services but also to numerous mundane affairs in the private sector. Along with the ongoing digitalization of databases and data management, PIN is acquiring new significance, since it appears as a smooth operator allowing easy and flexible combination and aggregation of personal data from different digital registers and databases for administrative, research and commercial purposes. With the latter development, PIN is transforming into a device of control in Deleuzian sense.
Title: “The entrepreneurial configuration of users in the independent living programmes for people with Down Syndrome; a heroes’ story”

Author: Joan Moyà-Köhler (jmoyak@uoc.edu)
Co-author: Israel Rodríguez-Giralt (irodriguezgir@uoc.edu)
CareNet Research Group, IN3, Universitat Oberta de Catalunya.

Abstract:

The LEPA (Act on the Promotion of Personal Autonomy for Dependent People), the entry into force of the UN Convention on the Rights of Persons with Disabilities, and the emergence of the independent living paradigm within the groups with intellectual disability, produced a significant change in how the associations in the field worked out their support programs in Spain. Within this framework, during the last 10 years this sector lived a split of programs working on the promotion of independent living, mostly linked to live in “the own home”, and based on socio-technical user-centred services.

Drawing on an ethnographic involvement within the Catalan Foundation of Down Syndrome, we will tell the story of the programme “I’m going home”, an independent living support service where people with DS choose with whom and where they want to live. Support here is focused on developing the "Person Centred Plan", previously elaborated by the service professionals together with the users and their relatives, and helping them to establish and maintain social relationships in the community. Building from here, the paper examines the discourses, practices and sociomaterial arrangements that enact and sustain an independent life, and examines the configurations of usership and autonomy emerging from the service. In particular, it focuses on the production of a constantly self-motivated and entrepreneurial user. A “quotidian hero”, as organisations working in the field usually defines them. Someone who is active, self-motivated, and open to be constantly learning new abilities. The paper ends with a reflection on the implications of these processes in shaping disabled people’s agency, as well as on their identity.
Translating value-based healthcare into practice

All authors are from Dept. of Information Studies, Aarhus University, Denmark:

• Peter Danholt, Associate Professor, pdanholt@cc.au.dk (corresponding)
• Claus Bossen, Associate professor, clausbossen@cc.au.dk
• Morten Bonde Klausen, Assistant professor, imvmbk@au.dk

Abstract

In this paper, we report from an experiment into healthcare governance called 'new governance in the patient's perspective' (NG). The experiment was intended to transform governance from a productivity-oriented paradigm to a value-based paradigm. Thus the Region in charge of the project exempted nine hospital departments from activity-based financing and accountability based on Diagnosis-Related Groups (DRG), and asked instead these departments to come up with self-generated indicators by which to be held accountable. The initiative was inspired by principles of value-based health care (VBHC), and motivated in the first place of a problematisation of how the DRG system entailed ‘perverse incentives’ potentially leading hospitals to treat patients more as financial assets than as patients with a care need. Drawing on the notion of ‘translation’ (Latour, 1987) this paper analyses how NG and the visions of a new governance paradigm were translated into the departments. Taking this perspective implies that we do not seek to assess whether NG was successful or not. Rather we are concerned with how it is received, shaped and put into practice. The paper contributes with providing a grounded insight into how initiatives of VBHC are realized and brought into organisational practice. Finally, our translational approach leads us to discuss how the case might provide inspiration for governance schemes to embrace the local complexities of professional practices, to rethink the role of performance indicators, and to develop formats in which concerns with accountability and professional values conflate in mutually engaging relations.