EASST Review

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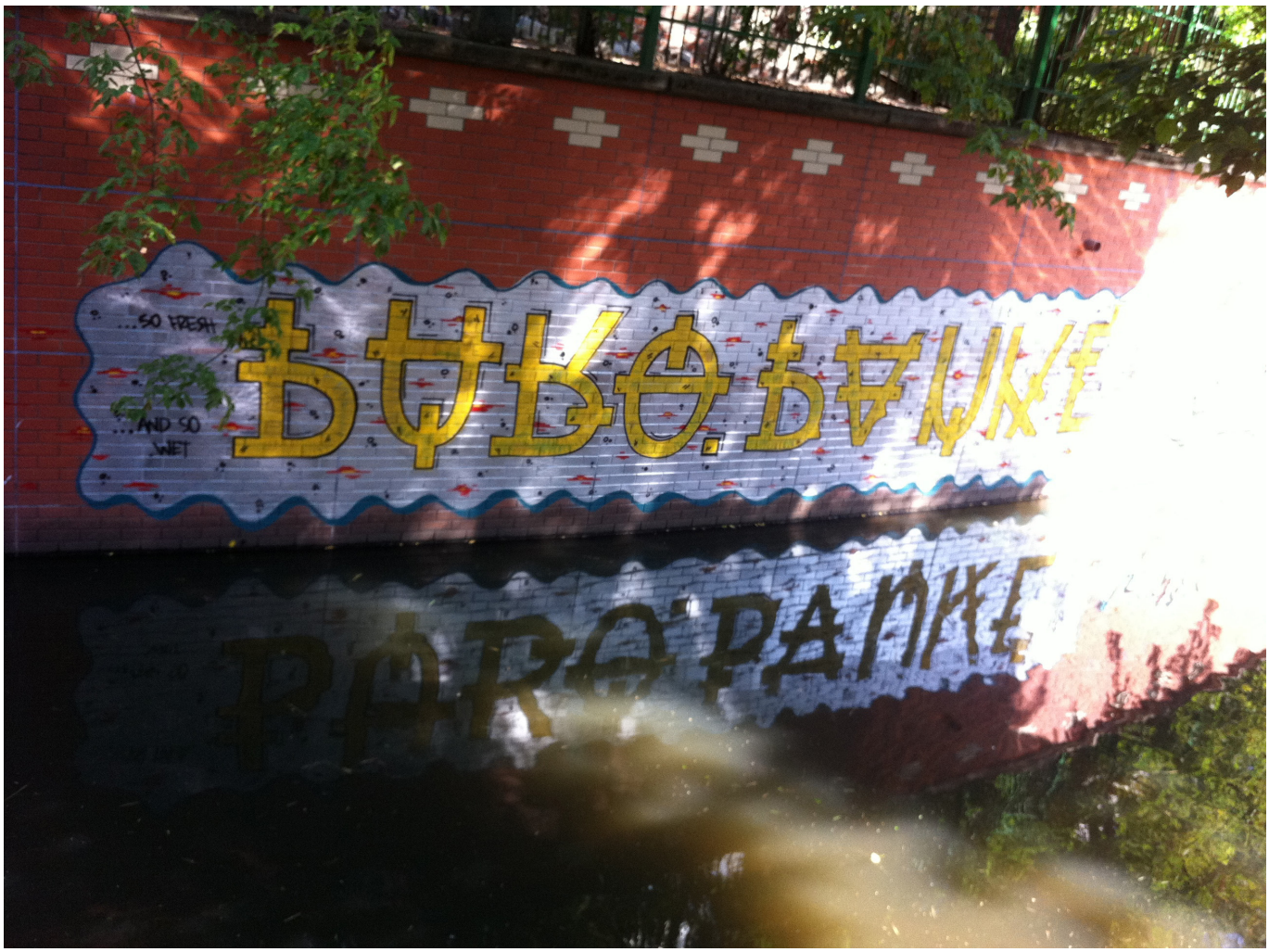

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Cover Illustration: ‚Collaboration of water, ligth and color'. Credit: Josefine Raasch

Past Editors: Ann Rudinow Sætnan, 2006 - 2014; Chunglin Kwa, 1991 - 2006; Arie Rip, 1982-1991; Georg Kamphausen, 1982.

The Association's journal was called the EASST Newsletter through 1994.

Member benefits:
EASST organizes a biennial conference and supports a number of "off-year" events such as workshops, PhD summer schools and national/regional STS meetings. Members are offered reduced registration rates for the biennial EASST conference and many other EASST events. EASST funds and awards three biennial academic prizes for excellence in various aspects of community-building – the **Olga Amsterdamska award** for a creative collaboration in an edited book in the broad field of science and technology studies, the **Chris Freeman award** for a significant contribution to the interaction of science and technology studies with the study of innovation, and the **John Ziman award** for an innovative venture to promote the public understanding of the social dimensions of science.
EASST publishes the EASST Review and offers member access to the journal Science & Technology Studies.

Editorial - Generative Collaboration

Josefine Raasch

There are many things to like about attending conferences, such as the thrilling excitement that accompanies good presentations and thought-provoking discussions. I also like seeing old friends, making new ones and meeting people whose texts I have read meticulously. It is easy to find a way to approach other attendees, start a conversation about different topics and approaches, discussing questions resulting from presented papers and sharing a fascination towards shifts, dynamics and emergences. What I certainly appreciate most of all is the sense that we are all collaborating on the development of Science and Technology Studies.

This issue is about collaboration – not just any collaboration, but generative collaboration. Not all collaborations in the field of STS are necessarily generative. This issue, however, provides different narratives of how we can approach the various dynamics, developments and novel phenomena that result from generative collaborations. The authors write the impermanence of thoughts, discourses, phenomena and definitions into their texts. Ideas presented in conference papers are discussed or contested, elaborated or reframed in novel ways in these contributions. In their reflection of conferences and workshops, some of the authors emphasize the process of collaborating while others focus on new concepts, shifts, or other emergences as outcomes of collaboration.

Emphasizing the importance of the process of generative collaboration, a collective of authors questions current forms and definitions, as well as the conditions and practices of authorship. Rethinking authorship in novel ways, they raise the question of which authorship practices can emerge newly and relate this question to the one of how they will do so. With a similar focus on the process rather than on the outcomes of generative collaborations, Alison Marlin considers how participants of different professions and nationalities managed to collaborate at a workshop on videogames and reflects on how comparisons generated an effective collaboration. Referring to some of his experiences at the EASST conference 'Situating Solidarities' in 2015 in Torun, Poland, Michael Penker examines the effect of STS engaging in buzzwords by reflecting on the ontological politics involved.

The EASST conference sparked a variety of reflections on outcomes of generative collaborations. Karen Dam Nielsen examines the role of STS in 'caring for participation' and urges for openness towards (generative) forms of participation that we might not recognize immediately as 'real participation'. Luis Junqueira considers whether discourses in STS as presented at the conference might have a double generative moment: On the one hand, they combine different theories providing 'interesting synergies' for public debates on energy consumption and efficiency,

and on the other hand, these synergy effects could serve to challenge the dominant societal understanding of energy and contribute to a more inclusive design of technology and public policy. Lloyd Akrong relates different presentations of responsible research and innovation to each other, describing recurring themes and implicit framings. This vivid account of generative collaboration is given by looking at the co-operation and contributions of presenters and discussants. Simone Belli addresses the question of how novel forms of trust emerge in social institutions. In his article, inspired by presentations at the EASST 2015 conferences, Belli argues for an analysis of new forms of trust in social institutions, which he suggests are co-emerging with protests against social institutions.

A strong proponent of collaboration during his lifetime was Stefan Beck. Tanja Bogusz and Estrid Sørensen remind us in their obituary of the many ways in which he was influential in establishing STS in Germany. Many who knew him remember him to be an outstanding person, which is reflected in the small selection of condolences featured here. As one of his former students I am most grateful that I had the chance to work with and to learn from him.

I invite you now to join the authors in their exploration of a range of generative collaborations.

Science & Technology by Other Means: Exploring Collectives, Spaces and Futures

4S/EASST Conference
Aug. 31-Sept. 3, 2016,
Barcelona

Some decades ago several STS scholars defended that science and technology could be considered as 'politics by other means'. Many years have gone through, and STS researchers are increasingly turning their attention towards proposals and experiences where science and technology are increasingly performed 'by other means': in a variety of exploratory activities that include the articulation of collectives that do not fit with the traditional actors in science and technology, or in ways that problematize the established value systems involved in the production of knowledge and technologies –e.g. fostering the creation of open science, DIY design and commons-based p2p projects, citizen science and maker communities, feminist and environmentalist technoscience projects, and many other platforms seeking to create alternatives to public/private technoscientific arrangements.

Local committee (in alphabetical order): Nerea Calvillo, Miquel Domènech, Daniel López, Vincenzo Pavone, Carmen Romero-Bachiller, Israel Rodríguez Giralt, Tomás Sánchez Criado, Francisco Tirado.

Emerging science and technology practices show how public and private actors are being re-assembled along routes that do not follow once established divides: science and technology are increasingly produced by private not-for-profit actors, such as CSOs, patient organizations and new citizens' collectives, whilst traditional public institutions once entrusted with the mission of 'producing' science and technology for the common good, like universities and research centers, are being transformed into for-profit organizations subjected to productivity bonus, austerity measures and new public management accounting principles. These emerging and consolidating phenomena destabilise and re-signify existing public and private spaces, whilst generating new ones. In turn, new technoscientific communities and unexpected political mobilizations are ongoingly opening up, incessantly engendering other contested options, as well as forging routes to explore more democratic and hospitable futures in the times of care, housing, food, financial and environmental crisis.

Important Dates
2015, September 28: Deadline for track proposals
2016, February 1: Deadline for abstract submissions
2016, June 15: Early registrations deadline
2016, July 30: Closing of online registration

The joint 2016 4S/EASST conference in Barcelona will be an opportunity to share reflections, ideas, findings and projects on a variety of aspects characterizing these alternative ways to do science and technology: (a) such as the fact that, for instance, all of these transformations usually take place in blurred everyday spaces and not in those enclosed established spaces for science and technology development, such as laboratories or industrial R&D departments; (b) or, in a similar way, the fact that research and innovation processes are increasingly organised in networked, horizontal assemblages where the traditional hierarchies in science are put into question and where science and technology are being co-produced by different actors in different, sometimes antagonistic, ways; (c) and, finally, the fact that traditional boundaries between the public and the private are no longer confined to state and for-profit actors, care practices taking a preeminent presence in most of these everyday situations.

More info about the conference soon at: sts2016bcn.org

STS International Summer School at Plovdiv (STS_ISSP)

Plovdiv University "Paisii Hilendarski", Rozhen National Astronomical Observatory, Bulgaria
Laboratory for Social and Anthropological Research (LSAR), Tomsk State University, Russia

With the support of
European Association for the Study of Science and Technology (EASST)

"Science and Technology as Way of Life and Identification: Observing the Practices at Confined Research Stations and Large Technical Systems in High Mountains"

This is the first international edition of the STS Summer School, regularly held since year 2000 for Plovdiv University's B.A. sociology students specializing on 'Science, Technology and Innovation'.
STS International Summer School at Plovdiv (STS_ISSP) aims to introduce students to the modern science and technology as form of life and identification. It helps students to develop basic skills in applying STS knowledge to the study of research and engineering practices in particular scientific organizations.
The students will spend a week in the research community of the astronomers and supporting engineering staff at NAO Rozhen - the biggest astronomical site in South-Eastern Europe. They will be attached in small groups of two or three to particular researchers and will observe their daily work, taking interviews, analyzing documents and technical artifacts, and collecting photo and video data. Special attention will be paid to practical application and use of semiotics in the analysis of collected data.
During the stay part of the students will study also a high mountain dam in the region, taking interviews and observing of everyday life of technical staff at this large technical system.
In 2015 sixteen Bulgarian B.A. sociology students will take part in STS_ISSP, together with twelve anthropology students from Laboratory for Social and Anthropological Research Tomsk State University, Russia whose travel expenses were supported by the project "Man in a Changing World. Problems of Identity and Social Adaptation in History and at Present" (the RF Government grant No. 14.B25.31.0009).

Location
STS_ISSP will be held at the Rozhen National Astronomical Observatory, Bulgaria, from 22 of June to 1 July 2015.

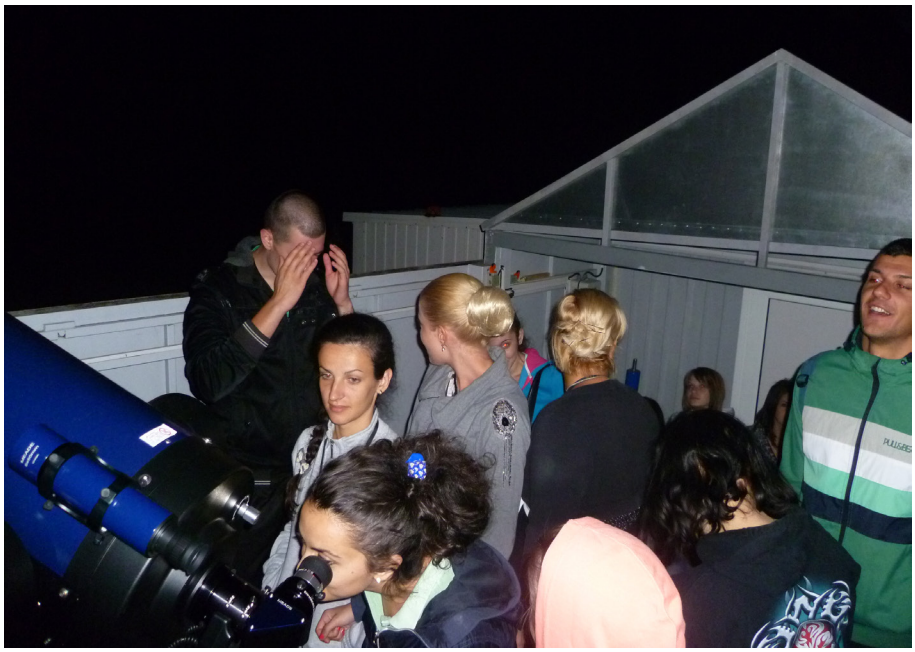
Subject Area
Anthropology of science and Sociology of large technical systems
Identities of scientists and engineers

Theoretical Framework
Actor-network theory (ANT), Laboratory Studies, Theories of Identity, Sociology of attachment, endurance and passion

Program
Structurally STS_ISSP consists of six parts:

- Introductory theoretical and methodological seminar on Anthropology of Science and Sociology of Large Technical Systems
- Seminar on methodology of data collection
- Fieldwork at the Rozhen National Astronomical Observatory and high mountain dam
- Assessment of the collected data and instructions how to prepare the research reports

- Data analysis and writing research reports (two months after field work)
- Presentation of research reports at competitively organized stu dent sessions (held in Plovdiv and Tomsk)



NAO Rozhen, July 2012. Students at small telescope

Additional outputs will be preparing documentary film about practice of astronomers and engineers and fieldwork itself of anthropologists and sociologists.

STS_ISSP Next Editions

EASST grant helped organizers to develop the now traditional STS Summer School for Plovdiv University sociology students into an international event.

After the World War II Bulgaria was one of most rapidly industrialized among the former communist countries and it managed to preserve most of its scientific and industrial base during the post-socialist period. It is our aim to make STS_ISSP regular, bringing each year STS students and researchers to study remarkable scientific and technology sites in Bulgaria – unique high mountain dams, and possibly other countries in South-Eastern Europe.

Fees

Accommodation, meals and travel expenses (for attending cultural events) will be covered by the STS-ISSP. Participants cover the travel costs to Plovdiv, Bulgaria by themselves. The participation fee is 240 euro paid upon arrival and registration in Plovdiv.

Best Projects Award - The best research reports will be published in volume.

Head of the Organization Committee
Dr. Ivan Tchalakov, Associate Professor
Department of Applied and Institutional Sociology, Plovdiv University

How to apply

Applicants should send a CV and a 500 words motivation letter till the end of April each year to sts_issp@uni-plovdiv.net.

The successful applicants will be informed until May 10. Those approved who need visa will receive letters of invitation.

Plovdiv University "Paisii Hilendarski",
Adress: Plovdiv 4000, „Tzar Assen" str. 24
тел: (359) (32) 261 491; факс: (359) (32) 261 433
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The Author Multiple: Reflections on a One Week Lorentz-Workshop on Authorship in Transition

Alex Rushforth, Sarah de Rijcke, Anne Beaulieu, Paul Wouters, Ruth Müller, Matt Burton, Saskia de Vries, Maarten Derksen, Patricia Faasse, Michele Garfinkel, Tjitske Holtrop, Bjorn Hammarfelt, Lynn Kamerlin, Vincent Larivière, Tara McPherson, Frank Miedema, Philippe Mongeon, Adèle Paul-Hus, David Pontille, Ed Simons, Susanne van Weelden, Joris van Zundert, Dorte Henriksen, Wolfgang Kaltenbrunner, Marlieke Kieboom, Lisette van Kalshoven

Summary

What is a scientific author? Today this question seems more urgent than ever, protruding into heated debates on social, epistemic, commercial, and ethical aspects of contemporary science. In February 2015 a workshop was held in Leiden, the Netherlands, bringing together participants from the worlds of academia, publishing, think tanks, research information systems, science policy, and activism, each with their own take and commitments on this important topic. The Authorship in Transition workshop was hosted by the Lorentz Center in Leiden, which formed an innovative backdrop in which a more bottom-up workshop format could thrive. Below we summarise some of the outcomes of the week, which we hope will inspire new collaborative ventures into the topic going forward.

What is a scientific author? What are the different practices for making-up this elusive figure, and how do these connect? Are current modes of enacting authorship still fit for purpose and how might we imagine and enact new forms?

What is understood as 'authorship' has varied over time and contexts yet is relevant across all fields of scholarship and science. This multiple figure is deeply interwoven with cognitive aspects of knowledge, such as creativity, originality, and invention, as well as with the institutional aspects of knowledge production, such as reward-systems, ownership and recognition. Authorship is also very much at the centre of ethical considerations in science and scholarship. Questions such as what is an appropriate contribution that warrants authorship, or how are authorship practices affected by increasing competition are of both practical and political importance. Moreover, authorship is linked to communication technologies and social networks: writing a scholarly letter for a print journal differs in important ways from authoring a submission on a Wikipedia page.

These manifold dimensions of authorship have rarely been brought together or mobilized to better understand and rethink authorship practices. With this in mind, in February 2015 a five-day workshop named *Authorship in Transition* was held in the city of Leiden, the Netherlands. Commissioned by the prestigious NIAS-Lorentz Program[1] and organised by Anne Beaulieu, Blaise Cronin, Frank Miedema, Sarah de Rijcke, and Paul Wouters, the event stimulated critical insights into authorship dynamics but also opened-up spaces for imagining new formations.

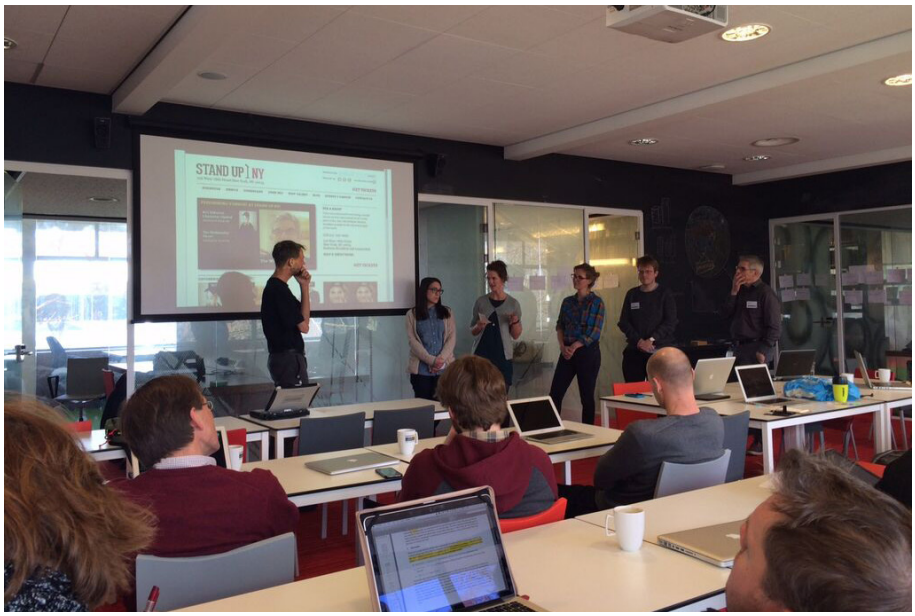
Many recent discussions about authorship have focused on two important issues: fraudulent authorship, and possible perverse effects of evaluative metrics. Without ignoring ethical and political matters, our workshop took a different starting point, considering the c*hanging conditions and practices* of authorship and the need to understand these in a grounded way. This requires posing some challenging questions, which touch the core of contemporary definitions of authorship and its practice. For example, to what extent does it still make sense to think about authors as autonomous individual subjects? Are more radical innovations in authorship practices thinkable and desirable? What are the implications for the reward and reputational system in science and scholarship? To what extent do we need new forms of quality control if scientific

[1] http://www.lorentzcenter.nl/lc/web/2015/690/info.php3?wsid=690&venue=Snellius

instruments are starting to play a more autonomous role in the creation of knowledge? What are the consequences for the organization of labour in research of highly distributed teams of authors (Beaulieu et al., 2012)? And what would the near future of scientific writing look like in a scenario analysis (Davidson & Goldberg, 2010)?

These are large, wide-ranging and challenging questions that justify a broad research program. Our workshop was intended as a first step in formulating such a program.

In appreciation of the richness and complexities of the topic, participants assembled from academia, but also other key players in the scholarly authorship process, such as editors, publishers, evaluators, representatives of university libraries, science policy advisors, research information system specialists, and non-academic authors (performance artists, media specialists).

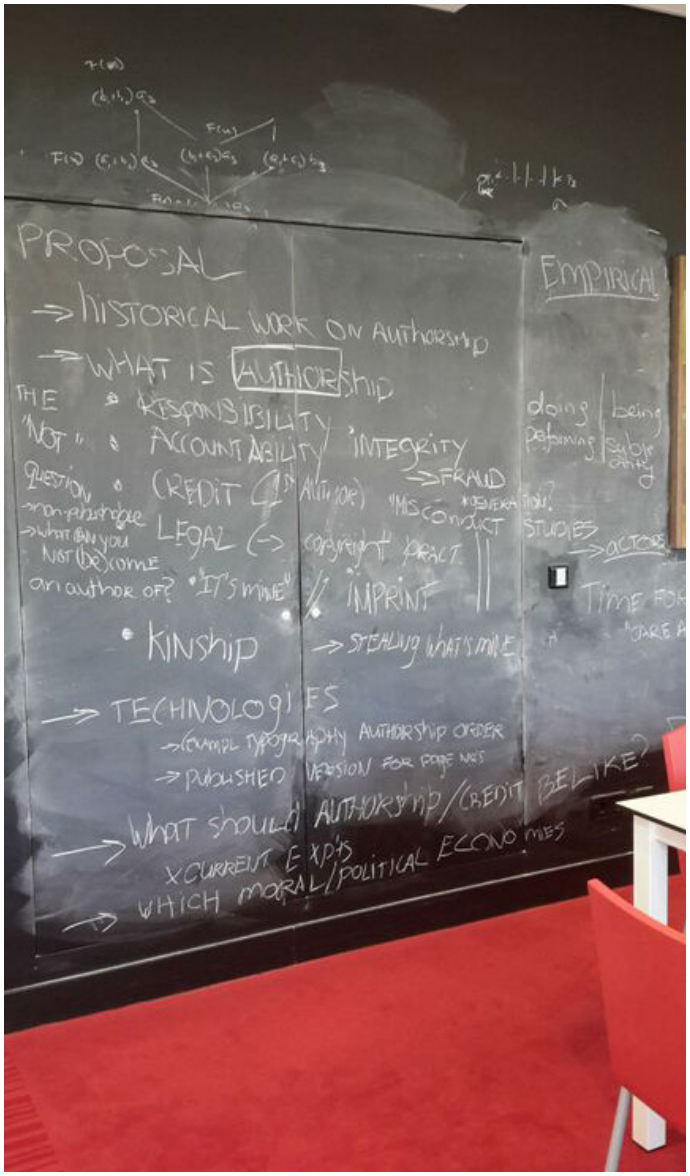


During the week, each day discussions were loosely organised around a particular dimension, so that interdisciplinary exchange could take place in a concerted way. These dimensions were: authorship as diverse practice, authorship as labour, authorship and reward structures, technological and material aspects of authorship, and politics and ethics of authorship. Besides sharing their expertise on the topic of authorship, workshop participants were also triggered to reflect on their own writing practices.

Work forms during the workshop consisted of:

- Presentations by experts from different fields
- Presentations by key players in the process of authorship (authors, but also editors, publishers, reviewers, evaluators)
- Explorations of the meaning of authorship through experimentation with different forms of authorship (in particular the Scalar workshop)
- Live performances, social media feeds, quizzes, surveys

The highlights of each day were summarized daily, to make the most of the cumulative effect of these discussions in the final session of the final day, and in the follow-up to the workshop. A key material participant in this respect was the venue itself: whilst allowing for traditional academic exchanges, the Lorenz Center's creative interior design features afforded a perfect setting for stimulating bottom-up thought spaces ('think pod' work spaces, walls to be written on, ample rooms to split-off into group work).



The event made visible a number of developments and problems circulating academic authorship in the present time. We heard throughout how audit explosions in universities and the measures and tools used to facilitate evaluation processes have performative effects in the shaping of research (cf. Rushforth & De Rijcke, 2015). This raised important political questions regarding how authorship is counted, and by extension, what forms of authorship count? *Scientometrics*, for example, performs authorship through counting names that have been archived onto specific digital databases. Vincent Larivière (University of Montreal) reminded us how this field offers a powerful descriptive tool through which to monitor shifts in authorship practices across fields of inquiry and regions over time. However enacting authorship through these

elaborate counting systems has performative effects in extending the reach and intensity of formal academic evaluation. The talk by sociologist David Pontille (Centre de Sociologie de l'innovation, Mines Paris Tech & CNRS) related how authorship emerges through technologies of attribution, including a number of artefacts for naming individual contributors and corporate entities as well (cf. Pontille, 2008). In contemporary big science biology and physics the complexity of tasks appears to be increasing and therefore so too the numbers of authors. The proliferation of so-called hyperauthorship in biomedicine (see the infamous 'fruit fly' paper recently reported by Nature[2]), provokes uncertainties in the attribution of credit, priority and authority, not to mention ethical issues of responsibility. Also drawing on anthropology of writing, Tjitske Holtrop (University of Amsterdam) recounted the instabilities in infrastructure and expertise which emerged in administrative report writing in the turbulent political and geographical context of the Dutch military's involvement in Afghanistan during the 2000s. Returning to academia, Ruth Müller (TU Munich) reported how the premium placed on first (and last) authorship berths in the institutional and epistemic reward systems of the life sciences was transforming social relations in labs, putting particularly strain on those occupying post-doc positions (cf. Müller, 2014). Maarten Derksen (University of Groningen) told of how recent high profile exposes of fraud and plagiarism have tended to implicate authorship systems – and their excessively tight coupling with individual scientific careers and rewards – in their explanations. Various developments in knowledge making, and limitations they expose in modern authorship techniques, have led certain actors to attempt solutions. Examples of collective responses to crises of credit and trust include attempts to create innovative authorship modes like 'contributorship', first launched in the nineties in biomedical sciences, and more recently crowdsourcing, which seek to accommodate new frontiers whilst also preserving some established norms and routines. Such efforts appear to generate quite specific authorship functions that hitherto are barely reported on, let alone understood. How ways of counting authorship effect labour, class, and gender relations in different epistemic and institutional contexts are also key issues at stake.

Questions of *which* new authorship practices can emerge are intimately related to questions of *how* they will do so: imagining and cultivating new and emergent forms will depend upon the practices and politics of infrastructure building. One session introduced participants with Scalar, an open-web based platform, which explicitly seeks to transform authorship in the humanities and social sciences. The result of collaborations between academics, web designers, and university presses, Scalar provides a flexible means for open publishing that provides quite distinct set of features and affordances than physical and digital book formats. The platform was developed by the Alliance for Visual Networking Culture (ANVC), led by Tara McPherson (University of Southern California), with support from the Andrew W. Mellon Foundation. In the spirit of spontaneity the workshop sought to cultivate, Matt Burton gave an off-the-cuff presentation on Ipython Notebook, an interactive authoring platform for combining rich text, media, code,

[2] http://www.nature.com/news/fruit-fly-paper-has-1-000-authors-1.17555

plots, and mathematics. As well as providing a practical demonstration of its interfaces, he brought into view path-dependencies surrounding scholarly infrastructure, such as the ubiquity of the PDF as a standard computer document through which 'authorship' gets circulated.

The format of the week placed great emphasis on group work, with participants each day splitting off into groups stimulating working on the production of new authorship interventions and platforms. These teams sought to imagine new ways in which authorship practices could be prised-open and done differently. For instance: one group produced the idea of *The Authorshop*, a web-based platform which makes available for free academic writing, thus circumventing academic journals and extortionate pay-walls. Initiatives like *The Authorshop* have potential to disrupt and improve the science system through ushering in better direction of public funds towards research, by calling on innovative quality control mechanisms to be developed, and by undermining the undue influence of indicators like the *Journal Impact Factor* in shaping scientific careers and evaluations.

The *Authorship in Transition* workshop enabled the authorship topic to trail off into multiple productive directions. The week has provided impetus for exploring further various branches of the discussions and findings, which we hope to translate into follow-up research projects, infrastructure-building initiatives and benchmarks for policy-makers and evaluators. One of the challenges will be to tease apart analytical dimensions of authorship, as it became clear throughout the week that the notion is so often entwined with reward, property, persona and voice - elements that matter deeply to scholars and researchers. The workshop provided a rich set of insights for further analysing contemporary authorship practices and stimulating opportunities to pursue modest interventions to re-shape this elusive but vital object.

We would like to express our gratitude to the Lorentz Centre for their generous funding of the workshop, and to the Netherlands Graduate Research School of Science, Technology and Modern Culture (WTMC), CWTS at Leiden University, the University Medical Centre in Utrecht, Open Access Publishing Services (OPuS), and the Rathenau Instituut for co-sponsoring the event.

References

Beaulieu, A., De Rijcke, S. & Van Heur, B. (2012). Authority and Expertise in New Sites of Knowledge Production. In: Wouters, P.F., Beaulieu, A., Scharnhorst, A. & Wyatt, S. (eds.). Virtual Knowledge. Experimenting in the Humanities and Social Sciences. MIT Press.

Digital Age. Cambridge, Massachusetts: The MIT Press.

Müller, R. (2014). Racing for What? Anticipation and Acceleration in the Work and Career Practices of Academic Life Science Postdocs. Forum: Qualitative Social Research, 15(3), Art. 15.

Pontille, D. (2008). Écologies de la signature en science. Sociétés & Représentations, (25), 137-156.

Rushforth, A.D. & De Rijcke, S. (2015). Accounting for impact? The Journal Impact Factor and the making of biomedical research in the Netherlands. Minerva, published online 31 May 2015, doi 10.1007/s11024-015-9274-5.

Interdisciplinarity and Comparison: A Workshop on Cultures of Video Games Concerns

Alison Marlin

Summary

Interdisciplinarity is ever present in academia, but difficult to do well. This report reflects on a workshop that combined two different disciplines, STS and Games Studies, which are themselves interdisciplinary, meaning that participants came from a wide variety of disciplinary backgrounds, as well as from outside of academia. The workshop aimed to examine some of the ways in which concerns about video games are enacted and sustained in particular settings, and how these concerns help to enact other objects and relations. The challenge of generatively working together varied knowledge traditions in order to engage in a shared project was met through a careful workshop structure and a double comparison, between and across two countries and four social domains.

Interdisciplinarity is highly valued in present-day academia. It is also central to STS, with scholars in the field commonly drawing on, being located in, and presenting their results to, a variety of different disciplinary settings. But even though it sometimes seems to be everywhere, interdisciplinarity is a difficult thing to do well. It is not easy to work together different knowledge traditions, assumptions about the world, and ideas about what counts as a valid question and a reasonable answer, in a way that is generative. It is even more difficult to do so without losing many of the interesting differences that made a mix between multiple disciplines seem so promising in the first place. This piece reflects on a workshop that explicitly sought to manage these challenges through a double comparison and a careful workshop structure.

The workshop 'Cultures of Video Game Concerns' was held at the Ruhr Universität, in Bochum, Germany, over two days in January 2015. It was organised by Estrid Sørenson, of the Mercator Research group at Ruhr Universität, and Espen Aarseth, of the Centre for Computer Games Research at ITU, Copenhagen. Part of the impetus for the workshop was to bring together two disciplines that have had little to do with each other but would seem to have a number of common interests, STS and Games Studies. Both of these areas are interdisciplinary, and the workshop hosted people from a large number of academic settings, including social psychology, sociology, media studies, and education, as well as from the games industry and regulators. The number of participants was kept small, at about thirty people, in order to enable the whole group to engage in discussion. Participants came primarily from Germany and Denmark, but also from Norway, the UK, Australia and Spain.

C64, Jump-'n'-Run ‚Bubble Bobble', 1986. Credit, Sandra Plontke.

The topic of the workshop was not the oft-repeated question of whether and to what extent video games cause harm to children, but rather the ways in which such facts and concerns around video games arise and circulate. Asking about how objects are enacted and sustained is a familiar move to STS scholars, but less familiar to workshop participants who came from other areas. The careful structure of the workshop was intended to facilitate this move, as well as to make space for the different knowledge practices of the participants. In particular, a double comparison was mobilised in order to destabilise the 'facts' of the matter and open up questions of how concerns come into being and which relationships and boundaries such concerns help to enact, and which they prevent.

The first comparison was between two countries; Denmark, often seen as the most liberal country in Europe when it comes to regulating video games, and Germany, often seen as the strictest. In Denmark, there is no specific video game regulator, although games carry age ratings from PEGI (the European industry-led classification body); in contrast Germany funds a regulator whose age classification of video games are enforceable at point of purchase. The debate about whether violence in video games causes aggression or other forms of harm in children is more present in Germany, in part stemming from the implication of video game playing in school shootings in 2002, 2006 and 2009, and a constitutional imperative to protect children from anything that may cause them harm. In Denmark, concerns around video games seem to centre more on issues of problem gaming (playing too much), on whether parents and teachers should try to learn more about games so that they can understand childrens' culture (of which games are a part), and on how these games fit into broader life.

The second comparison was between four social domains: regulation and prevention services, the game industry, children's and family culture, and scientific research. While this comparison was envisaged as parts of the social in and through which concerns about video games circulate, it served also to collect workshop participants into groupings other than their disciplines. The workshop structure encouraged us to think about ourselves as attending primarily to one of these four areas, such that in discussion and when dividing into groups we were ordered by the objects of our attention rather than as academics and industry, or psychologists and sociologists.

Becoming sensitised to this double comparison started before the workshop, with the organisers circulating a series of questions to participants about how concerns about video games circulate in their country and social domain. The lengthy and well-considered answers were collated (anonymously) into a Booklet of Utterances, which was circulated prior to the workshop, and made fascinating reading on the flight over.

In addition to mobilising these two comparisons and generating and circulating discussion prior to the workshop, the careful attention to a generative practice of interdisciplinarity was expressed in the structure

Alison Marlin is a PhD student at the University of Melbourne, where she studies family intimacies that incorporate technologies such as Skype, Facebook and text messaging, as multiple and material-semiotic. She has been a research intern at the Socio-Digital Systems group, Microsoft Research, Cambridge, and a visiting scholar at the Technology in Practice group, IT University of Copenhagen.
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of the workshop. There were only a few presentations, and these were intended to speak directly to the workshop topic and provide food for discussion, rather than providing an opportunity to report on the presenters' latest research. The time given over to discussion much outweighed that for presentations. Despite the small number of presentations, I cannot cover them all here, but will give a brief mention to a few that I found particularly interesting and which speak to the heterogeneity of the workshop.

Anne Mette Thorhauge is Chair of the Danish Media Council for Children and Young People and a lecturer at the University of Copenhagen. The Media Council classifies films, but not video games, a task that they view as too expensive and (with parallel importation) impractical. Anne Mette spoke of her concerns about PEGI's classification system, which she saw as embedding cultural and normative standpoints that are not appropriate in Denmark, and its lack of concern for children's rights to communication, freedom from control, and to seek information. The Media Council works to promote Danish cultural values at PEGI, and also to provide information to parents on concerns such as problem gaming, data protection, and encouraging children to develop creative play cultures around games.

Jan Schank has researched game regulation by the German regulatory body, the USK. Jan talked about how the figure of 'the player' is constituted in the written descriptions of video games that are produced by the regulator as part of their rulings on age classification. This figure of the player in the text shifts from being inside the game, to sitting on the couch, to an avatar, having a different relation to the game, the person playing it, and to potential harm in each place. Jan argued that this carefully contrived shifting of the player figure serves to justify why children in some age ranges (but not others) must be protected from a game.

Tobias Rothmund presented the scientific (mostly psychology) research that he argued provided sufficient evidence to know that violence in video games increases some forms of aggression in child players, ie. causes harm. He described his and his colleagues' frustration that this evidence is often not accepted and acted upon by regulators and industry, as well as some of the reasons why gamers themselves may not be receptive to this evidence. The objects that Tobias worked with were notably different to those attended to by most of the other presenters; objects like evidence, experiment, measurement, scientific knowledge, 'aggressive affect' and 'aggressive cognition', and even those which shared a name with objects that circulated more widely at the workshop, such as 'harm' and 'children'.

Dorte Marie Søndegaard talked about her interviews and observation of young people aged 8-14 years in Denmark, as part of a project investigating bullying. She was interested in the ways that video games become relevant to children, and how they entangle everyday lives and social interaction. Dorte Marie made use of Barad (2007) and Butler (2004) to show the fluidity of children's talk about violence, in which

violence from all sorts of settings (in games and movies, on the news, at school) are connected. Dorte Marie suggested that violence seems to be a distributed phenomenon in children's lives, and that it may be more useful to talk about it as flowing around rather than passing from a game to a child in a causal or unidirectional relationship.

Simon Løvind, a Games Commissioning Editor at the Danish Film Institute, talked about games as a cultural artefact, and how he assesses their cultural value in order to decide which projects to support. He explained that they look for four types of cultural value in assessing game proposals: aesthetic value; social value (to formation and development of identity); experience value (engagement, experience based learning); and cognitive value (problem solving, training cognitive functions). Simon told us that the Danish Film Institute's funding agreement with the parliament states that video games are a natural part of children, youth and adults' lives, and that there was not much concern about violence or immorality. Simon also talked about the characteristics of the Danish film industry, as well as research that has been done on cultural habits in Denmark, including who plays games, how often, and what sorts of games they play.

Playstation, Jump-`n`-Run ‚Little Big Planet 3', 2014. Credit, Sandra Plontke.

These presentations each focused on particular places and times that the speaker was familiar with, making these available to the group so that the ways in which concerns arise and circulate could be discussed. Such times and places were immediately compared to other specific times and places, as well as used as examples to fuel the more general comparisons that were built into the workshop structure, between and across nations and social domains. These comparisons made it very clear that concerns about video games are situated, that they need not be this way; comparison has long been used in STS in order to support just such a conclusion. The comparisons also prompted discussion about what it is to 'know about' video games, who should do this knowing, and what sort of an object a game is. The act of comparison kept particular

differences present and available for discussion, albeit inevitably de-emphasising others. At the same time, however, these comparisons created connections between participants, as we were all engaged in a shared and explicitly understood project. The comparisons connected us because we were making similar categorical separations.

A third, less explicit comparison, that inherent in interdisciplinarity, prompted us to reflect on what sort of knowledge traditions we each participate in. This was only intensified by the presence of participants from outside of the academic sphere. To be 'inter' is to be among or between, and interdisciplinarity means putting more than one discipline, more than one way of knowing, alongside each other. The contrast between knowledge practices, between the sorts of questions that we ask and the objects that we work with, was ever present. This contrast served to destabilise our conceptions of what and how we know, just as the double comparison between nations and social domains served to destabilise our knowledge about concerns around video games. In this workshop, comparison served to make connections, keep some differences present and also to foster the very STS project of examining our assumption about knowledge and the world.

References

Barad K (2007) Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Durham, NC: Duke University Press.

Butler J (2004) Undoing gender. New York: Routledge.

Nauroth P, Gollwitzer M, Bender J & Rothmund T (2014) Gamers against science: The case of the violent video games debate. European Journal of Social Psychology 44(2): 104-116.

Søndergaard DM (2013) Virtual materiality, potentiality and subjectivity: how do we conceptualize real-virtual interaction embodied and enacted in computer gaming, imagery and night dreams? Subjectivity 6(1): 55-78.

Sørenson E (2013) Violent Computer Games in the German Press. New Media & Society 15(6): 963-981.

Verran H (2001) Science and an African Logic. Chicago: University of Chicago Press.

Caring for Participation in STS: From Empowered Patients to Ghostbusters

Karen Dam Nielsen

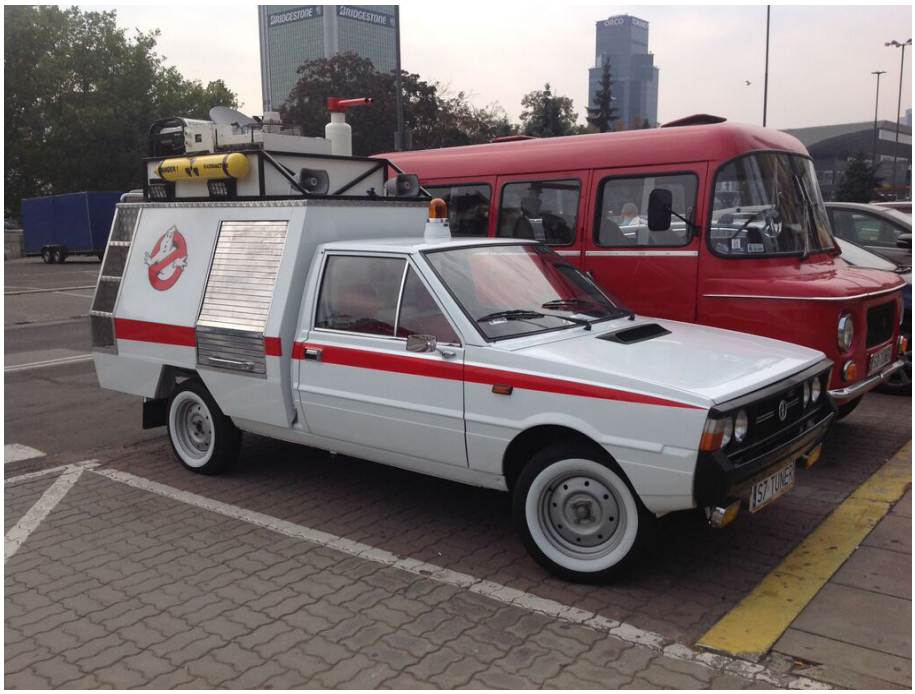

Image: Gonzalo Correa, Warsaw (in front of the Palace of Culture and Science), 2015 (one day after the EASST conference)

Summary

In this short report from the EASST Conference 2014, I sketch a handful of presentations that engaged with 'participation'. Two tracks, in particular, offered interesting analyses and conceptual experiments. The first track contained primarily empirically driven studies of 'technologies of participation' in (health) care and provided illustrations of the conceptual ambiguities and empirical implications that continue to make participation a problematic, yet highly relevant and intriguing STS-topic. The second track featured presentations that more explicitly contributed new analytical tools for studying participation - primarily aimed at studies of public participation in deliberative processes, yet of potential relevance for studies of seemingly more 'private'/less 'political' forms of participation.

STS researchers have a long tradition for caring for participation – advocating public participation in science and innovation (e.g. Irwin 2006), exploring participation as it unfolds in practice (e.g. Callon & Raberharisoa 2008), and in some instances actively taking part in instigating participation (e.g. van de Bovenkamp & Zuiderent-Jerak 2013). The EASST Conference 2014 was no exception with several tracks and presentations addressing issues of participation in different arenas. The wide span of issues that presentations addressed illustrated the richness of how and in what we as STS researchers participate when we engage with participation as a research object. Yet, it also highlighted a need for further discussion of STS's engagement with participation. How do we define participation? What are the effects of different conceptualizations and, not least, valuations of participation – empirically, analytically and, ultimately, politically? With the following tour through EASST talks about participation, I wish to underline the relevance of attending to these questions and, in general, of continuing to 'care for participation' in STS.

Technologies of participation in care practices

For the track "Technologies of care and participation: Shifting the distribution of expertise and responsibilities", conveners Hilde Thygesen and Ingunn Moser had invited speakers to address the role of (health) care technologies in creating a so-called 'participatory society'. In particular, they called for discussions of the "shifts in the distribution

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of expertise, values and responsibilities in the field of health and care" that are associated with a move towards a participatory society. As Thygesen and Moser pointed out in their call: "Being „active" and „participating" invokes a set of democratic as well as professional values: of empowerment, self-help/self-management, duties and individual responsibility. However, a number of debates indicate that there are some battles to fight."

'Battles to fight' is an interesting choice of words as it echoes the traditionally strong political commitment to participation in STS. Moreover, Thygesen and Moser's call points to the multiple and at times conflicting values that participation is ascribed in different empirical contexts as well as in academic discourses. One 'battle' for STS could therefore be to critically attend to these different normative framings of participation and what they produce empirically and analytically. The majority of the presentations in the track did not explicitly deal with 'participation', but with often-related terms such as 'empowerment' (e.g. Lisa Lindén), 'self-management' (e.g. Nete Schwennesen) and 'Patient 2.0' (e.g. Alberto Zanutto et al; Søsser Brodersen & Hanne Lindegaard). The track itself thereby came to illustrate the elasticity of the concept 'participation' – or, put more critically, how it often comes to serve as somewhat of a 'ragbag'. Some presentations did, however, address participation head-on – primarily by unpacking different empirical framings of participation and their practical implications and, to a lesser extend, by attending to the analytical effects of different (STS) conceptualizations of participation.

Mare Knibbe (with Klasien Horstman) shared their insights from a Dutch mental health promotion project that applied mixed media to reach community members of low socioeconomic status. Embedded in a local policy discourse of "together we can do it ourselves", the project could be seen as an example of what is framed as a move "from welfare society to participatory society" in the Netherlands and elsewhere. Knibbe showed how the local participatory discourse materialized in two very different kinds of participation for community members in the specific project: from being part of the making of an intervention (six short films about challenges in everyday life) to more indirectly being 'informed and activated to take part' in solving these by watching the films. In the latter case, what community members were to participate in – that is, the 'relational aspect' of participation - was rather unclear. Maybe 'empowerment' would be a more suitable term than participation for the kind of agency that was sought instigated as a result of the project.

Also referring to a Dutch context, Susan van Hees (with Klasien Horstman, Maria Jansen, and Dirk Ruwaard) showed how 'empowerment' is a cornerstone in creating so-called participatory societies and, as such, perhaps something that precedes participation. Yet, we quickly get lost in a 'the chicken and the egg'-discussion here since empowered citizens can be perceived as both a prerequisite and a result of a 'participatory society'. Van Hees captured this empirical and conceptual entanglement of

empowerment and participation by speaking of "the soft technologies" of the participatory society that serve to "activate to participation", with participation translating into a kind of citizenship that entails responsibilities rather than entitlements. Van Hees specifically showed how professionals in elderly care use 'soft technologies' such as kitchen-table conversations and shared registration systems to facilitate a specific version of 'empowered citizenship'. In this process, older citizens 'participate' in a negotiation of how to handle everyday life – a negotiation that, put bluntly, aim to convince them to take on certain responsibilities and care for themselves, that is, to be active participants in society by being active in their own lives in specific ways.

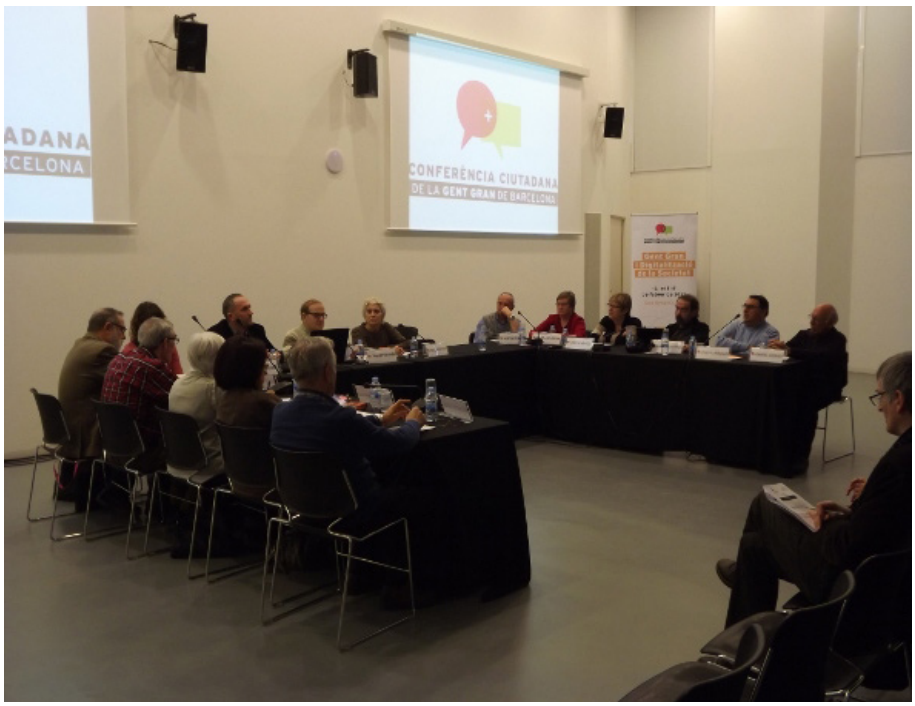
'Convincing-through-dialogue' as a 'soft technology' of the participatory society was also the key figure of Laura Navne's presentation (with Mette Nordahl Svendsen). Navne focused on how parents and health professionals at a Danish neonatal care unit reach consensus about when and why to continue or withdraw life-sustaining treatment from infants. She showed how decision-making processes regarding specific infants were guided by an overall strong "ethos of participation and consensus" typical for the Danish welfare society. In practice, decision-making involved a process of on- and off-the-scene negotiation of different concerns (the infant, the parents, the clinic, and other members/the collective of society) in which the parents' participation most of all seemed to be treated as a process of being 'convinced to reach consensus'. On this background, Navne directed attention to the way practices of participation tend to privilege 'agreeing participants' and leave little room for objection. That is, non-adherence to professionals' recommendations may be perceived as 'bad participation' – or even as 'non-participation'.

Zooming in on the politics of participation: conceptual experiments

With presentations such as the three I mention above, the track on technologies of care and participation interestingly opened up practices and discourses of participation in different care and welfare arenas, illustrating how participation as a political trope is highly amorphous and often problematic. That is, it carries with it a number of different and often-implicit notions of good citizenship and, in practice (when embedded in welfare policies, technologies, and practices) constitutes a kind of 'soft power'. In our own presentation in the track, Henriette Langstrup and I proposed conceptualizing participatory technologies (for example e-health) as posing 'soft structures' to their users. Drawing on Michel de Certeau (1984), we further proposed to understand use practices – or practices of participation more broadly – as participatory 'tactics', that is, users' creative 'making-do' with arrangements that are given to them (pp.29-30). With this conceptualization, we aimed to bring out the political nature of devices aimed at instigating participation and, importantly, the political nature of the use of these devices, also when they are designed to support seemingly 'private' or 'individual' projects.

Our attention to participation as a political 'norm and form' which is increasingly linked to technological innovation was inspired by Noortje Marres (2012) and her work on material participation in environmental matters. And we were not the only ones to find inspiration in Marres' call for STS to take a renewed look at the politics of different participatory technologies, which STS itself has helped give shape to and continues to promote, especially in the case of public participation in science and innovation. The track "Non-concerns about science and technology and within STS" hosted several presentations on pubic participation with some of these also offering interesting analytics.

In an analysis of citizen panel deliberations about older people and ICT in Spain, Juan Carlos Aceros (with Miquel Domenech) zoomed in on how opinions are 'refined' through a process of making 'illegitimate', private matters publically relevant. Whenever panel participants would present an argument in a 'too personal' format, panel facilitators (and other participants) would intervene and either quickly rule out these arguments as relevant or help translate them into a relevant format. Speaking on different "engagement formats", Aceros drew on Thévenot (2007) and further conceptualized the process of shaping formats as a matter of making so-called personal opinions and stories 'scalable' and 'exportable'. This process may be perceived as oppressive and even humiliating; yet, it also produces representation and creates public opinion. The questions is, however and as Aceros pointed out, if we can create and promote participatory devices that are open to personal matters and formats. Aceros thereby also seemed to suggest a combined analytical and practical/interventionist approach to participation in STS that seeks to reconfigure the politics of participation and participatory devices in a way that allows for and acknowledges multiple forms of engagement.



A consensus conference in Catalonia. Photo courtesy of the Barcelona Science and Technology Studies Group (STS-b).

Another, and highly entertaining, conceptual contribution that highlighted the politics of technologies of public participation came from Guillem Palà and Gonzalo Correa. Drawing on STS work on 'absences' (e.g. Meyer 2012), Palà and Correa set out to conceptually open up the conspicuous paradox of deliberative processes; that is, the simultaneous affirmation and denial of the figure of representation. In deliberative processes, participatory devices, such as citizen panels, serve to 'capture' those who are absent and make them somehow present. Although seemingly absent, 'non-participants' do important work in securing the democratic legitimacy of deliberative processes. Palà and Correa went on to propose an analytics to grasp the dynamic relation between presence and absence and the devices that are used to handle this relation. Adopting the terminology of the movie "Ghostbusters", we might think of participatory devices as 'traps' and 'containment units' that serve to capture non-participants who we can also term 'ghosts'. Facilitators of participation may then be understood as 'ghostbusters'. All these actors are part of the infrastructure of participation – what Palà and Correa also called the 'plasma' of participation; that is, the formless matter that shape participation. In this wobbly infrastructure, so-called 'non-participation' plays an equally important role as direct or visible participation and is thus not something we can place 'outside' the realm of or in opposition to participation, democracy, politics etc.

Concluding remarks

Judging from the range of presentations on participation at EASST 2014, STS scholars certainly continues to care for and find 'battles to fight' in relation to participation, first of all empirically, but also conceptually as STS continues to search for analytics that can help qualify and nuance the all-inclusive term and political trope that participation is so often used as. I believe that one important task traverses empirical and conceptual contributions: to pay attention to the normative and political projects we as researchers tap into and contribute to when we study, conceptualize and, at times, facilitate participation. We should strive to: clarify what we mean by participation and how we understand it in relation to other terms such as empowerment; make visible the values we ascribe to participation; and, at the same time, be open to recognize and revisit practices and devices that may at first glance fall outside our own or others' assumptions about 'real' participation. Some of the analytics referred to above seem to have the potential for helping us do so. Importantly, all empirical cases and analytics that I have here referred to deal with what we could call 'invited participation' (Wehling 2012). Other presentations also dealt with 'uninvited participation' – that is, more activist and bottom-up forms of participation. It would be interesting to inquire into how the presented analytics would work when studying these forms of participation.

References

Callon, M. & V. Rabehariosa (2008) 'The Growing Engagement of Emergent Concerned Groups in Political and Economic Life', Science, Technology & Human Values 33(2): 230–261

de Certeau, M. (1984) 'The Practice of Everyday Life' (Berkeley: University of California Press).

Irwin, A. (2006) 'The Politics of Talk Coming to Terms with the 'New' Scientific Governance', Social studies of science 36(2): 299–320.

Marres, N. (2012) 'Material Participation: Technology, the Environment and Everyday Publics' (Basingstoke: Palgrave Macmillan).

Meyer, M. (2012) 'Placing and tracing absence: A material culture of the immaterial', Journal of Material Culture 17(1): 103-110.

Thévenot, L. (2007) 'The plurality of cognitive formats and engagements moving between the familiar and the public', European journal of social theory 10(3): 409-423.

van de Bovenkamp, H.M. & T. Zuiderent-Jerak (2013) 'An Empirical Study of patient Participation in Guideline Development: Exploring the Potential for Articulating Patient Knowledge in Evidence-Based Epistemic Settings', Health Expectations (in press).

Wehling, P. (2012) 'From Invited to Uninvited Participation (and Back?): Rethinking Civil Society Engagement in Technology Assessment and Development', Poiesis & Praxis : International Journal of Ethics of Science and Technology Assessment 9(1–2): 43–60.

Quantifying the Body and Health: Adding to the Buzz?

Michael Penkler

Summary

Questions of measuring and quantifying the body and health are currently very popular research topics in STS. In this short reflection, I engage in discussing the ontological politics of STS engagements with hyped topics such as the quantified self. I argue of the importance of reflecting in how far we ourselves as researchers add to the buzz, and to be conscious about the affinities of our own research apparati to the topics we study.

Questions of measuring and quantifying the body and health are currently very popular research topics in science and technology studies (STS) and beyond. In last year's EASST conference, I participated in the panel "Measuring health and illness: Quantification and changing practices of health, illness, and solidarity", convened by Rathenau Institute's Stans van Egmond and André Krom. It was the most recent of a whole series of panels on the quantification of health, self-tracking, and similar issues in past years' major STS conferences. Comprising 16 papers in four sessions, it was also one of the largest streams in Torun.

So what's all the buzz about measuring and quantifying the body and health? Why is it such a hugely popular research topic in STS? And what might be the dangers of focusing as a research field on flashy and trendy topics? While I think that STS engagements with this research topic have produced highly relevant studies, I want to reflect on the "ontological politics" (Law, 2002; Mol, 1999) of our own research in this short piece. Don't get me wrong: I heard some very interesting presentations, had great discussions, and presented myself in last year's panel. But STS has taught us that it is important to be reflexive about why we study what we study, and I think it is worthwhile to think about what the consequences and performativities are of some research topics appearing to be more "sexy" than others.

In a recent article in Public Understanding of Science, Bernadette Bensaude Vincent (2014) highlighted the "politics of buzzwords" in science and science policy. She argued that buzzwords, such as "public engagement in science", are usually "shallow linguistic units deprived of substantial meanings" (Bensaude Vincent, 2014, p. 250). But this lack of substance is not a weakness, but the very feature that makes buzzwords so powerful in setting agendas: it allows to rally a heterogeneous assemblage of actors with diverging interests around what is perceived as a common cause, thereby "creat(ing) unstable collectives through noise" (Bensaude Vincent, 2014, p. 238). They describe less than they perform, helping a specific future to come into being.

The "quantified self," "self-tracking," "crowdsourcing," and other terms connected to novel technologies for measuring and analyzing bodily functions and behavioral aspects connected to health are certainly buzzwords in the way Bensaude Vincent conceptualizes the term. They have generated a huge hype, although what exactly is comprised by these terms often remains unclear and vague. Different actors have rallied around these terms and technologies, given them diverging meanings. For personal users, measurement tools embedded for example in mobile apps hold the promise of regaining control over one's data and life. For health policy makers, they raise hopes of changing health behaviors.

For medical researchers, they promise novel ways of harnessing widespread and pervasive medical data. For medical and IT companies, they signify the hope of the generation of novel markets.

And for STS researchers? Well, certainly many of us have joined in the buzz created around these technologies. In a research field that still defines itself as "new" and "interdisciplinary," even after 30+ years, it is perhaps little surprise that researchers are drawn to the seemingly novel and revolutionary. But if we take Bensaude Vincent's argument about the performativity of buzz seriously, we might reconsider what we are really studying, and what the performativity of our own engagement is.

Take the so-called "quantified self" as an example. Having emerged as a movement dedicated to self-improvement through constant digitally enhanced self-surveillance in Northern California's Bay Area, it perhaps comprises a couple of thousands members worldwide. And yet, it has sparkled the imaginations of numerous journalists, app developers, and social science scholars alike. Who of us has not seen an academic presentation focusing on some new self-tracking gadget – say, a cup that automatically measures and classifies one's liquid intake? And wondered if anyone actually uses these kinds of things?

My point is that, perhaps, in focusing on such flashy examples, we perhaps less reflect on technological buzzes than add to them, being part of the "unstable collectives" they form. And thereby re-perform and re-produce the revolutionary claims about the transformative capacity of self-tracking techniques, brought forward by a fairly small group of mostly white middle-class males in Northern Atlantic urban centers. Yes, sure, millions around the globe use self-tracking apps like Runtastic. But recreational runners have for a long time kept track of distances and times for training purposes. Do new tools to do this digitally really bring about substantial changes in these long-established practices? I believe that this is an empirical question, perhaps somewhat obscured by the revolutionary claims that circulate in this novel socio-technical domain.

Concerns about the performativity of our own engagements with "new" technologies can go beyond how we are part of re-producing the hype. For example, we might want to reflect on what kinds of conceptual apparati we bring to bear on these socio-technical phenomena. Self-tracking devices and discourses on the quantified self lend themselves easily to an established genre of scholarly critique: They appear to be almost ideal typical examples of Foucauldian "technologies of the self" that people engage in to self-improve in a neoliberal biopolitical context that increasingly relegates the disciplining of bodies to individuals themselves (Foucault, 1988; Rose, 1996). While Foucauldian inspired accounts of self-tracking and -quantifying practices usually appear to be critical about them, at a closer glance there are some astonishing affinities between the quantified self movement's ideology and the concepts of Foucauldian governmentality studies. Governmentality studies stress that the self is not ontologically prior, but produced in practices

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and through "technologies of the self." The quantified self movement, on the other hand, also views the self as project to be worked on, open for self-improvement. Both governemtality studies and quantified self movement thus stress the malleability and the fluidity of the self.

What are we to do of such affinities between our theories and the realities they describe? How is, perhaps, the one implicated in the performance of the other? That is, perhaps, that our own theories, as critically as they may be in style of late capitalist technosocieties, might be closer related to contemporary hegemonic cultural forms than what we might regard as comfortable.

Be that as it may be, I think that it is important to be reflective about our own conceptual apparati and their "ontological politics" in a given context. Of course, such work in regard to quantifying and measuring bodies is already happening in STS, and it will be exciting to watch and witness this in upcoming conferences.

A last word on the form of the "measuring health and illness" panel. Stans and André asked each of the presenters to prepare a comment on one of the other's paper. I think that this was a great idea. Because of structural restraints, the time given to individual presentations at large conferences tends to be unsatisfactory low. What can you present in 12 minutes? As a consequence, discussions also tend to be not only short, but also often superficial – something that can be frustrating. Having assigned commentators helps to ensure that you get at least some substantial feedback on your paper. That's great! I hope to see more of this in upcoming EASST conferences. Perhaps we could also collectively experiment with different ways of how this could be done.

References

Bensaude Vincent, B. (2014). The politics of buzzwords at the interface, of technoscience, market and society: The case of 'public engagement in science', Public Understanding of Science 23(3) 238-253.

Foucault, M. (1988). Technologies of the self. In L. H. Martin, H. Gutman, & P. H. Hutton (Eds.), Technologies of the Self. A Seminar with Michel Foucault (pp. 16-49). Amherst: University of Massachusetts Press.

Law, J. (2002). Aircraft Stories. Decentering the Object in Technoscience. Durham, NC: Duke University Press.

Mol, A. (1999). Ontological Politics. A Word and Some Questions. In J. Law & J. Hassard (Eds.), Actor Network Theory and After (Vol. 47, pp. 74-89): Blackwell Publishing Ltd.

Rose, N. (1996). Identity, Genealogy, History. In S. Hall & P. du Gay (Eds.), Questions of Cultural Identity (pp. 128-150). London: Sage.

Household Energy Consumption. Reflections from an EASST 2014 Panel

Luis Junqueira

Summary

This text presents some reflections on a small group of presentations focusing on domestic energy consumption given during the 'Sociotechnical asymmetries in energy issues' track at the last EASST conference,. It is my understanding that there is an important role for STS to play in this issue, as the analytic frameworks developed within the discipline – practice theory and actor-network-theory - challenge the dominant societal understanding of energy consumption and thus may contribute to shift the discussion towards a more inclusive design of technology and public policy.

Contemporary energy transitions is a particular urgent issue, heavily discussed in the media and recently defined by the EU as one of six major societal challenges under the new Europe 2020 framework. It is an issue that permeates society at multiple levels, from energy production and distribution, to industrial processes, transportation, and domestic consumption. As such, energy consumption isn't the only aspect to be tackled in the path to a more sustainable society, but it is one to which STS can give a valuable contribution.

Between 2012 and 2014, I collaborated in a project on public controversies about large-scale implementation of renewable energy technologies in Portugal, where I was responsible for a case study of controversies concerning the local impact of a 46MW Photovoltaic plant in a small municipality in the south of Portugal. Soon after starting, I found out that the construction of the plant had been supported by a Town Hall communication campaign that had an important effect in shifting local perceptions on energy consumption and the use of solar energy micro generation. Seeing the small city's rooftops populated by solar panels and the interaction with the population was more than enough for me to develop some curiosity on issues related to energy at the household level.

As a PhD candidate in sociology studying the development of a research and innovation community on renewable energies, attending the EASST conference for the first time offered me the opportunity to significantly expand my perspective on my own work. I was particularly interested in the Sociotechnical asymmetries in energy issues track, and especially with one session dealing with domestic energy consumption both from the technology designer and user perspectives. I could not only learn from current research projects presented by scholars focusing on similar issues in different national contexts, but also gain awareness of new topics related to energy in Europe.

Over the last decade household energy has become an increasingly important topic in STS, especially through the revival of practice theory and its rejection of the economics/psychology informed individualistic understanding of energy consumption and other sustainable behaviour that is prevalent in public policy (Shove, 2003; Spaargaren, 2011). Practice theory proposes a framework where energy consumption is not the product of individual behaviour but instead of collectively structured practices ingrained in individuals by continued exposure to technology and their social environment (Wilhite 2008).

Remarkably, the presentations in this session drew more frequently from an Actor-Network-Theory. I am quite familiar with the application

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of ANT in processes of scientific knowledge production and more high-tech oriented innovation, where lay people/users' input is usually less of a concern. Hence it was especially interesting to learn about how STS scholars are deploying ANT in a case where the technology intermingles with everyday life activities. Meiken Hansen's presentation - Smart grid, household consumers and asymmetries: Energy visualization and scripting of technology – was based on a two-year project that gave users access to visualization technologies for domestic energy consumption and production. She highlighted the desire of users to have control over these technologies and the extent to which change in consumption patterns was related to their ability to interpret technology's interface. In her presentation - Social networks and energy use: Household practices in Copenhagen - Signe Nielsen introduced another element to the discussion. Change in daily activities would not just be shaped by the relation between the user's own objectives and technological devices, but also by the capacity of establishing connections between daily activities and the global (global warming, threatened ecosystems). The use of an ANT perspective by the two presenters, when contrasted with practice theory, seemed to provide a more granular view of the changing consumption activities where the user's agency takes a more reflexive flavor. Practice theory is indeed less concerned with the ways individuals position themselves in a bidirectional/close-looped relation with technology and more with the shaping of inconspicuous daily activities by routine, thus providing a better understanding for long term change and broad societal patterns.

Thus, both practice theory and actor-network-theory provide powerful theoretical tools to understand energy transitions. They both rely on systemic accounts of social phenomena that account for the interdependency between individual agency and broader structural elements, while the defining elements of the theory (practices and actor-networks) provide for a solid meso-level unit of analysis. This analytical perspective determines the way both perspectives incorporate technology into their analytical framework as a factor that both shapes and is shaped by social agency. The inclusion of a strong sense of the impact of technology in shaping behaviour, while at the same time rejecting technological determinism is, in my opinion, among the most relevant contribution STS can give to the broader societal discussion on energy consumption and efficiency. The current moment provides an opportunity to start developing interesting synergies between practice theory and actor-network-theory and to avoid having them fall into the typical conundrum of sociological theory, where competing perspectives stress different sides of the same social phenomena but don't quite blend well when mixed together. Some of the papers presented at EASST made important steps towards a possible integration.

References

Shove, E. (2003). Converging conventions of comfort, cleanliness and convenience. Journal of Consumer Policy, 26, 395–418.

Spaargaren, G. (2011). Theories of practices: Agency, technology, and culture. Exploring the relevance of practice theories for the governance of sustainable consumption practices in the new world-order. Global Environmental Change, 21, 813–822.

Wilhite, Harold. (2008). New thinking on the agentive relationship between end-use technologies and energy-using practices. Energy Efficiency, 1(2), 121-130.

Reflecting on Conceptualizations of Responsible Research and Innovation Discourses

Lloyd Akrong

Summary

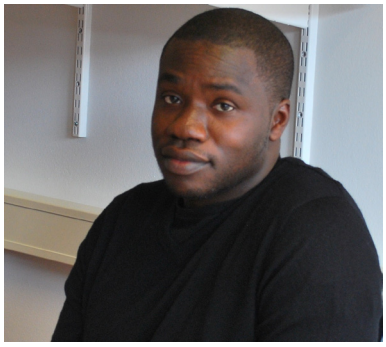
The Situating solidarities conference provided a platform in which various conceptualizations of responsible research and innovation could be discussed, challenged and placed against the background of broader discussions of what it means to do good science. This paper reflects on some of the discussions that occurred during the conference and points of interest that arose in the process. It discusses recurring themes highlighted by various presenters and makes connections with the implicit framings of RRI concepts displayed on different conference tracks. An idea underlying many presentations was that RRI requires active work and that this work often involves an alignment between society and innovation.

Responsible research and innovation (RRI) is a concept that has become quite prominent on global agendas. Within Europe for example, the European Commission, through its Horizon 2020 research and innovation programme, have directed substantial attention towards RRI as it is seen as a mechanism to stimulate economic growth. It was not surprising then that given the global interest in RRI it would be among the more visible themes discussed during the 2014 EASST conference. The discourses on RRI that unfolded during the course conference sought to provide considerations when addressing questions such as what it means to be responsible, who is responsible, for what are they responsible and justifications of why this is so. The narratives featured in many presentations and discussions attempted to elaborate on what it means to do 'good science' and at the same time pointed out the consequences of not striving to abide by interpretations of good science. While differences in viewpoints can often stifle interactive discussions, the atmosphere in Torun was quite positive, taking identified differences and gravitating toward constructive dialogue between various schools of thought and scientific interest. This made the EASST conference experience all the richer for those attending.

Responsible research and Innovation: understanding and making meaning

Within the tracks specifically focusing on RRI ('Conceptualizing the practice of responsible research and innovation' and 'Addressing societal challenges by governing towards RRI') the concept was often positioned as a means of achieving mutually shared objectives in research through processes that bring together science and society, often in the form of research initiatives. The narratives generated within sessions allowed for insights into how framings of RRI are tied to specific scientific interests (i.e. whether RRI is about the proper use of animals in research or finding ways to do away with animal research altogether) and how acknowledging this could be used to reflect on our own constructions of RRI. Attending sessions in the RRI-focused tracks demonstrated how for some participants, RRI was being conceptualized as a tool that could bring the development of science and technology closer in line with a society's morals, values and expectations. Moreover, the narratives articulated normative statements about the kinds of interactions a RRI framework would facilitate between science and desired societal development.

Rider Foley's paper, 'Normative principles to guide the process of responsible innovation', suggested that RRI is a tool that should work in concert with society in order for it to not be made into an additional obstacle, but rather be seen as a goal of science. Foley proposed deconstructing



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RRI into different conceptual branches – reflexive, engaging, responsive, collaborative and anticipative – that were each important to be navigated through. Thus he demonstrated that RRI is a deliberative process and it is by continually going through this process, meaning is made. In the discussion following his talk several challenges underlying this process were acknowledged. The importance of context and geographical location in which this tool could be implemented was described as being a hurdle in many cases, but at the same time was perceived as an opportunity to demonstrate how RRI requires the need to be able to adapt. The discussion emphasized that being responsible in research was not a fixed process and that in the course of doing research shifts need to take place to account for issues like unequal resource distribution or the shifting of goals and expectations in the course of scientific research. In conclusion, the talk stressed that a responsive RRI framework is one that is adaptive, and that this adaptation requires working together to affect change.

This idea draws parallels to that described by Jack Stilgoe, who also gave a paper in the same session as Foley, where he describes how for technology to work within society connections need to be made between them. As a result RRI can be seen as more than just about technological development it is also about socio-technical cohesion.

> *"We can see the societal embedding of technologies as requiring a process of alignment... Actors and interests are arranged such that they are dependent on one another, so stabilising a particular sociotechnical system… The project of responsible governance requires understanding this 'alignment work'"* (2013, pg. 1573)

It is interesting that Stilgoe made the observation that RRI as a form of governance needs an 'understanding' of alignment work. If taking RRI as tool connecting scientific research and society, then Foley's emerging branches of RRI can viewed as actions taken to achieve this goal. The ideas of the two speakers can be seen as complimentary, but what really seems to stand out for me is the emphasis placed on the work that needs to be undertaken both for and by RRI in science. Continuing with the idea of RRI involving actively doing work, Sally Gee described in her paper the idea of socio-technical dialogue. This idea corresponds with the conceptual branches highlighted by Foley in that connections could be traced between engaging with different branches of RRI in a deliberative manner, in order to create common understanding of innovation, and the desired outcome of public uptake and acceptance of innovation.

Implicit discourses on RRI

The multiple perspectives on RRI being formulated by the STS scholars and expressed in various academic discourses contributed to the high quality exchanges and discussions in our recent conference. In each session I attended presenters and participants alike consistently proved to be keen on sharing their perspectives on RRI related matters and the construction of research frameworks to achieve this. The conference provided the kind of environment where people could engage with alternative perspectives on RRI and widen their own position on what RRI entails. These issues were touched upon in tracks not dealing explicitly

with RRI and, although they were formulated in slightly different terms, these still displayed strong links to RRI in that they explored broader characteristics of doing good science. In the track 'Stakeholder involvement', discussions on inclusive and exclusive practices paralleled points of concern iterated in the RRI focused sessions. Sandra Karner's presentation on 'co-operative research' explored features of knowledge co-production, while emphasizing the significance of the concept of integration in science. It was a good example to illustrate that doing good science entails recognizing and respecting the various components of co-production that make science work – i.e. knowledge production. To say that various forms of knowledge and expertise go unnoticed would be an understatement, particularly when dealing with unbalanced power-relations as seen in research initiatives between higher and lower-resourced countries. For responsible research to occur, Karner's presentation indicated, differences between existing between groups need to be made explicit and taken seriously to achieve meaningful knowledge integration in the context of RRI.

Conference discussions revolving around RRI were also interested in reflecting on questions related to, on a practical level, how do we actually do research and that is both innovative and at the same time responsible. Additionally, participants often reiterated the importance of drawing attention to what the implications of doing RRI or not adhering to it would be. These instances offered perspectives on questions like what does it mean to realize RRI, by what mechanisms can this idea be operationalized, and what is the impact on scientific governance. Presenting on 'Public engagement and RRI – The quest for meaningful engagement', Kerstin Goos allowed us to visualize operationalizing RRI as an active process leading to learning through public engagement and about public engagement. Referring back to the notes I took during her presentation and during the ensuing discussion, I got the sense that the message being formulated was that conducing responsible research and innovation could be seen as a tool which provides a means of translation between experts and non-experts to effectively communicate ideas, expectations and differences of opinion. A similar idea of what it meant to actually realize RRI came up in a discussion about the challenges of governing towards RRI, where a presenter pointed out that public engagement that fosters mutual responsiveness among actors also helps to establish a trust relationship – performing RRI work, one might conclude, entails interactions that develop trust between the actors.

The 'Situating Solidarities' conference promised to bring together experts from various fields and backgrounds to contribute to stimulating conversation and to challenge ideas, concepts and perspectives. Coming to this conference I was prepared to learn a lot about how notions of RRI were being discussed from both theoretical and practical perspectives, and was not disappointed in the level of discussion. RRI was shown to be a non-fixed concept that requires active contribution and co-operation, coupled with a movement towards mutual understandings. The underlying assumption implied in the presentations was that any formulation of RRI should have the goal of enhancing the union of science, technology and society.

References

Stilgioe, J., Owen, R. & Macnaghten, P. (2013). Research Policy, 42(9), (1568-1580)

Zigzagging between Trust and Social Institutions

Simone Belli

Summary

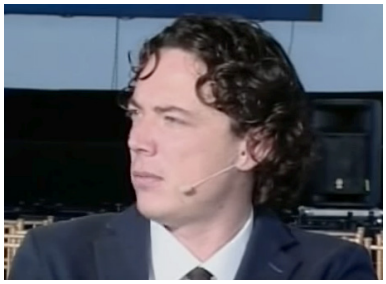
In this paper, I present three sessions held at the EASST 2014 conference in Torun to argue that social institutions are shaped through interactions between actors and technologies, assemblies and protests in several networks. I suggest an analysis of how trust works in social institutions and how these institutions are based on cooperation and knowledge. In the first part, I introduce examples of innovation in social institutions. In the second part, I highlight epistemic trust in social institutions. In the third and final part, the focus is on horizontal democracy as a traditional technology that is being redesigned by citizens. Due to the presenters in this panel, I could observe how trust and social institutions are shaped through interactions between actors and technologies, assemblies and protests in several networks.

Photo by Juan Carlos Aceros

Since 2011, following the Arab Spring, *Indignados* and Occupy movements, the debate on new forms of governance has been popular focusing on collective action and social institutions. These new forms of governance can be explained by applying to the actor–network theory, as I observed in three sessions of the 2014 EASST conference in Torun. Based on the presented papers, I would like to emphasize how trust works in social institutions and how these institutions are based on cooperation and knowledge.

First, I attended a session on 'Actor-Networks' (S-10) that explored different approaches to empirical research relying on ANT and discussed key ideas about collective action, cooperation between actors and trust in institutions. This also opened a debate on the importance

of a post-ANT perspective in the study of social institutions, from a gender and postcolonial perspective – probably, issues that in the past were often neglected in mainstream STS, but that have encountered an adequate space in the last editions of EASST conferences. In this session, I also found the concept of innovation in social institutions particularly significant, as it has been recently used in the topics of P2P and horizontal technology, grounded in the actor–network theory (Callon et al., 2013, Mallard, Méadel and Musiani, 2014). This concept considers new forms of cooperation and innovation emerging through shared trust among the actors involved in social institutions. Trust appears here as the basis of multiple kinds of relationship in everyday life and in social institutions. Based on the assumption that people interact for a common purpose, trust was further understood as being contagious and as causing contagion. The debate in the session circled around chain reactions caused by the Occupy Movement in different places around the world, and how these movements have constructed and managed trust in a cooperative and innovate way. In sum, a trust reaction in different actors in institutions of societies with different economic and political systems, where people have decided to place their trust in this form of protest and to adopt the same political strategies. Horizontalism here involved mostly the modes of communication among the members of these social institutions, that is, forms of direct democracy over hierarchy. Trust in social institutions thus appears as the basis of this horizontal democracy – a type of democracy where being together and sharing collective emotions as a community is based on trust in each other as citizens of this democracy. Town meetings, working groups, and assemblies are the places for the enactment of horizontal democracy and non-hierarchical social relationships as they promote civic involvement, innovation and transparency.



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Another session I would like to comment on to discuss how social institutions are shaped through interactions between actors and technologies is 'Epistemic issues in the play of governance' (D2). Four interesting presentations addressed the epistemic dimensions of guidelines and standards in play with governance, ranging from active ageing policies and professional guidelines for palliative sedation in end-of-life care to policies for the prevention of obesity. These talks focused on social policies and citizens, studying governance technologies from the subjects' point of view enabled a dialogical approach, whereas an epistemological approach focused on the meaning of government guidelines.

The debate in this session circled around epistemic trust in social institutions. Latour appeals (2013) to trust in a fragile and complex institution, such as science, suggests that if no institution were accounted for in our analyses, it would appear as though trust would not be necessary. But schools, universities, hospitals, markets, courtrooms, military barracks, and recreational/sporting facilities are all venues of trust-based intensive rituals (Srbljinovic & Bozic, 2013). One of the presenters in this session proposed that our ability to rightly judge and be judged as trustworthy emerges in the social interaction and is expressed as epistemic trust, according to which the speaker's commitment to her own words was a condition for the acceptance of the testimony on the part of the listener.

Epistemic trust is composed of several actions based upon feelings of expectation, hope and confidence, and also accuracy, sincerity, honesty and openness. This epistemic trust as presented in this session is the basis for multiple kinds of relationships in social institution. In the debate, someone mentioned O'Neill (2004) remarking that trust in institutions is precarious because we need to establish a robust system of accountability to replace it. Given that in institutional and social life, we have to make decisions in the absence of full information, trust is essential to make these decisions. Narratives can provide opportunities to ensure trust in social institutions: the communication between doctor and patient in a hospital, the researcher–subject relationship in a laboratory, and so on.

Photo by Juan Carlos Aceros

'Social movements as actor–networks' were discussed in another session (B-2). Here, the focus was on the analytical tools for studying social movements from an STS perspective. Cases mentioned here included the 1935 social movement in Ireland for distributing condoms and the 2012 hunger strike in Brussels, where physical bodies were used as political tools, as well as the Mediterranean anti-austerity movements, viewed through the ANT lens. A common point in these practices of social movements is the design of new forms of sharing collective action, affects and policies.

Speakers of this session focused on experience, emotions, cooperation and actions of activists. In my understanding, they also suggested that forms of horizontal democracy observed in the Occupy and indignados movements provided the infrastructure for collective action and stimulated positive emotions among citizens. People challenged the authority of "traditional" (political and economic system) institutions and formed a multitude of subjects which shared the same emotions in the same place (Zuccotti Park in Occupy Wall Street, Puerta del Sol in 15M, and so on); a sort of emotional contagion, caused face-to-face and interaction contact. All were in different places around the world, but with the same practices of occupying public space to fight against traditional institutions,

setting in motion a democratic mobilization through which people challenged institutions of neoliberal capitalism. Correspondingly, institutional failure led to the collapse of representative democracy and produced negative emotions like social unrest, rage and anger. For this reason, the Occupy and indignados movements constructed a social order through interpersonal interactions in everyday life using cooperation and positive emotions. Accordingly, the „technology" of democracy has been adjusted to specific modes designed by citizens; a new political space has been opened up through a series of negotiations and interactions. Horizontal democracy, I shall conclude, as a technology has been adjusted and redesigned by citizens. Interstingly, a speaker agreed with Akrich et al. (2006), for whom the 'stabilisation' of technology usually occurs with the establishment of a configuration in which the tool and infrastructures become transparent and invisible. Here lies the importance of incorporating institutions in our narratives as transparent sources of trust. In sum, these three sessions provided perfect examples for how STS could further zigzag between emotions and technology, trust and social institutions.

References

Akrich, Madeleine et al. (2006). Sociologie de la traduction. Textes fondateurs. Paris: Presses des Mines.

Callon, Michel et al. (2013). Sociologie des agencements marchands. Paris: Presses des Mines.

Latour, Bruno (2013). An inquiry into modes of existence: an anthropology of the moderns. Cambridge: Harvard University Press.

Mallard, Alexandre; Méadel, Cécile and Musiani, Francesca (2014). The paradoxes of distributed trust: Peer-to-peer architecture and user confidence in bitcoin. Journal of Peer Production. 4.

Obituary

Stefan Beck 1960-2015

Tanja Bogusz and Estrid Sørensen

„So, my appeal is that STS should intervene in the midst of the sciences. It should be with the sciences, and indeed at times in their way: Sometimes, STS should be the sand in the gear box of normal science, point to the stumbling blocks of the sciences and help clearing them away. Too often, STS is practiced as "Chair science", it acquiesces in the self-chosen role of "observer" or even "referee"; in the role of the "grand constructor of thoughts". My appeal is to venture a step out of the Chair, a step that I provisionally call the collaborative re-construction" [our translation].

From "Sachen, Tat-Sachen und Tatsachen: Überlegungen zum Stand der Dinge in den STS und zünftigen/künftigen Problemen".
Talk given by Stefan Beck 22. October 2014 at Wissenschaftszentrum Berlin
Many of Stefan Beck's publications can be accessed on http://hu-berlin.academia.edu/StefanBeck.

The section ‚Obituary' is introduced as a new feature of EASST Review. It aims to inform the STS-community about recently deceased members who had an impact on the development of the Science and Technology Studies and/or their communities. Please contact us if you want to publish an obituary. admin@easst.net

Great sadness spread from the Department for European Ethnology at the Humboldt University in Berlin to colleagues worldwide as we learnt that our dear colleague Stefan Beck during vacations in Australia suddenly had passed away on March 26, 2015. Stefan Beck, born in 1960, was a professor of European Ethnology. He played an important role for the introduction and spread of STS in Germany.

"*Umgang mit Technik*" was the title of his doctoral thesis that was published in 1997. At the time German anthropology's approach to technology was dominated by a rather nostalgic view on the disappearing cultures of craftsmanship in the work sphere. Stefan succeeded in introducing a new approach that combined ethnographic research of everyday life, Science and Technology Studies and social and cultural theory. Early on, Stefan had been genuinely occupied with the interplays between the materiality of work conditions, desynchronisation, and reflexivity. In 1994 he conducted an ethnography at IBM in Germany through which he examined how the experience of time was transformed by way of new and flexible methods for organizing work. Initiated at the Ludwig Uhland Institute in Tübingen and following Hermann Bausinger's important contribution to a materialistic turn within the discipline, Stefan contributed to its move from what used to be called "Volkskunde" towards "empirical cultural science" (*Empirische Kulturwissenschaft*).

In 1998 Stefan joined the department of European Ethnology at the Humboldt University in Berlin, first as a research assistant, in 2003 as junior professor, and since 2007 as full professor. From his focal study of technology, he turned towards medical practices. He studied among others transplantation and reproductive medicine, somatography, neuroscience, gerontology and biomedicine more broadly. Anthropological perspectives on culture and kinship played an important role in these studies. He was deeply engaged in comparisons between medical practices in Germany and on Cyprus and developed long-lasting private friendships within the medical profession in both countries. As the quote introducing this obituary indicates, this was much more than mere private engagement.

In Berlin, Stefan created the fertile ground for young STS scholars to develop their projects, their thoughts and their careers. At the centre was the *Collaboratory: Social Anthropology and Life Sciences* where scholars from different disciplines, universities and nationalities gathered to discuss a variety of themes within the area of Science and Technology Studies. Some of the greatest scholars worldwide of anthropological STS visited the *Collaboratory* and contributed to the high quality of discussions. Yet, the informal character and the debates across academic statuses was remarkable, not the least in the else strongly hierarchical German academic culture. With his colleagues at the Department of European Ethnology Stefan established a Master Study in socio-anthropological STS and edited (together with Jörg Niewöhner and Estrid Sørensen) an introduction to this approach to STS, titled "Science and Technology Studies. Eine sozialanthropologische Einführung" (Transkript, 2012). This and many other brilliant publications, significant activities and solid scholarly support have been essentially important for the growth of the STS community in Berlin and in Germany.

By emphasising the anthropological perspectives of the study of science and technology Stefan innovated old disciplinary questions concerning the dualism of nature and culture, human-technology relations and the way in which different social cultures intervene within the enactment of scientific and technological encounters. Stefan's lifetime curiosity for practice theory, first in Bourdieu's approach, later extended by Schatzki, Knorr-Cetina and John Dewey, stimulated his aspirations for building bridges across the diverging cultures of social and cultural anthropology across Germany, the UK, the US, among others. It was also through practice theory Stefan succeeded in creating partnerships between anthropology and the technical sciences, medicine and the life sciences, an endeavour he accomplished in close collaboration with Jörg Niewöhner. Apart from research funding these partnerships gave rise to Stefan's *collaboratory* approach. With this he developed vocabulary and methodological tools for reflecting on how disciplines with extremely different epistemic cultures can gather to constitute collective objects. In these attempts Stefan was closely related to the projects of his long-time friend Paul Rabinow. Though, Stefan was less pessimistic than Paul about the possibilities of collaborative research.

Thoughts from the Book of Condolences

Friends,
What a tragic turn of fate. Stefan was a rare and wonderful person.
My exchanges with him in Berkeley and in Berlin were precious. His intelligence, generosity, wit and care were memorable.
My wife and I retain the precious memory of our last visit to Berlin when Gisela and Stefan took time to show us parts of Berlin we would not have seen and then hosted a marvelous dinner. At the dinner, they gave me a gift of a book by Gerhard Richter and Alexander Kluge, Dezember. Midst somber series of images of the snow covered trees in the Alps are Kluge's short interventions on the arbitrary turns of time and fate. How true, moving and distressing.

How sad and cruel.
with gratitude for having known Stefan,
Paul Rabinow

Such a grievous blow. The photo at the top of this blog says so much: a thoughtful, modest man, gregarious, and with an impish sense of humor. I have fond memories of meetings in Berlin, informal and formal, when the sun seemed always to be shining and the conversations were profound, informative, and fun. Stefan's academic contribution is of singular importance and his untimely loss so hard to bear. My condolences to Gisela.

With gratitude
Margaret Lock

I am shocked by the news of Stefan's passing. Indeed, Stefan was most influential in my academic life. Being one among hundreds of students at the Institute of European Ethnology at Humboldt University Berlin, I was often deeply moved when Stefan encouraged and supported me just in the right moment. His support seemed to be refreshingly playful and accompanied me for the whole time that I learned and worked at the institute – for all the six years. As I, many others have written about his precious support too. Stefan supported generously. I also admired his sincerity and his integrity, and his clarity and his stringency have inspired me over all the years. Moreover, despite the overwhelming requirements of a quickly growing institute, he managed to maintain a remarkable warmhearted wit. Stefan's personality remains highly inspiring for me. My memories of him are full of appreciation and deep gratitude.

My condolences to his wife, his family and to the many who will miss him now.
Josefine Raasch

We are still devastated at Rice about this very sad news. Stefan was among the most brilliant anthropologists I have ever met. More than this, he was also a very dear friend. We take comfort in knowing that his words, ideas, memories will live long in the network of those with whom he came into contact and influenced. Just reading through the Kondolenzbuch one realizes what a full and marvelous life Stefan had. Gisela, you are very much in our hearts and thoughts. We look forward to celebrating Stefan's life with all of you at the Gedenkfeier!

Dominic Boyer

For me - as an MA student in the late 1990s - , and for many others, Stefan was a door opener for so many things that could never have happened in other contexts. I came as an exchange student from Zürich to Berlin. And Stefan organized a fantastic two week seminar at a study centre in the Ruhrpott, the German coal district, where we swam, ate, read and talked with a bunch of guest professors all matters cybernetics, cyborgs, and prostethics, a small group of students, some of them physicists, but also historians. It was there where he showed me that academic work could be so much more than two hour chunks of lectures and readings.
When I returned as a visiting researcher many years later, he gave me and my colleagues some money they had left from a research project, with the expressed intent to mix up their questions and methods regarding prevention. No strings attached.
Such adventures were typical for him. He did not want to be a big whig, but he became a big organizer, someone who made things possible for many many people. This happened because he was open and curious, always interested in whatever people were doing. He enjoyed what others were doing, he had humor and he could be mischievous. Often he was in the background. I do not know enough about him whether some of this was simply his style, or whether it was also, that being a professor in a small institute, he was kept crazy busy by the German university administration against which he kept the department thriving. I often wondered, given my knowledge of other German professors, how he could operate in such a modest and clever way in a context dominated by bureaucracy and grandstanding. But he also was an astute ethnographer of precisely this context, and maybe this made his career possible. It fills me with extreme sadness, that he is no longer among us.

Michael Guggenheim

It is hard to write this. [...] I still find it difficult to believe that Stefan won't be there when I next go to Berlin. He was such a vibrant presence – clever and funny; smart and politically astute about organisational things but with a refreshing irreverence and humour; deeply committed to his own brilliant work as well as the discipline more widely, and with a breadth of vision to infuse it with new ideas and push it in original directions. His death, so absurdly and tragically early, came soon after we had exchanged emails celebrating the fact that the negotiations that would finalise my move to Berlin were concluded. He had put so much work into making this happen. That he won't be there to be part of the Institute that he has put so much into shaping, in other ways too, is tremendously sad and still hard to grasp. My hope, though, is that, along with others, I can play a part in making it at least something of what he had hoped and planned, and that that will be at least some kind of tribute and thanks."

Sharon MacDonald

He was good to think with.

Jörg Niewöhner

Further condolences: https://ethnoserver.hu-berlin.de/kondolenz/