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Editorial – STS and Human Drama

Recently I had to give an interview for a university magazine. After some questions about STS, cities and sociology, the interviewer asked me how STS helps us to think about the current refugee crisis. I stumbled and didn't know how to respond, even though during the last weeks I've been shocked by stories and images of unfortunate human fates; angry at the slow and irresponsible reaction of most European governments, particularly at their silence about Europe's historical responsibility; touched by the commitment of volunteers and private acts of generosity and hospitality; concerned about the ongoing negotiations about EU-wide refugee distribution system; convinced that refugees should be able to apply for visas in third countries; so that they can travel legally and safely to recipient countries, and so on. I certainly wanted to say something about these issues, but it was hard for me to connect them with the theories, questions and problematizations in our field.

This does not mean that while reading the news in recent weeks I haven't come across many developments and configurations that lend themselves to fascinating STS studies. Think, for example, of the controversies around systems and formulae being devised for asylum-seeker allocation throughout Europe. Or the debate about why for many weeks the online system for refugee registration in Germany was switched off at nights; a decision for which no governmental office took responsibility. Or the controversy about the need to obtain building permissions when it comes to the urgent building of refugee housing and facilities. Or the use of mobile phones and Facebook among asylum-seekers during their trips to Europe. Or how other uses of transportation networks, walking on highways and railways, sleeping in train stations, load these with moral and political capacities.

But as sociotechnically interesting as these topics might be, my sense is that none of them really grasps the fundamental issue at stake, what moves us, concern us and engages us ethically and politically, namely, the drama of fleeing. In traditional political theory, human suffering is imagined to be a universal concern related to a common human nature. From this perspective the real challenge that the refugee crisis poses to Europe is not so much the one related to tolerance and multiculturalism, which assumes the prevalence of cultural difference, but the challenge of cosmopolitanism, the challenge of recognizing a common humanity. Such argumentation is, however, at odds with the intellectual project of STS, so greatly invested in decentering if not undoing the idea of a human nature, reimagining the nonhuman as not opposed to the human, and opening a new politico-theoretical space for thinking about the post-human, the more-than-human.



Ignacio Farías

Cover Illustration:

„Hungary Ignorance“, taken on September 4, 2015, Tatabanya, Hungary

www.flickr.com/photos/syriafreedom/21364003026

So how to think about the human dramas of fleeing asylum-seekers with STS? Clearly, feminist interventions in STS have for a long time been concerned with issues of sociotechnical exclusion, with making invisible, absent and with suffering: how classifications and standards produce both smoothing of operations and human sufferings; or how conceiving of sociotechnical assemblages as matters of care reveals all type of devalued ordinary labours. This perspective is crucial to critically explore the devalued position of refugees in the various sociotechnical assemblages in which they come to be integrated, but I wonder whether it suffices to grasp the drama of displacement, of fleeing away from home, of leaving it all behind.

A possible starting point can be found in Nigel Clark's book *Inhuman Nature*, which addresses the relationship between an ethics of hospitality and natural disasters. Challenging the emphasis in STS on symmetrical entanglements among humans and nonhumans, Clark argues that natural disasters demonstrate a fundamental asymmetry between human existence and a whole realm of natural processes, ranging from bacterial life to tectonics, upon which human existence depends, but which are completely autonomous from our doings and, most importantly, capable of annihilating us. From this perspective, the sense of empathy, compassion, the offer of help and hospitality to those affected by natural disasters would not derive from a recognition of a common human essence, but of a common vulnerability to overwhelming earthly forces.

Somewhat similarly, what the drama associated with fleeing as a liminal process seems to reveal is the asymmetrical dependence upon the various nonhumans that constitute us, to which our identities, memories, skills are attached, upon which we so deeply depend and without which we become nothing but poorly equipped human bodies. What the current situation reveals is not (only) the sophisticated biopolitical production of a 'nude life' in refugee camps, to use Agamben's term from *State of Exception*, but the painful processes of disassembling and disentangling humans from the sociotechnical assemblages they live by. What we thus seem to recognize, when we are touched by these human dramas and when we feel the urgent need to help, to donate things, to shelter, to teach our language, is perhaps not so much a universal human nature, but a universal right to be sociomaterially entangled, sociotechnically equipped, heterogeneously assembled, that is, to be more-than-human.

Center for the Study of Invention and Social Process. Goldsmiths, University of London

Noortje Marres

The *Centre for the Study of Invention of Social Process* is an active inter-disciplinary research centre at Goldsmiths, University of London, which was founded more than 10 years ago by Andrew Barry and others. CSISP was opened in 2003 by Bruno Latour with a lecture on the question of “how not to change vehicles” in moving from micro- to macro- in the social study of” ...invention (more on this topic, and choice of label, below).

Institutionally speaking, CSISP has the luxurious if delicate position of being based in the Department of Sociology, while boasting an interdisciplinary membership, with staff and students from across Goldsmiths involved in collaborations and events, including from Design, Art, Anthropology, Visual Cultures and Cultural Studies. CSISP also works with members from beyond Goldsmiths, including Kristin Asdal (Oslo), Carolin Gerlitz (University of Amsterdam) Javier Lezaun (Oxford) Celia Lury (Warwick) Fabian Muniesa (Paris) and Tahani Nadim (Berlin). From the very beginning CSISP has been based in the Warmingington Tower on the highest and generally peaceful 12th floor, which a few years ago however was troubled by an asbestos threat, exposed by a leak in the roof. The asbestos fortunately have since been removed, and besides the 12th floor has the benefit of a view of the City of London, which helps us to keep things in perspective, albeit an ensobering one.

Over the years, CSISP has been directed by a variety of Goldsmiths sociologists, including Mariam Motamedi Fraser, Mike Michael, Marsha Rosengarten and myself. Michael Guggenheim, Alex Wilkie and Marsha Rosengarten have just become the new Co-Directors of CSISP, as

Summary

This short piece introduces the Centre for the Study of Invention and Social Process, an interdisciplinary research centre based in the Department of Sociology at Goldsmiths, University of London. CSISP supports work in the broad area of science, technology, society and the environment, and hosts events, research, and projects that facilitate mutual intervention across disciplines and practices that touch on the social broadly conceived, such as design and social science, computing and sociology, the arts and environmental science. The article gives an overview of recent projects and activities hosted by CSISP and discusses the distinctive approach they take to invention, as not only a topic but also a resource for STS.

CSISP projects, events and publications are catalogued on the CSISP website (www.gold.ac.uk/csisp) and documented at CSISP online, the Centre's blog (www.csisponline.net).



Figure 1: The view from Warmingington Tower (2012)



Noortje Marres was trained in the sociology and philosophy of science and technology at the University of Amsterdam. She was a Research Fellow in the Centre for the Study of Invention and Social Process (CSISP) at Goldsmiths, University of London, and then in the Institute for Science, Innovation and Society at the University of Oxford. In 2011 she returned to Goldsmiths to (co-)direct CSISP. She has just left to take up a new post as Associate Professor in the Centre for Interdisciplinary Methodologies (CIM) at the University of Warwick, where she aims to continue her work on technologies of participation, digital sociology, and issue mapping. n.marres@gold.ac.uk

from September I have joined the Centre for Interdisciplinary Methodologies at the University of Warwick. The Centre's thematic focus has been remarkably enduring over the years. As the official blurb on the CSISP home page has it, the centre supports research, projects and events in the broad area of science, technology, society and the environment. This broad and inclusive description echoes the broad substantive focus of our field (at CSISP we like to blame STS for whatever we can); but CSISP makes up for its wide focus through its narrow objective to support and enable – website blurb again – “mutual interventions across disciplines and practices that are concerned with the social: design and social science, computing and sociology, issue advocacy and social methods, biomedicine and social research, the arts and environmental science.”

It does not seem an exaggeration to say that CSISP has developed a distinctive take on interdisciplinary research over the years, which a) explicitly includes creative or ‘generative’ disciplines like design, computing and the arts, b) collaborates with NGOs and activists, including Platform, the International HIV Social Science and Humanities Conference, and the Tactical Technology Collective, and c) has a special focus on enabling practice-based, materially aware, medium-specific forms of methodological innovation that further enables this broad and generative approach to interdisciplinary social research that we and (former) colleagues at Goldsmiths have termed “inventive” (Lury and Wakeford, 2012).

Research projects developed and hosted at CSISP that may help to clarify and exemplify this approach this are:

- a) the *Pindices* installation by Andrew Barry and artist/designer Lucy Kimbell, which consisted of translucent tubes fixed to the wall carrying buttons with accounts of specific acts (e.g. ‘I raised an issue’), and which was part of the *Making Things Public* exhibition in the ZKM Karlsruhe in 2005.
- b) the on-going collaboration between *Design and Social Science* by Mike Michael, Bill Gaver, Alex Wilkie and others and which produced the RCUK-funded ECDC project in which designers and STS researchers developed an material method and/or prototype device called the *Energy Babble*, a kind of community-radio which broadcasts digital content relating to energy demand issues and also enables community engagement among the network of its users (via the microphone) (see the contribution by Alex Wilkie below).
- c) Noortje Marres’ ESRC-funded work on *Issue mapping online* (Figure 2), which brings together STS approaches with digital methods to develop tactics, methods and tools for analysing and visualising public issue formation, including the Associational Profiler, a prototype tool for studying the ‘liveliness of issues’ with Twitter (see www.issuemapping.net and Figure 2 for an early associational profile of #drought from 2012).
- d) Jennifer Gabrys ERC project on *Environmental Sensing* with deploys a variety of sensors and sensing devices to develop materially aware methodologies for the articulation of and engagement with environmental crisis (see www.citizensense.net).
- e) the ERC project led by Michael Guggenheim on *Organizing Disasters* with seeks to analyze the encounter between civil protection organizations and the population and to this end combines field-based, experimental and visual methods (see www.organizingdisaster.net).

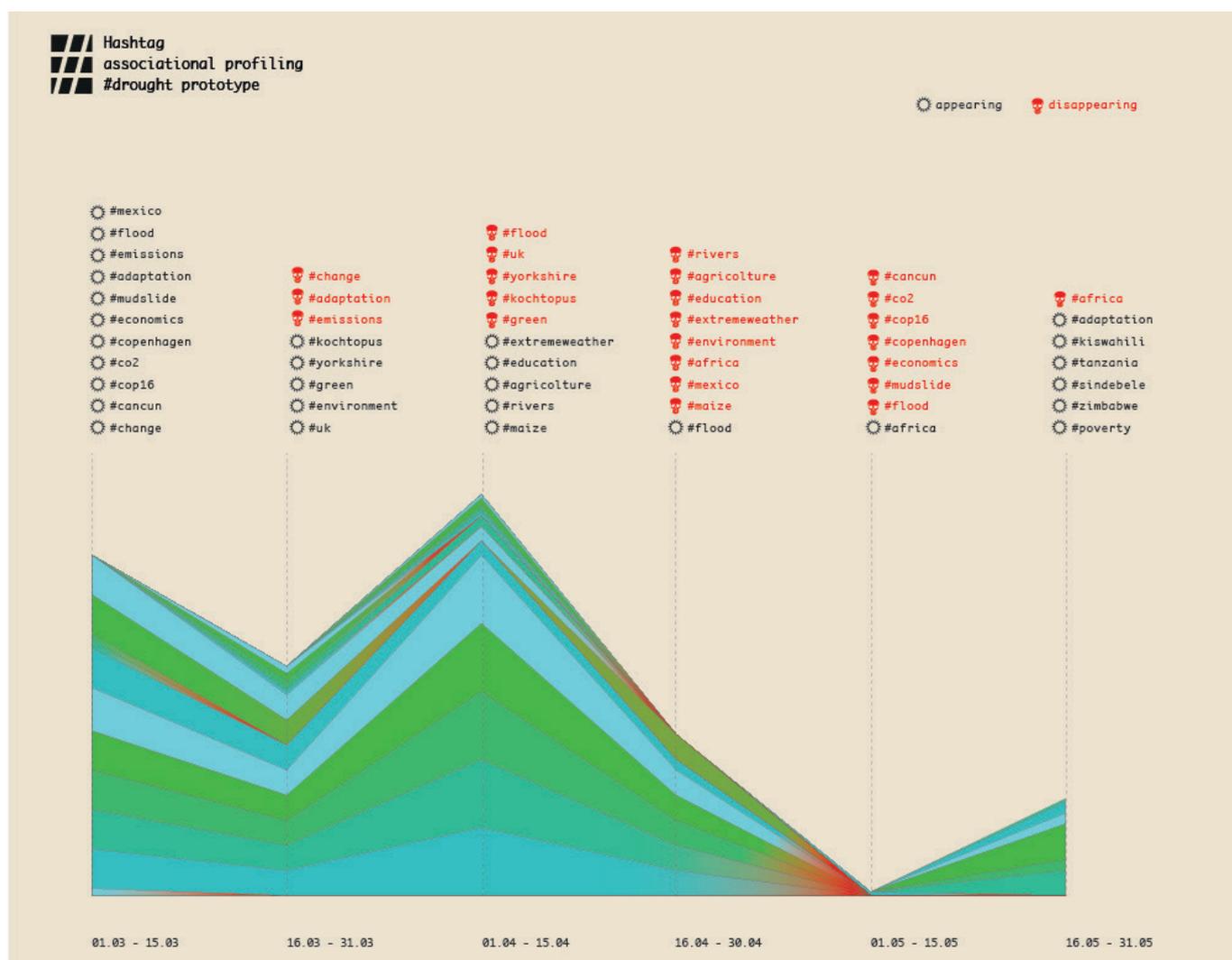


Figure 2: Issue profile of #drought on Twitter over time, Noortje Marres, Carolin Gerlitz, Alessandro Brunetti (2012)

The development of social research projects is then key to CSISP – indeed it hosts other ERC projects besides the two mentioned above, including the project on market problems by Dan Neyland discussed in the next article, and Goldsmiths Sociology also hosts Evelyn Ruppert’s *How Data Make a People* (www.gold.ac.uk/sociology/research/researchprojects/howdatamakepeople).

A no less important aspect of CSISP has always been the lively post-graduate culture that it supports, by way the *Whitehead Scholarship* and the CSISP studentship, and through on-going events such as the *CSISP Salon*, an informal reading-cum-viewing-and-discussion group, which has been organized by PhD students and post-doctoral researchers over the years (Tahani Nadim, Ann-Christina Lange, Joe Deville, Laurie Waller, Sveta Milyaeva, Vera Ehrenstein, David Moats), and where “members and others meet to debate issues in the field of the social studies of science and technology and beyond,” using an “experimental format that aims to accompany texts with contextual materials in the form of films, news articles, field visits etc..”, as the CSISP Salon webpage puts it.

These and other CSISP events are enlivened by participation of students in Master programmes taught and convened by CSISP members, including in recent years the MAs in Visual and Digital Sociology, as well as by CSISP visiting fellows who join us for a period of a few months to over a year from related, international STS groups and departments, including Anders Koed Madsen (Copenhagen), Nerea Calvillo (Madrid), Priska Gisler (Zurich), Lonneke Van der Velden (Amsterdam), Daniel López and Israel Giralt Rodríguez (Barcelona), Kay Felder (Vienna), Pascale Trompette (Grenoble), Ignacio Farías (Berlin) and Manuel Tironi (Chile).

Events have been very important to the making of CSISP as not only a research centre but also an intellectual place. The last big one was the anniversary symposium *Inventing the Social* in 2014, which was co-organised by myself, Michael Guggenheim and Alex Wilkie, and brought together speakers to discuss renewed attempts to connect innovation and creativity with sociality, in a range of current fields, from digital media to disaster management and installation art. We are in the process of developing this event into an edited book to be published by Mattering Press, and the poster advertising the event was designed by Alex Wilkie, as most of our many CSISP posters are, and this poster took the form of a long list of events organised in the 10 years of CSISP existence, showing how diverse our topics of interest have been, going from the philosophy of Bergson, open source software, oil and politics, digital societies and so on (www.gold.ac.uk/media/Inventing%20the%20Social.pdf). This broadness could be taken for a lack of specialization,



Figure 3: Inventing the Social. CSISP anniversary symposium in the Orangery at Goldsmiths, organised by Noortje Marres, Michael Guggenheim and Alex Wilkie, May 2014

and this would not be wrong, but it also signals the commitment of those who assemble in and around CSISP to work across the registers of theory, research and practice.

Invention, then, is not only an important *topic* for CSISP but equally presents an important *project* in which STS researchers and practitioners may engage themselves. Perhaps most importantly, to engage more directly with the ‘invention of the social’ opens up possibilities for broadening our understanding of what it is ‘we’ do: Do we dare experiment with accepted divisions of labour in social research and innovation? Can we include the design and implementation of methodologies for sociality in the social studies recipe book? This is the question that on-going work in CSISP has raised over the last years, and also one that informs the new online, Open Access journal that CSISP will launch the coming year, *Demonstrations* (www.csisponline.net/2015/03/25/call-for-contributions-for-the-launch-of-demonstrations-journal-for-experiments-in-the-social-studies-of-technology).

Market-Based Initiatives as Solutions to Techno-Scientific Problems: MISTS

Daniel Neyland, Sveta Milyaeva & Véra Ehrenstein

MISTS engages with market based initiatives employed as potential solutions to what Frankel, Ossandón and Pallesen (2015) recently referred to as collective concerns¹ such as environmental or health-related issues. We use ‘market-based initiative’ as a term to cover a range of activities that incorporate a market component (from market creation, through market devices, to drawing on market principles in order to, for example, stake a claim for enhanced competition). The project, which runs from 2013 to 2018 and is funded by the European Research Council, draws together two strands of Science and Technology Studies (STS) research: the theoretical turn to matters of business and markets; and the more policy oriented STS literature on science problems (and solutions). The two strands of STS research are drawn together to explore four sub-projects: attempts to build a market for privacy, a market scheme to incentivise vaccine development, international initiatives to resolve price carbon emissions and a national system that uses market principles to render higher education research competitive.

The rise of market based initiatives from the 1970s and 1980s onwards as solutions to problems can be seen in numerous areas. For example, market based initiatives have been implemented in an attempt to enhance the value for money of public services² by introducing competition for increasingly scarce public funds³ and have been discussed as one aspect of contemporary government austerity drives⁴. We resist using singular terms such as neoliberalism to convey what is going on in these initiatives to instead consider the way such initiatives are composed through various devices, practices, policies and so on. Perhaps we will end up with a study of neoliberalism in action, but one which questions the nature of the term.

As STS scholars, we are particularly interested in the area of science and technology policy, where markets have been heralded as mechanisms to, amongst other things, stimulate otherwise absent innovation⁵, introduce ethics into new fields⁶, and generate efficiency⁷, efficacy and greater equality⁸. In these discussions, market based initiatives are noted as both valuable in their own right and key for attributing and distributing value. Market based initiatives are also understood as providing the means by which scientific, technological, financial, social and policy issues can be corralled and addressed, problems can be made to make sense and resolved. And yet controversy endures regarding for example: claims that in some areas there is no competition and hence there can be no market⁹; that assumptions built into market models simplify key areas such as scientific discovery into linear financial models¹⁰; that the insistence on creating a market is expensive and inefficient with regards to the problem to be solved¹¹; that on the terms on which they are established many market based initiatives fail¹²; that markets asymmetrically allocate agency and capability at the expense of the most vulnerable and that market prerogatives are not neutral, but shape and constrain the activities and realities of those subject to them¹³. Thus despite their widespread deployment, engaging ever more people, resources and devices, market-based initiatives have frequently been associated with questions, concerns, possible failure and/or the generation of further problems. Hence the relationship between problems, solutions and markets is by no means straightforward. This suggests that the very genesis, development, experience and consequence of market-based initiatives require careful consideration.

Summary

This short article presents a brief introduction to the MISTS project as an example of the research carried out within CSISP. MISTS is an ERC funded research programme which investigates the rise of market based initiatives designed to resolve collective concerns regarding, for example, health and the environment. The research explores possibilities offered by drawing together recent Science and Technology Studies work on markets with more long standing concerns in science and technology policy. The research seeks to be inventive through participatory experiments in economic exchange alongside more traditional ethnographic methods.



Daniel Neyland is the Principal Investigator on the MISTS project. Daniel's interests cover issues of governance, accountability and ethics in forms of science, technology and organization. He draws on ideas from ethnomethodology, science and technology studies and his research is ethnographic in orientation. In particular he is interested in the question of how entities (objects, values, relationships, processes and also people) become of the world.

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current understandings of the capability and capacity of solutions, and the numerous unintended consequences of solutionism²¹. We have also drawn on STS science policy work to start rethinking the status and role of market and economic expertise, the importance of values held by decision makers in seeking solutions to diverse social problems and how these become embodied in political culture²². Work on governance has also been useful for helping us to think about the adequacy of methods of public consultation in relation to demands for greater accountability and transparency in market work and the concerns that have been expressed regarding the means by which market-based legislation and regulation, public representation, participation or consultation has been formed²³. And we have started to consider the role of us STS researchers in these policy contexts.

Taking on these ideas in our initial sub-projects on markets for privacy and markets for vaccines in low-income countries has been analytically useful. In considering attempts to regulate the proliferation and monetization of data through the online data industry, what we have found are, for example, start-up firms and community groups trying to invert taken for granted assumptions that the monetization of online data inevitably and straightforwardly harms individuals by, for example, invading their privacy. Instead, various organisations are attempting to rethink privacy in terms of control and the establishment of proxy property rights for users over their data. Through doing so, start-ups seek to establish a

In our research we have drawn on the move in recent years by STS scholars to pay greater attention towards matters of organisation, organising and business, particularly those that can be said to draw inspiration from Actor-Network Theory (ANT)¹⁴. For example, Callon (1998) suggests, markets can be treated as assemblages that are continuously made and re-made through the work of economists, models, calculative devices, forms of valuation and experimentation¹⁵. The substantive focus for STS research on markets is broad, engaging global financial markets, arbitrage and price, through to the exchange of strawberries¹⁶. Market assembly, according to Callon (1998) involves the production of devices and framings, which disentangle entities from their social, cultural and technical obligations, in order to be re-entangled into specific market framings. Such disentangling and re-entangling in market assemblages is said to affirm various demarcations between, for example, relative degrees of value. Further innovative and provocative ideas arise through treating economics and markets as performative¹⁷, questions are posed of what counts as a market actor¹⁸, forms of equivalence and other market metrology are investigated as a practice¹⁹ and the intersection of market assemblages with broad political systems analysed²⁰.

We have found these ideas useful and challenging for our own thinking. But what of the critiques of market-based interventions? How can we engage with the problematic politics of markets as apparent solutions to collective concerns? Here we have analysed a variety of ideas. For example, we have explored STS thinking on the constitution or legitimacy of solutions, the entangled histories of recursive problem-solution relationships, the notion that problems are frequently re-oriented to fit



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form of privacy (through control and a re-specification of property rights) as the future of marketing. We have become interested in how this re-specification work could become part of on-going and recursive problem-solution relationships. Alternatively, in attempts to transform global vaccine markets for low income countries, what we find is not markets in the wild, but pacifying, taming contracts, mutual obligations, and carefully managed supply chains, governed and held to account through international agreements, aid partnerships, diverse forms of expertise (legal, epidemiological, economic, etc.), standards of assessment and evidential delivery mechanisms. Market assemblages, political governance and counter-intuitive results abound. Although superficially we might take this kind of intervention as an example of market-based initiatives being used to civilise otherwise unruly, incalculable exchanges, what we find in practice is an enormous number of mundane, sometimes messy, sometimes unruly practices, devices and people coming together through a number of distinct evaluative situations.

Our on-going research continues to explore long-standing CSISP interests. For example, what counts as a problem or issue appears to be continuously at the forefront of market interventions. Furthermore, the practices and processes of intervention seem key. And a focus on inventive and experimental methods continues to be vital (including our own attempts to subvert the dominant policy-shaping field of experimental economics by carrying out our own breach experiments that disrupt otherwise rational and linear market thinking). Alongside our on-going research activities, we also continue to organise a series of events. In September, we will host 'Economic Exchanges' exploring what happens when STS engages with the economic and at the next EASST conference in Barcelona, we hope to put on another stream, this time on Mundane Market Matters.



Véra Ehrenstein is a Research Fellow on the MISTS project. She completed her PhD at the Centre de Sociologie de l'Innovation, Ecole des Mines, Paris. Her research interests revolve around Science and Technology Studies, the sociology of markets and the anthropology of development, particularly in relation to topics like tropical deforestation and health in so-called developing countries.

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You can find out more about the project and join in here:

www.marketproblems.com

¹ See: <http://easst.net/easst-review/easst-review-volume-34-1-march-2015/studying-the-failures-of-markets-for-collective-concerns-a-workshop-report/>

² See: http://www.civitas.org.uk/nhs/download/Civitas_LiteratureReview_NHS_market_Feb10.pdf

³ See: http://www.oft.gov.uk/shared_oftr/reports/comp_policy/OFT1314.pdf

⁴ See: <http://publicuniversity.org.uk/wp-content/uploads/2010/11/Callender.pdf>

⁵ See: <http://www.who.int/immunization/newsroom/amcs/en/index.html>

⁶ See, for example: <http://pats-project.eu/>

⁷ See the UK's new Research Excellence Framework: <http://www.hefce.ac.uk/research/ref/>

⁸ See: <http://uk.ibtimes.com/articles/20101115/power-generation-market-039-should-level-playing-field-039.htm>

⁹ See: A. Farlow (2005) 'The Global HIV Vaccine Enterprise, Malaria Vaccines, and Purchase Commitments: What is the Fit?' (Innovation Strategy Today, June 2005: 1-15).

¹⁰ Overlooking the history of STS research into scientific 'discovery' which questions assumptions of linearity.

¹¹ See for example, criticism of plans to marketise the UK NHS ('No market for the NHS,' Guardian newspaper, 14th March, 2011, p.31)

¹² See: http://www.resource.uk.com/article/WEEE/Weevee_got_long_way_go

¹³ See: History of Human Sciences (1999) 'Knowledge for What? The Intellectual Consequences of the Research Assessment Exercise', special issue of History of the Human Sciences 12(4): 111-46.

¹⁴ A note of caution is advisable here: many early advocates of ANT have over the last 10 to 12 years questioned some of the limitations of ANT, used the label post-ANT or refer in very minimal terms to ANT. See for example Callon, M. (1998) *The Laws of the Markets*. Oxford: Blackwells; MacKenzie, D., Muniesa, F. and Siu, L. (eds) (2007) *Do Economists Make Markets? On the performativity of economics*. Oxford: Princeton University Press; Muniesa, F., Milo, Y. and Callon, M. (2007) *Market Devices* Oxford: Wiley-Blackwell

¹⁵ Callon, M. (1998) *The Laws of the Markets*. Oxford: Blackwells

¹⁶ See for example: MacKenzie, D. (2006) *An Engine, Not a Camera* (London: MIT Press); Beunza, D. and Hardie, I. and MacKenzie, D. (2006) A price is a social thing: towards a material sociology of arbitrage. *Organization studies*, 27 (5). pp. 721-745; Garcia-Parpet, M. (2007) The Social Construction of a Perfect Market: The Strawberry Auction at Fontaines-en-Sologne, in D. MacKenzie, F. Muniesa, and L. Siu (eds) *Do Economists Make Markets? On the Performativity of Economics*. New Jersey, USA: Princeton University Press, pp. 20-53.

¹⁷ MacKenzie, D. (2006) *An Engine, Not a Camera* (London: MIT Press)

¹⁸ Cochoy, F. (2009) Driving a Shopping Cart from STS to Business, and the Other Way Round: On the Introduction of Shopping Carts in American Grocery Stores (1936–1959). *Organization*. 16: 31-55.

¹⁹ Callon, M., C. Meadel, and V. Rabeharisoa. (2002) The Economy of Qualities. *Economy and Society*. 31(2): 194-217.

²⁰ Barry, A. (2002) The Anti-Political Economy. *Economy and Society*. 31(2): 268-84

²¹ Woolgar, S. and Pawluch, D. (1985) "Ontological Gerrymandering: The Anatomy of Social Problems Explanations," *Social Problems* (32:3), pp. 214-27. Garfinkel, H. (1967) *Studies in Ethnomethodology* (NJ, USA: Prentice-Hall).

²² Drawing on the work of, for example: Jasanoff, S. (2007) *Designs on Nature* (USA: Princeton Press)

²³ See for example Irwin, A. (1995) *Citizen Science* (Routledge, London); Kitcher, P. (2001) *Science, Democracy and Truth* (Oxford University Press, Oxford); Kleinman, D. (2000) (ed) *Science, Technology and Democracy* (State of New York University Press, Albany NY, USA); Jasanoff, S. (1994) *The Fifth Branch: Science Advisers as Policymakers* (USA: Harvard University Press); Colebatch, H., Hoppe, R. and Noordegraaf, N. (2010) (eds) *Working For Policy* (Amsterdam, Netherlands: University of Amsterdam Press); Rip, A. (2003) *Constructing Expertise*. *Social Studies of Science* 33(3): 419-34; Collins, H. and Evans, R. (2007) *Rethinking Expertise*. London: University of Chicago Press; Bozeman, B. and Sarewitz, D. (2007) Public Values and Public Failure in US Science Policy. *Science and Public Policy*, 32(2): 119-36.

The Energy Babble, Part of the Energy and Co-Designing Communities Project: ECDC

Alex Wilkie



Figure 1

The Energy Babble, part of the Energy and Co-Designing Communities project (ECDC)¹. This interactive device emerged and operated over the course of the three-year project where design and STS researchers sought to engage with a number of UK based energy communities and bring about provocative enactments of energy-demand reduction mediated by social media and algorithmic forms of elicitation. The project team made thirty six Energy Babble devices in total, which were deployed amongst communities in Cornwall, Devon, London, Norfolk, Nottinghamshire and Sussex over the course of three months. The device took two years to devise, design and fabricate, following an engagement workshop and initial ‘ethnographic’ contact. Whilst being deployed, further ethnographic work was conducted with the communities to gain an understanding their energy-demand reduction practices and how their practices and communities had been shaped through the intervention of the device. So far, accounts of the Energy Babble and the ECDC project have featured in the *Sociological Review*² and the *SIGCHI*³.



Alex Wilkie is a Senior Lecturer in Design at Goldsmiths, University of London, and a sociologist of science and technology. His research interests combine STS with design and address data practices, energy, healthcare, inventive methods, users, process and speculative theory. At Goldsmiths, Alex leads the MA Interaction Design and the PhD programme in Design Studies. He is preparing a monograph on the ethnographic study of user-centred design, and is co-editor of *Inventing the Social* (Mattering Press, forthcoming), *Transversal Speculations* (forthcoming) and *Studio Studies* (Routledge, 2015). a.wilkie@gold.ac.uk



Figure 2

The Energy Babble was the upshot of a lengthy design process, which, as mentioned in the previous caption, included and drew on contact with the research participants. A key part of the design process was the production of a series of design workbooks that bring together empirical observations and insights, a review of related (and sometimes unrelated) existing and emerging technologies, as well as sketched propositions and proposals for devices, systems and other designed artefacts that the team might build as deployable research devices. Sketches are often humorous, absurd and non-sensical as a means to re-think the problems and questions that are being posed by the topic of the research, in this case energy-demand reduction in local-community contexts. During the ECDC project, three design workbooks were made, successively defining, redefining and refining proposals until the brief for the Energy Babble emerged. In other words, until a firm idea of what the team was to design came to fruition.



Figure 3

An energy-community visualisation created during the engagement workshop at the Geffrye Museum, London. The engagement workshop included approximately thirty representatives from the local energy communities that the ECDC project team worked with and consisted of three key activities designed to explore somewhat speculative community make-up and topology, the home as a affective site of energy use and the environmental expectations of community members.

¹ ECDC was funded by RCUK and led by the EPSRC (project code ES/1007318/1). The project team included Andy Boucher, Bill Gaver, Tobie Kerridge, Mike Michael, Liliana Ovalle and Matthew Plummer-Fernandez.

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Short-circuits, alternative geographies and new paths for scientific publishing in STS

Tecnoscienza, Italian Journal of Science & Technology Studies

The Editorial Coordination

(*Tecnoscienza – Italian Journal of Science and Technology Studies*)

Abstract The article offers a thumbnail sketch of the intellectual, editorial and organizational outline of *Tecnoscienza – Italian Journal of Science & Technology Studies*. In particular, the article focuses on the evolving geography of STS at global level and on how *Tecnoscienza* represents an attempt to support a reevaluation of the role of smaller national STS communities. In addition, the online open-access policy which characterizes the journal sets *Tecnoscienza* apart from most of the current STS journals, providing a path for new and alternative scientific publishing practices.

Keywords: independency, creative commons, open access, STS geography, local communities.

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Tecnoscienza – Italian Journal of Science & Technology Studies (www.tecnoscienza.net) is an independent online peer-reviewed journal, released under the Creative Common license. As we also stated in the opening of the very first issue of the journal, we could define *Tecnoscienza* as the outcome of an intellectual and academic short-circuit.

From an academic perspective, the short-circuit mainly concerns the process (started in 2005) that led a group of researchers to set up an association and create STS Italia, the Italian Society for Social Studies of Science and Technology. The aim of the journal was to give visibility to a debate as much established and acknowledged at the international level, as it was disregarded at the national one. On the other hand, in the Italian scientific and academic environment, the association has also represented an original form of aggregation able to attract researchers, not exclusively Italian, not only sharing the same areas of interest, but

also willing to challenge the current production and circulation of knowledge in academic settings.

Although supported by STS Italia, we never wanted *Tecnoscienza* to be the journal of the association. The publication of *Tecnoscienza* is a proof, and the result, of the commitment and energy of an emerging generation of researchers, who have been going through the traditional issues of science and technologies studies, and have also expanded the scope of their own interests by drawing on different areas and research fields

Since the beginning, the subject areas *Tecnoscienza* focused on have involved both 'classic' STS topics (such as laboratory studies and public communication of science) and more cross-sectional ones (such as postfeminist debates, cultural studies, design and media studies). In fact, we are interested in expanding connections and intersections with areas that are mostly affected by innovations and transformations: economy, organisations, design, art and everyday life. The aim of *Tecnoscienza*, therefore, is to continue this work by following two parallel research paths. On the one hand, the journal will be contributing to the already existing and today flourishing STS debate. On the other hand, it will be drawing a transversal line across the existing categories and boundaries, by questioning fields, objects and methods, involving a heterogeneous set of knowledge, disciplines and topics.

The sense of having a new STS journal, more than just topics and contents, concerns a reflection on the evolving geography of STS at global level. When referring to the intellectual policy animating the journal, we can say that this policy is especially targeting the wider process of reconfiguration of the cultural geography of STS. Initially started in specific countries (UK, France, Netherlands, US), the STS landscape has been characterised by the raising of newer increasingly international and globally interconnected networks, journals, and research. Today, the presence of STS scholars has expanded in many different countries all over the world. In this scenario, one of the aims of *Tecnoscienza* is to relocate the geography of the global STS community by giving resonance to the relevance of the local embeddedness of STS perspectives.

Thus, not only *Tecnoscienza* represents a significant attempt to draw attention to a relatively new, 'indigenous' Italian STS community, but it also supports more generally a reevaluation of the role of smaller national communities. This policy is aimed at appreciating in a new way the multiple, locally embedded, alternative STS perspectives, as well as the local trajectories of researchers, communities and countries where STS have in the meantime developed.

This reflection on STS geography can be recognized in some of the actual contents and sections we present in the journal. The section named "Cartography" aims to map histories and current developments of local STS communities: from Croatia to Portugal, from Spain to Germany, from Italy to Norway. Contributions published in this section serve as well as intellectual reflections on STS: while conceptual frameworks are increasingly globalized, actual STS research work and activities still occur in connection with, and in the context of, national academic, intellectual and scientific environments. In the same vein, alt-

though the section “Book review” could appear merely as a way to comply with an academic routine, *Tecnoscienza* has turned it into a further tool to articulate the STS geography, more sensitive toward peripheral (but for this reason not less meaningful) voices. So, our book review editors constantly work to include books written in various European languages (up to now French, Spanish, Danish, German, Portuguese, Swedish, Norwegian and Russian), all reviewed in the shared working language of English. The idea is thus to bring light on books and research that otherwise would have not had the chance to be noticed outside their national borders.

Beside the aforementioned “Cartographies” and “Book Reviews”, the journal is constituted of “Essays”, “Conversations”, and “Scenarios”. In the “Essay” section, where theoretical and research articles appear, contributions undergo a blind peer review process, involving three expert scholars. In this section, we encourage authors not necessarily to subscribe to the STS literature, but rather to critically engage with it. “Conversations” intend to represent a field of encounter among different disciplines and perspectives (also involving people from outside the academic community). Finally, “Scenarios” is devoted to address new or controversial issues emerging from the STS debate.

The journal features two issues per year and has been thought to be distributed in the way today most dynamic and accessible: as an online open-access publication. Thanks to open source platforms such as Open Journal System, we have been able to work without a traditional publisher, managing everything by ourselves and taking care of all aspects of the publication process. Such an independent practice and open access policy set *Tecnoscienza* apart from most of the current STS journals, providing an example of alternative scientific publishing practices away from the existing oligopoly of international academic publishers.

As other journals in the field, we also occasionally publish special issues that can be based on conferences or workshops (as we did with the extended versions of the keynotes’ papers presented at EASST 2010) or, more often, on a specific topic. In the latter case, the special issue includes articles submitted in response to an open call for contributions and is managed by one or more guest editors. Special issue editors write an introductory article that orient the readers, oversee the process of blind peer review and work with the Editorial Board on the whole publication process. The success of the special issues published so far convinced us to maintain this path, accepting new proposals for the next few issues. The special Issues intend to privilege emerging themes from the STS debate and can be proposed by STS scholars who are interested in collaborating with us.

In terms of people involved, the journal consists of an Editorial Coordination, an Editorial Board and an International Advisory Board. The Editorial Coordination involves three members of the Editorial Board who are in charge of the journal management for three years. The Editorial Board is constituted by a group of 14 Italian STS scholars who share a variety of tasks and duties. This is organized with Section Editors, who are in charge of one of the aforementioned sections, and Editorial Board members, whose role is to advise and support the work of the relevant sections. As for the Editorial Coordination, Section Editors

are also in charge for a limited amount of time. Temporary roles allow us to have a flexible organization of the journal that can adapt to academic needs as well as biographical contingencies. The process of reconfiguration of the STS cultural geography, in this case, is represented by the increasing number of members of the Editorial Board who live and work outside Italy. The international dimension of the journal is also fostered by the participation of well-known STS scholars to the Advisory Board. Besides reviewing submitted papers, in fact, the role of the Advisory Board members is acting as ambassadors for the journal within their academic and national contexts.

Finally, given that the distinction between science and art is just a modern invention, we like to invite artists as well to contribute to our journal, by allowing us to publish an image of one of their work as a front cover (see fig. 1). In this way, we hope to offer to our readers and the STS debate suggestions and contributions also from an aesthetic point of view. And to stimulate other short-circuits in the next future of STS.



Figure 1 – Two examples of *Tecnoscienza*'s covers.

Colourful, Courageous and Community-Building. Reflections from the Organizer of the 2nd Nordic STS Conference

Torben Elgaard Jensen

Summary

The 2nd Nordic STS conference, held in Copenhagen 2015, was an occasion to take stock of the current trends and developments of Nordic STS. In this paper, the leading organizer reflects on the event and characterises contemporary Nordic STS as colourful (spanning a wide range of perspectives and empirical topics), courageous (critical, reflexive but also willing to take on collaborative roles), and community building (sharing commitment to a number of topics and issues). Speculating on future developments, he suggests that Nordic STS will be receive impetus for change and transformation from at least four sources: (1) The steady stream of new controversial scientific and technological developments. (2) The increasing commitment to gather interdisciplinary collaboration and research funding around grand societal challenges. (3) Methodological developments within STS. (4) The increasing number of collaborative roles that STS, as a mature discipline, will be invited to take up.

The interest in STS has been strong and growing in the Nordic countries for a number of years. Two years ago, researchers on this growing Nordic scene introduced an organizational innovation in the form of a biennial Nordic conference. One might think that yet another conference is not exactly what is needed in the already densely populated ecology of STS conferences. But the Nordic conferences, do in fact seem to occupy a vacant spot. Their current participant number (100-150), makes them significantly larger than most national STS conferences, yet still less overwhelming than the 4S or the EASST conferences, not to mention the combination of the two. In addition, the Nordic conferences are conveniently located in odd years, i.e. out of sync with the EASST conferences.

The first Nordic STS conference was held in Trondheim in 2013, the second has recently been held in Copenhagen (May 27-29). The editor of the EASST review, has kindly asked me, as the leading organizer of the recent Copenhagen conference, to offer my account of the conference to the readers of this journal. I happily accept this invitation.

In the following, I will first outline some of the developments and 'organizing forces' that made the Copenhagen conference possible. Through this I hope to convey an impression of the organisation of STS in and around Denmark. Second, I will attempt to say something about the current state of Nordic STS, and finally I will briefly speculate on where Nordic STS might be going next. It goes without saying that I am speaking from the point of view of the organizer; others might have entirely different interpretations of conference event in Copenhagen on those late days of May.

The organizing forces behind the conference

To give a sense of the people and institutions that came together at the conference, I would like to outline some of the 'organizing forces' that were directly involved. In my book there were 4+1 of these organizing forces.

The first force was a small and informal coordination group with one representative from each of the Nordic countries. This group, which has also occasionally been dubbed the scientific advisory board, was established by the organizers of the first Nordic conference and it has stayed in existence. For me, as the local organizer, the Nordic group has proven to be an indispensable resource for quick responses on a variety of issues such as scheduling and channels of communication.

The group currently consists of Kristin Asdal, Sampsa Hyysalo, C-F Helgesson and myself.

A second organizing force and local driver of interest in the conference, was the Danish Association for Science and Technology Studies (www.dasts.dk). DASTS was established in 2005 as a network organisation for Danish STS. It has been successful in stimulating the Danish STS field through a very active homepage, an online journal, and an annual conference. To give an impression of Danish STS scene, it could be mentioned that the number of subscribers to the mailing list of DASTS has now grown to more than 500. This growth of interest in STS has developed in parallel with a considerable institutional embedding of Danish STS since the mid 00's. In 2006 there was only one organisational unit at a Danish University that explicitly described itself as STS (Centre for STS-studies at Aarhus University). In 2015 there were four additional organisational units with a substantial official dedication to STS research (Technologies in Practice, IT University; Centre for Medical STS, University of Copenhagen; Centre for Design, Innovation and Sustainable Transition, Aalborg University; The Techno-Anthropology Research Group, Aalborg University). It is also noteworthy that STS in Denmark has gained considerable prominence in the thinking and curricula of a number of established disciplines, such as Organisation studies, Ethnology, History & philosophy of science, Design studies, Sociology, Anthropology, Psychology, Educational research and Media studies. In sum, the growing Danish STS scene, in part stimulated and channeled through DASTS, was a part of the momentum that pushed forward the conference. Not least because DASTS has decided to participate in the Nordic conference instead of arranging its own national conference in odd years.

A third important organizing force was the local host, the Techno-Anthropology Research at Aalborg University Copenhagen. I am the leader of this relatively new group, and the task of organizing the Nordic conference was of course a welcome opportunity to place ourselves on the map of Nordic STS. The Techno-Anthropology Research Group in its current form was established at Aalborg University Copenhagen in 2012 in connection with a bachelor and master programme in techno-anthropology. The group now consists of 9 researchers covering a broad range of STS, including feminist STS, innovation studies, studies of expert cultures and public engagement of science. The group has strong interest and commitment to 'mapping controversies' and the use of digital methods in STS and has recently opened a 'techno-anthropology lab' as a centre for these activities (www.tantlab.aau.dk).

A fourth organizing force that must be mentioned was the local organizing group that handled every practical detail before, during and after the conference. Two techno-anthropology students worked on the conference for the better part of a semester. Invaluable help was also given by local secretaries, a handful of other techno-anthropology students, members of the research group and my head of department, who supported the conference financially.



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As I mentioned earlier, I count 4+1 organizing forces. The fifth and final one, was the self-organizing of the conference participants. The conference had no specified theme. It was merely announced as a space for discussion between Nordic STS researchers, and participants were therefore encouraged to submit papers as well as proposals for panels. The final shape of the conference was thus very much in the hands of the 125 participants and in the hands of three extra-nordic keynote speakers who were given a free choice of topic (Steve Woolgar, Estd Sørensen and Fabian Muniesa). In the following, I will use the conference programme as springboard for speculating on the current state of Nordic STS.

The current state of Nordic STS

In contemporary academic life, we are all caught up in the game of making appealing accounts of activities that are somehow beyond our full control or comprehension. We constantly write precise plans for future projects or elegant abstracts of papers that we haven't been able to write yet. I therefore trust that the reader will be familiar with the genre, when I now present my very neat summary of Nordic STS. My claim is that it can all be boiled down to the three C's.

Nordic STS is Colourful

The conference programme is a wonderfully rich and broad collection of topics and perspectives. It contains concepts such as noise, love, morality, revelation and empowerment. It engages practices such as elections, education, drug trails, biobanking, male masturbation, peer innovation, and eugenics. And it talks of objects such as digital maps, synthetic biology, electricity grids, nuclear bombs, publics, earthquakes, climate change and calculative devices.

Nordic STS is indeed colourful. Some may even prefer another c-word: carnivalisque. We can think of this colourfulness as a charming feature that makes STS conferences fun and sets us apart from other fields that are tied down by a more narrow scope of interest. But the colourfulness is however also a part of a long trend in Nordic and international STS to move attention beyond the classic sites of knowledge production and technology development. It somehow performs the argument that the seamless web of science-technology-society extends and can be studied everywhere. The creative application of STS styles of analysis to all sorts of phenomena is thus not merely a curious feature but an important part of how Nordic STS collectively constitutes its object of research.

Nordic STS is Courageous!

When glancing through the programme, it strikes me that a good deal of courage is involved in the topics and approaches that are taken on. In fact, the paper titles indicate several different forms of courage. There is the well-know type of 'ethnographic' or 'anthropological' courage involved making critical, reflexive or ironic accounts: *,On the trail of*

the calculator boys'. There is also the self-reflexive courage involved in constantly rethinking the our own tools: *„Pixels and Pencils: Improvising Methods for Writing Futures*'.

An additional form of courage relates to the collaborative roles that Nordic STS researchers often assume: *„Make room for emergence when speaking about synthetic biology*'. The interest in collaboratory roles is indeed a strong and well-established trend in Nordic STS. Close affiliations between Nordic STS and the Scandinavian participatory design tradition, as well as with various types of democratic public engagement with science experiments, have generated a broad interest in finding ways for STS research to work closely with both designers and users, and scientists and publics.

The commitments to collaboration, or bridging, do of course generate problems of their own. A fourth kind of courage is therefore also needed, namely the courage to rethink our roles as STS researchers. Something, which might be indicated by the following title: *„Enough of Ethnography? Or: What I learned from being an ad-hoc lab rat in an Internet of things*'.

Nordic STS is Community-building.

The participants' self-organizing forces resulted in the clustering of interest and discussion around a number of topical areas. Some of these topical areas were: Technical Innovation, medical STS, science communication/PES, educational practices, valuography, calculating & documenting technologies, environment, biotech governance, new big science, and eating. In addition to these topical areas, there were also a number of cross-cutting issues or themes, which became the basis for sessions: Intervention, digital methods, technoscience & the social, and empowerment.

The communities and sub-communities in Nordic STS are surely grounded in more enduring practices and institutional affiliations than a three day conference. I am not able to say exactly what generates these numerous communities. What I can say, however, as a conference organizer, is that there is a good deal of shared commitment to topics and issues in Nordic STS. When we, the organizing group, gathered to work through the pile of submitted abstracts and panels, we found it surprisingly easy to group the papers into meaningful sessions. It was basically a 3-hour job.

Where will Nordic STS go next?

It would be reckless to try to predict where the buzzing scene of Nordic STS will go in the future. But I will nevertheless end with a bit of speculation. My sense is that Nordic STS will remain committed to following and reflecting upon all sorts of new, significant and controversial scientific and technological developments. For this reason alone, we can expect an ongoing renewal of the discipline. My sense is also that

STS researchers will turn their attention to grand societal challenges of all kinds, not only because STS researchers are curious and committed people, but also because of the opportunities for significant research funding. The renewal our field may also be driven by methodological developments, such as the current experimentation with digital methods, which has generated entirely new collaborations with media scholars, IT developers and several others. I believe that digital methods will gradually open up significant new opportunities for data gathering and visualization, which will expand or conception of what kinds of research STS can do (Elgaard Jensen et al. 2012; Munk & Elgaard Jensen 2014). Finally, and on a more general level, my hunch is that the increasing maturity of STS as a discipline will lead to an increasing number invitations to participate more directly and more actively in scientific, technological and political projects (Elgaard Jensen 2012; Birckbak et al. 2015). This, I suspect, will engender increasing reflections on our roles, opportunities and responsibilities as STS researchers, and perhaps also increasing tensions and dilemmas within our field.

So where will Nordic STS go next? I can only speculate and encourage others to do the same. But one thing is certain. Nordic STS will go to *Sweden*, since this is where the next conference will be held in 2017.

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Friction Zones and Local Energy Initiatives – an Excerpt from Graz 2015

Giacomo Poderi

Summary

This note focuses on the scope that Energy and energy-related presentations had during the 14th Austrian Annual STS Conference „Critical Issues in Science, Technology and Society Studies”, held in Graz. It reflects on the idea of friction zones as a fruitful lens for looking at transformations of the energy paradigm and on the relevance of the local, in particular households and grassroot energy initiatives, as a key level of inquiry.

This May, I was traveling to Graz for the 14th Austrian Annual STS Conference – *Critical Issues in Science, Technology and Society Studies* (11th-12th May) where, beside the pleasure of having to co-chair a session, I was also eager to listen to the presentations related to Energy, a topic I'm currently involved with. Before arriving there, as I often do on the plain, I had examined the conference programme for marking the tracks and talks „not to miss” and I realized that, more than in any other conference I had attended, I should have made choices and compromises, because I would have been able to attend only a few of the talks I wished to.

The fact that STS scholars fully embraced the emergence of Energy as key area of inquiry, at least in Europe, was apparent in Torun. The EASST conference *Situating Solidarities: social challenges for science and technology studies* already included two tracks dedicated to energy-related topics for a total of 21 presentations. In Graz, I had a pleasant validation of this trend, both in terms of attendance to the sessions and the overall presence of energy throughout the conference programme. The two conferences are different and difficult to compare, yet having attended both this has been my feeling. About attendance in Graz, for all energy-related sessions I attended, rooms were packed with 30 to 35 participants, often forcing a small group of attendees to stand and squeeze at the corners. More interestingly, Q&A moments always gave space to engaging confrontations among the participants. About the overall programme, out of the 22 sessions, grouped in six areas, which spanned the two-days of the conference, four sessions (of which two were double sessions) were directly connected to a specific energy-related topic. Basically, a keynote speech, by Harald Rohrer, *The household junction: Households as friction zones in infrastructure transitions* and a thematic area „Transitions to Sustainability – Energy” framed the role of Energy and its relations to environment and society, in Graz. The range of areas and specific topics touched in this context was thorough. The session „ICT Use, Energy Consumption and the Changing Practices” touched on the complex relationship between ICT use and energy impact with a focus on young generations and their different usage patterns. The double session „Local Innovation Impulses and the Transformation of the Energy System (1 & 2)” touched several issues that are transversal to energy transitions and innovation by focusing on the local level. Finally, the last two sessions tried to capture in more theoretical terms the complexities and entanglements of energy transformations, by focusing on social order and governance theories and epistemics: „Energy, Society and Culture – (Sustainable) Energy Transformations as Transformations of Social Order (1 & 2)” and „Energy

Transformations, Energy Epistemics and Governance – the Role of the Social Sciences and Humanities”.

In retrospect, given that the relevance, complexity and impact that transitions of energy paradigms have in shaping contemporary society had already been pointed out more than two decades ago by Hughes (1993), probably, I wonder that I was surprised: nowadays that environmental sustainability, smart grids and sustainable energy systems, only to name a few, have become key societal challenges¹ it seemed consistent that STS community kept engaging with them. However, the attention that local contexts and emergent grassroots actors received by the STS community, in contrast to the usual energy companies, institutions and grand socio-technical imaginaries (Jasanoff and Sang-Hyun, 2013), it is what I found resonating the most with my actual work with local energy cooperatives.

During his keynote speech, Rohracher raised many noteworthy points, but central to his argument was the suggestion to frame households as friction zones, in the current energy transition paradigm. By relying on the concepts of *social worlds and arenas of development*, he showed to what extent households are friction zones and therefore a fruitful nexus to study by spanning through different aspects: from the attempts to configure households in different ways (e.g. economically rational actors, ecologically conscious citizens etc.), to the existence of conflicting socio-material practices (e.g. heating, laundry etc.); from the new interfaces between heterogeneous infrastructures (e.g. ICT, Energy, Transport) with conflicting demands on households, to the ongoing negotiation about the meanings of ‘sustainability’ at this level. Furthermore, as the developments in the frame of ‘smart everything’ goes on, households become ‘smart homes’ and are also at the center of very complex intersections, such as the infrastructuring of new ICT components, the supply of new services for the dwellers, and the configurations of end-users as active energy managers and economically rational actors. After two years spent working with energy cooperatives and households for defining and implementing the objectives of our project’s intervention, I found Rohracher’s picture perfectly fitting the complexities of the local contexts we faced, both in terms of interfacing heterogeneous infrastructure and in terms of defining and negotiating the meaning of sustainability and efficiency themselves.

At the same time, a different focus was brought upon local energy cooperatives and grassroots initiatives. I mention here three thought provoking talks. With the presentation ‘Understanding Conflict Within Renewable Energy Cooperatives’ Judith Rognli raised a simple, but spot-on question: How can this democratically-led cooperatives function, given the diverse interests represented by people participating in them? Still at the beginning of the empirical part of the research, Rognli framed the inquiry by combining a sense-making perspective (Weick, 1995) with a conflict analysis. Similarly to Rohracher’s position on the household level, Rognli too showed that energy cooperatives can be friction zones and are at the center of complex socio-technical



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t struggles. With “Community Based Energy Use – Two Examples of Individual Innovations in the Daily Energy Practice” Petra Wächter theoretically framed two cases of community-based energy use, the first case focused on the demand side and the other one on the supply side.

It clearly showed how individuals’ organization of their daily life has large impact and relates to the shaping of energy transformations at the level of localized communities. Finally, in „The quest for citizen governance of energy resources”, Tineke van der Schoor used the frame of social movements and ANT to talk about ‚community energy networks‘ as entities that align a diverse range of actors: consumers, prosumers and energy cooperatives. These entities have as main goals the promotion of local sustainable energy production and consumption, the maintenance and growth of local economy, and the promotion of democratic forms of governance for the energy resources. However, these goals imply that such energy networks work to consolidate an identity which is defined in close connection to the local culture (language, mentality, attitude) and tightly anchored to the local, contingent boundaries and both have implications for the scalability and growth of these entities. Here, the idea of friction zones emerge when the local community energy networks are viewed as social movements, which, in Touraine’s words are „a special type of social conflict” (Touraine, 1985). The issues about the definition and safeguard of their own identities and about the alignment of heterogeneous stakeholders (*i.e.* individual consumers, prosumers and collective bodies) are those ones that I found particularly prominent in my empirical work and ongoing interactions with local energy cooperatives.

Finally, while the quality and relevance of all talks varied due to the scholars’ heterogeneous career stages and to the different stages of the research presented in the sessions, I found the overall quality of presentations to be very good and inspiring as well as the discussion sessions, which left me with a clear sense that the STS community can make valuable contributions about ‚energy & society‘ in the forthcoming years.

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4S/EASST CONFERENCE BARCELONA-2016

science and technology by other means



CALL FOR TRACKS

4S and EASST are now inviting proposals for tracks at its 2016 Joint Meeting, August 31-September 3 in Barcelona. The selected tracks will later be included as part of the formal call for papers. There are no pre-determined topics for the tracks but we encourage applicants submitting tracks to engage with the general theme of the conference: „**Science and technology by other means: Exploring collectives, spaces and futures**”. It refers to the opportunity for both 4S and EASST scholars to meet, share and discuss together how science and technology are increasingly performed, shaped and developed ‘by other means’: in a variety of exploratory activities that include the articulation of collectives that do not fit with the traditional actors and institutions in science and technology, or in ways that problematize the established hegemonies involved in the production of knowledge and technologies.

The purpose of this call for tracks is to stimulate the formation of new networks around topics of interest to the 4S/EASST community. Like any meeting session, a ‘track’ is comprised by one or more paper sessions with a theme and a responsible chairperson(s). The difference is that it is not submitted already filled up with papers. Rather, track themes are subsequently included in the call for papers, and authors nominate their paper for one or more tracks. A track may extend across up to 4 sessions of five papers each (i.e. a total of maximum 20 papers). Proposers of tracks commit to work closely with the program chairs to achieve the final composition of their tracks, and they must be prepared to chair or suggest colleagues who are willing to do so.

4S and EASST boards, however, are open to different types of sessions: traditional ones with standard papers, practitioners’ workshops, open debates concentrated upon specific topics. We therefore encourage the proposal of alternative formats, which may not consist of up-front power-point presentations but instead engage new ways and new media for presenting, sharing, producing and disseminating research projects and outcomes.

Papers and contributions will be invited in International English, as it is most frequently used as a vehicular language of science. However, conversation and debates in other languages will be welcomed too.

To learn more about the conference please go to the conference website at www.sts2016bcn.org/. You can email any enquiries to sts2016bcn@gmail.com.

You can propose a track online via the website. You will need to enter your name and other details, a session title, and a short (maximum 300 characters) description of the track theme and of the format selected (especially when the presentation style is imaginative and may require special equipment). We also require an extended abstract of up to 250 words. Please try to be clear and concise, to stimulate the broad participation of colleagues.

New Deadline for submissions: **26 October 2015**.

Communication of accepted and rejected tracks: **13 November 2015**.

For other key dates please see the website.

Obituary Prof. Zeng Guoping 1953-2015

Xiaobai Shen & Chengwei Wang



Prof. Zeng Guo-Ping, one of the key Chinese scholars in the field of Science and Technology Studies (STS) field, passed away suddenly on 8 July 2015 when he was carrying out a field study in China. He was director of the Institute of Science, Technology and Society, at Tsinghua University. Since 2001 he was Vice-President of the Chinese Society of Studies in Science of Science and Policy of Science & Technology and Vice General Editor of the leading Chinese STS journal *Studies in Science of Science*. He contributed to the systematic introduction of STS into China, and nurturing of young academics in the field. He worked closely with STS scholars in the University of Edinburgh, Technical University of Munich, Penn State University, USA, the University of Tokyo and The University of Victoria, B.C., Canada, to establish a long-term cooperation between Chinese STS and STS networks in the world.

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

Prof. Zeng was born in 1953 and raised in Yinjiang, a less-developed town in western China. He taught himself to pass the first college entrance examination in 1977 after the Cultural Revolution, got his first degree in 1979, and taught at a middle school in his hometown. His hunger for knowledge however, pushed him to study harder and pursue a larger stage. Finally, he obtained a Master in Philosophy degree in 1986 at Beijing Normal University, since when he worked as a university lecturer ever since. In May 1994, he was invited to work for Tsinghua University, and chaired its Institute of Science, Technology and Society from 1995 to 2010. A gifted teacher, he educated his students enthusiastically and trained many STS scholars and practitioners all over the world. Many of the Ph.D. and master students under his supervision, won honours including China National Scholarship and Tsinghua Excellent Dissertation. His scientific work was characterized by his broad horizon and insightful perspectives.

He published several books, „A Self-Organized View of Nature”, „Studies on Chinese Innovation System: Technology, Institution and Knowledge” (with Prof. Li Zhengfeng). For this and many other pieces he was awarded the Beijing Outstanding Social Sciences Publication Prize. The novel concepts he developed, such as „Philosophy of Industry” and „Science for Lives”, continue to receive attention in academia. His recent research included a study of Basic Science in China for the China National Science Foundation and various studies on science communication. His international reputation in STS scholar revolved around his sustained efforts to bridge the Chinese STS community to counterparts in other parts of the world. This included helping establish the East Asian Science, Technology and Society network and securing the first European research (EU FP7) funding for social sciences in Tsinghua with his international colleagues.

Prof. Robin Williams at the ISSTI, University of Edinburgh said, „ZENG Guo Ping worked tirelessly to overcome disciplinary and institutional barriers and build scholarship and collaboration in the area of science and technology studies across China and with the international research community. We are very sorry for the loss of such a great mentor, friend and scholar.“



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