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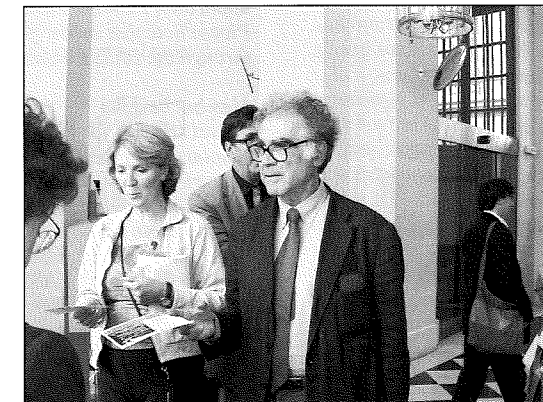
# EASST

## Review

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Carlo Ginzburg, Bruno Latour and Sally Wyatt  
in the Sénat, 4S/EASST conference in Paris

Reports from the joint 4S & EASST Conference, August 2004

## Breaking the divide

by Anda Adamsone-Fiskovica  
University of Latvia, Riga

The biennial meeting of scholars engaged in the field of social studies of science and technology (4S&EASST) this year held in Paris passed under the slogan "Public Proofs – Science, Technology and Democracy". As can be inclined from the title of the conference the guiding principle and prime theme of this year's event was focused on the topical question of developing and establishing democratic relations between science and society. making scientific expertise and lay knowledge two equally valuable sides of the same coin and erasing the still persisting divide between the two.

This event called together those concerned of diverse backgrounds, experiences, generations, races and geographical locations from all over the world. According to data provided by the organisers of this event

([www.csi.ensmp.fr/csi/4S/](http://www.csi.ensmp.fr/csi/4S/)) participants represented almost equal gender shares, as well as the share of Anglophones and those not having English as their primary language of communication. There were altogether 1176 people from 45 countries interchanging the two main conference premises located in the middle of Paris (École des Mines and Lycée Saint-Louis). The majority of those came from the Western Europe (pre-dominated by United Kingdom and France as well as the Netherlands), with a considerable representation of researchers from North America, and individual delegates from Asia, Eastern Europe, Latin America, Oceania and Africa, ranging from 1-4% of all attendees. Along with traditional paper sessions this conference included such special sessions as the presidential lecture on a historical interpretation of public proofs chaired by the current president of the 4S Bruno Latour, sessions aimed at confronting authors and their critics, roundtables as well as poster sessions, not to mention several exhibitions made available to the participants as well as social events.

This was a recurrent chance for the attendees to meet old acquaintances and colleagues as well as to get to know the newcomers and to meet face

to face with those previously only known by names in the realm of scientific publications. After all in addition to the majority of senior researchers there were still one third of students attending the conference. This was not only a chance to present and learn about the most recent developments within the field but more importantly to feel the unceasing relevance of the issues addressed by this particular conference as well as more generally dealt with within 4S and EASST. In addition to its primary function of knowledge communication and networking this event serves as a motivating and encouraging factor for those lacking a strong STS community in their home country to carry on with ones work and interest in related issues and expanding it on a local scale as well.

As a person considering myself a comparative newcomer to the field and attending this event only for the second time (first time in 2000 in Vienna, Austria) I even more than previously experienced the diverse range of topics addressed by the STS field, starting from more traditional strands of research to increasingly progressive ones representing various approaches to numerous dimensions of the role played by science and technology in our society experienced and detected on both micro and macro levels. There were altogether eight broad themes identified for this conference, here listed in a diminishing percentage of the total number of 1036 communications across 189 sessions including (1) expertise, governance and public debate, (2) science and scientific practices, (3) information and communication technologies, (4) health care practices, (5) research and innovation, (6) technologies, markets and society, (7) biomedical sciences and scientific practices, and (8) environment, energy, and natural boundaries. This enormous range of topics was stimulating and confusing at the same time. On the one hand it demonstrates the extensive scale of this research field while on the other hand it points to its ample internal diversity, which makes it increasingly hard to

speak of STS as a single coherent discipline operating with a unified set of concepts and categories. Thus I find it to be a core challenge of this conference now and more so in the future to provide a platform for all these different perspectives to meet and challenge each other trying to identify common and distinctive features and enriching each other's understandings and views.

With reference to the latter point, I realised that there are at least two ways in handling the choices to be made due to the enormous amount of parallel sessions – one can either perceive this meeting as a place for reinforcing and advancing ones prime interest by attending those sessions most closely related to the subject matter concerned, or one can instead try to use the occasion to transcend the borders of the long occupied place and learn of the other “STS worlds” thus broadening ones view on matters previously either unknown or underdeveloped in ones thinking. Altogether it is all about trying to find the golden mean in order to achieve a

## Beyond Translation: Conceptualizing Heterogeneous Micro-Communities

by Olga Stoliarova  
State University of Moscow

The organizers of the session on 'heterogeneous microcommunities', Ivan Tchalakov and Ulrich Glotzbach, share the growing interest of STS participants in questions of ontology. How do STS overcome the 'ontological split' of the universe that was the characteristic feature of Modern thought? What ontological models come to take their place now? What traditionally philosophical means can we use in order to describe science and technology practice adequately? All of these were the questions raised by speakers whose concern in philosophy and metaphysics directed the lines of discussion.

The concepts of hybrid reality coming from ANT and adjoining 'schools' were at the centre of attention. Speakers tried to cover a wide spectrum of hybrid ontology problems: they moved from general metaphysical questions to an analysis of particular cases of 'hybridization'

balance between one's direct interest and concern over contributions made by other scholars in closer or more distant but still related fields covered by the STS term. These regular 4S & EASST meetings provide space for both keeping abreast of the most recent developments in one's own and neighbouring areas of current interest for wider STS community and for comprehending the latter's distribution in both physical and intellectual terms. To refer back to the theme of the conference - this points not only to the need of enhanced dialogue between science and society but also between various disciplines represented within STS community itself.

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such as a couple of 'scientist/engineer plus 'object'.

'Heterogeneous coupling' (in terms of I. Tchalakov) is a process that constitutes scientific and technological practice on the micro-level. This is a mode of initial relationships between a scientist and a 'thing' that is characterized by mutual 'remelting' of their goals and interests. On the part of scientist it appears as some types of actions towards non-human fellows. To investigate such types of actions, to expose ontologies that lie behind them and to trace their ethical implications are the tasks set by the participants of this session. They don't exclude (and they see it as an important part of work) that new ontological 'discoveries' and ideas can influence empirical research on laboratory/engineering life and inspire new types and methods of field studies. That was what I.

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Tchalakov talked about in his opening speech.

The paper by U. Glotzbach 'Companion Gestalt: Heterogeneous Togetherness at Issue – Ethics at Stake' opened the theme of heterogeneous togetherness. Glotzbach took up one of the aspects of scientist's involvement in his/her subject matter that he called *passivity*. The notion of *passivity* is derived from M. Buber's philosophy and means 'action of the whole being'. In laboratories you may find somebody apparently doing nothing while being deeply absorbed in something. One can say that here we deal with a process of thinking when scientist is strongly captivated by an 'object'. A hermeneutic analysis of such kind of relations in Martin Buber's terms shows that in certain moments a non-human Other appears to some I as its You. Accordingly, the I/It relation is replaced with the I/You relation in which continuous dynamic translation of the Other is going on. To put it differently, in certain You-moments, non-human beings gain personal identity that inevitably changes the I-pole of the relation, too. Glotzbach called such couples 'companion-gestalts'. He mentioned obvious difficulties in an analysis of such phenomena inasmuch as 'reciprocal togetherness' is basically not accessible for a third party. This is a non-observable movement. However, hermeneutical and metaphysical discourses would be relevant because they open a way for attaining the most genuine ethical layer of laboratory praxis.

Olga Stoliarova ('Whitehead's Concept of Concrescence and the Notion of Heterogeneous Coupling: Internal Relations as Constituents of Scientific Practice') continued discussing the 'heterogeneous coupling phenomenon' but she placed the emphasis on relational ontology that underlies it. At first, two conceptions of relation were considered. The model of *external relations* goes back to Aristotle and his idea of self-depending being that may be understood from itself without reference to any other being. This point of view culminates in a definition of substance stated by Descartes: 'substance requires nothing but itself in order to exist'. The opposite model of *internal relations* that belong to the relata and constitute them can be traced back to Plato's dialectic of a Many and a One. In the 20th Century this model is used by Whitehead who builds his ontology on the following principle: 'every actual entity requires all other entities in order to exist'.

The elementary unit of such kind of ontology is a relationship that is described via the concept of 'concrecence'. Concrescence means a process of participation of 'the many' in a unified, distinct thing that is a creative assimilation of all

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past entities as its initial elements. Stoliarova supposes that the concept of concrescence replaces a 'substance' by an 'event': the notion of event translates the sense of interaction, in other words, the sense of *simultaneity* of reciprocal determination of entities.

Further, Stoliarova turned to STS investigations of scientific practice and argued that some of STS approaches, too, interpret action as a realization of internal relations. Considering Latour's analysis of the Pasteur-and-microbes story, Stoliarova concludes that Latour bases his reasoning upon the main principle of internal relations ontology as Whitehead formulated it: 'to be something is to have the potentiality for acquiring real unity with others'. That's why microbes appear as an event, i.e. as a result of concrescence of all the circumstances of experiment.

Next, Tihomir Mitev (Plovdiv, Bulgaria) gave a paper called 'Non-orthodox Phenomenological Reduction of Emanuel Levinas v/s "Irreductions" program of Bruno Latour: searching for common places'. The speaker aimed at considering heterogeneous communities in the light of possible consensus between Latour's 'irreductionism' and Levinas' face-to-face phenomenology.

What is common between them is that meaning is incorporated into relations. According to Levinas, the Self is not a substance, but a relation (I – Other). For Latour, 'subjects' and 'objects' define and re-define each other. For both thinkers, sociality is in the centre of attention, and this sociality is derived from bodily experience (Levinas) or interactions (Latour). However, Levinas opens an ethical dimension when he puts responsibility as the genuine human mode of 'action' toward the Other. According to Levinas, responsibility rooted in perception is exactly what keeps 'otherness' for the Other.

Yes, ANT is able to follow the traces actants leave but it remains insensitive to their 'intimate' relations that are being built through emotional experiences. The point is even more important because, according to Levinas, such modes as responsibility are characterized by passivity and, consequently, they are 'traceless'. Mitev supposed that some of elements of non-orthodox phenomenology, especially its attention to perceptive and sensuous bodies, could be integrated into ANT in order to provide it with more dialogical and ethical vocabulary.

The last speaker was Ivan Tchalakov ('The Limits of Causal Action: Aristotle's theory of the action-'energeia' in the light of contemporary studies of heterogeneous micro-communities')

who questioned the notion of *action* underlying most of contemporary sociological studies of science and sociological discourse in general.

ANT operates with a 'broad definition of action' that associates action with movement. It enables to replace 'action' by the notion of translation and, thus, to equalize human and non-human actors. However, this definition of action still remains in the frame of modern tradition that has been 'forgot' the other meaning of action going beyond only movement. The Latin term 'actus' that had been used when translating Aristotle kept just the meaning of function, work, movement. But Aristotle clearly distinguished between an incomplete process directed to an outside goal (what he called 'kinesis'), and properly 'activity' having an end in itself, which he called 'energeia' and correlated with 'entelecheia'. The last two meanings missed in 'actus' provide activity with characteristic of self-realization because 'energeia' is at the same time its own result and is contained as a *reality* inside actors. The meaning of 'action-energy' was retained and developed by neo-Platonists and Orthodox tradition, while the mainstream of European philosophy interpreted action as a movement, which blended well with mechanical concepts.

Tchalakov supposed that the restoration of the lost meaning of 'action-energy' would be useful for questioning the foundations of ANT symmetries and for discussing the phenomena like resistance, passivity, suffering (in the laboratory life and social life in general) that eluded analysis in the frame of 'actus'.

In the course of session participants debated some of questions raised by speakers. Thus, polemizing with Mitev, Glotzbach supposed that *passivity* could hardly be modelled on Levinas' face-to-face phenomenology because the non-human Other did not have a face. Stoliarova was asked about the difference between 'substance' and 'event' and she explained that an 'event' was

a way of leaving the Aristotelian territory of logic definiteness of being, the territory where it was impossible to be and not be simultaneously. An 'event' gives a possibility to keep a principle of individuality without keeping the idea of enduring being that is equal to itself. Comments on Tchalakov's paper concerned the point that the 'action-energy' did not allowed to differentiate between human and non-human actions and, therefore, did not undermine symmetries (although, it founded them differently). We have to take into account that Aristotle did not define the action-energy as a properly human mode of action but put it as a mode of existence of things in general. Consequently, the 'action-energy' has to be expanded to non-human actors, too. It is not by chance, that in new European philosophy the notion of energy turned out to be 'on hand' in the schools like 'nature-philosophy', 'new monadology', 'metaphysics of biology', 'organic philosophy', all of which tried to avoid rough anthropocentrism of the main line of modern thought.

And a 'grand total' was tallied up by Leigh Star who found that speakers were occupied with a very important work trying to expose and to reconsider STS ontology that often remained implicit in case studies. And what is even more remarkable is their attempt to address to religious discourse presented by Levinas, Buber, Orthodox tradition or Whitehead. It promises a new dialogue between philosophy and science. This nice comment closed the session.

I would like to thank Ivan Tchalakov for helpful suggestions.

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## Emerging Stem Cell Strategies: Practices, Rhetorics & Policies

by Loes Kater

University of Twente, Netherlands

Over the last five years human stem cell research has emerged as a new and much discussed new bio-medical strategy. Many positive expectations are connected with stem cell research concerning the potential treatment of several serious diseases and health conditions. Stem cell research has also created a great deal of political controversy and put pressure on regulatory policy making. A double session on stem cell research was organized by Herbert Gottweis and Linda Hogle. The seven papers focused on the interrelationship between emerging research strategies, research support and regulatory policies in the field of stem cell research. The session was a great opportunity to meet other STS scholars studying stem cell research; a small but growing number.

The papers included case studies on Sweden, Israel, the USA, the United Kingdom and Germany. Sweden, Israel and the United Kingdom have developed liberal policies on stem cell research, whereas Germany has developed a more restrictive policy. The USA has a mixed position. Several papers provided clues on how to explain differences between countries.

Teresa Kulawik provided an insight in the Swedish policy which is, within Europe, closest to that of the United Kingdom. Quite surprisingly for a social-democratic regime, the Swedish political debate on biomedical research and practice faced not much criticism. Kulawik puts this down to the rather elitist policymaking structures that are still in tact within technological policies. The Israelian policy pursues one of the most permissive regulations of stem cell research. Barbara Prainsack has put the permissive policy of Israel in a cultural and religious perspective; an endangered society and a religious view on embryo's as not fully human. This has shaped a specific bioethics climate in Israel. Endorsing a permissive approach towards technologies by finding new cures for the sick is offered as the only solution. Herbert Gottweis used discourse analysis to explain differences between the USA, the UK and Germany, especially differences in dealing with risks and uncertainty. The UK has adopted a regulatory approach towards stem cell research that allowed a broad range of experimental research in this

field under government control. This policy has united a broad variety of socio-political groups. Gottweis characterized the UK strategy as a 'democratic model'. My own analysis of the UK Stem Cell Bank, the world's first, represented step two of this UK democratic model. I have analyzed two different roles for the public in the emerging network of the bank. The public in general was addressed to create broad support for stem cell research; specific publics were merely involved in some form of consultation setting, for example lay members in the Steering Committee of the SCB and focus group interviews with embryo donors.

The US stem cell research was examined from three different perspectives. Morten Christiansen used ANT concepts to reconstruct the network dynamics of human embryonic stem cells when they were introduced in the late nineties. Actors who agreed with this introduction attempted to construct embryonic stem cells as an obligatory point of passage, whereas the opposition focused on alternative points of passage such as adult stem cells. These notions help to understand why the US debate was powerfully structured around this controversy. Linda Hogle presented a paper on the strategy work going on in tissue engineering (grounding specific techniques, linking laboratories internationally) in the USA. She has done ethnographic research in practices of regenerative medicine. Hogle argued that attention should be shifted away from the political theatre to the practice of stem cell research, as the work done there will have a much bigger impact. Gottweis identified a strong mobilization of emotional language within the political theatre of the USA, used both by supporters and critics of embryonic stem cell research.

Germany was the sole country included in the session with an explicit restrictive policy. In Germany it is prohibited to harvest embryonic stem cells; however it is allowed to import them. In contrast to the debate in the USA the German debate is not polarized. There is a broad socio-political alliance that constructs embryonic stem cell research as in conflict with the political identity of Germany. The National Ethics

Council in Germany very recently announced that it would continue to oppose the cloning of human embryos for research despite calls for more research into its benefits, which confirms Gottweis' analysis of the German policy.

The aim of the Paris 4S meeting was to explore new relations between science and democracy. The idea that the public should be consulted about scientific and technological developments has been widely accepted. But how can or should the public be involved to ensure new forms of governance? The use of rhetorics and discourses by experts has structured the debates quite strongly, leaving the public more or less aside. An interesting counterpoint was provided by Catherine Waldby in her paper on cord blood banking. Private cord blood banking has been largely condemned by bioethical and professional medical bodies because the likelihood of an individual actually needing his

or her cord blood for a transplant is very low and public redistributive banking is a more efficient use of resources. Still there is a public interest. Waldby argued that a private cord blood account allows the donor to retain control over their tissues as a form of non-commodified, inalienable property if there are prospects of selling one's cord blood. It also gives the account holder a stake in the future of biotechnological development. The lesson for governance of stem cell research might be to involve specific publics, like stakeholders and donors of embryos and cord blood.

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## Interactive sessions and putting a face to texts and names

by Ragna Zeiss  
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One large reunion (around 1200 participants I heard). That is one way of describing the 4S & EASST conference in Paris. It was a reunion for people who already knew each other in person and perhaps had not seen each other for a number of years; it was a reunion for people who knew each other from email and now had a chance to meet in person; and it was a sort of reunion for people who knew each other or the other from articles and books and were now able to put a face to these texts and names. Not surprisingly, the poster session on *Spacing, timing and organizing* with many of the well known names attracted a large audience despite the warning that access to the session was restricted which certainly reduced the number of people who tried to gain access.

With 28 parallel sessions, it was not always easy to choose, to me, the most interesting one, and it would be an impossible task to write a report on the conference as a whole. Therefore, I will reflect on three interactive sessions that formed a nice change in format from individual paper presentations. Choosing a session to attend

at such a large conference depends on complex relationships between and among texts, names, and people. One can choose a session on basis of the abstract or title of the abstract; on basis of the combination of papers or people in a session; on basis of a relationship to the presenter who may be a personal friend or a co-author; or on basis the name of the author who is someone well known or someone one has read much work of and would finally like to attach a face and voice to. The three interactive sessions I will focus on below probably thanked part of their success to some well-known people attending the session and others using the opportunity to attach faces to names and texts. Yet, as we will see, they had a number of other attractive features.

Firstly, the 4S-EASST Student Meeting on *STS Careers Across the Atlantic*. This was organised by student members of 4S (Shobita Parthasarathy, Dave Conz, Robert Doubleday, Stefan Sperling) and EASST (myself) and was attended by over 50 graduate students. The panel members, Mike Lynch (Cornell University), H el ene Mialet (University of California), Trevor

Pinch (Cornell University), and Mathew Ratto (Netherlands Institute for Scientific Information Services) shortly introduced themselves and discussed the difficulties they encountered when they decided to take themselves and their career across the Atlantic. When moving from America to Britain, from France to America, from Britain to America, and from America to the Netherlands, they found that requirements for application letters, interview procedures, teaching practices, contact hours with students, the importance of graduate students during the interview process, etc. differed greatly between the two continents (and countries within a continent). Students who were thinking about or planning such a move were urged to look into it a long time in advance to make sure that for instance the application letter meets the requirements of the country to which one applies. Ratto stated however that sometimes an unexpected opportunity may come along in a country one has not much knowledge about. Taking this opportunity, despite lack of preparation, can result in a great and valuable experience as well. After the introduction, the floor was open for students to ask their questions. The panel members answered questions on for example what it is like to go back to your country after having been away for a few years and on how to prepare for working abroad. A few questions centred on the importance of publications. Mike Lynch, as editor of *Social Studies of Science*, and the other panel members on basis of their experiences, discussed the question whether the number of quality of publications were regarded as most important and whether publications were always necessary when applying for a new post. Although publications are important, it was commonly agreed that the quality of publications was more important than the number. Examples were mentioned where candidates were accepted for a job without publications, but with excellent other written material. The panel members stressed that the written material (for instance a chapter of the dissertation) that one includes in a job application, needs to be well prepared and well written.

Another successful and very well attended session was *Twenty years after "The social construction of facts and artefacts"*. *The past, present, and future of SCOT*. This session was organised by Pablo J. Boczkowski and Nelly Oudshoorn and provided the audience with a sense of history of the STS community. Trevor Pinch and Wiebe Bijker met each other for the first time at the very first EASST conference and decided to do some work together which resulted

in the above mentioned article in 1984. A number of people reflected shortly on what this article and SCOT (the Social Construction of Technology) more generally meant for their work and careers. Rayvon Fouche had managed to find his first copy of the article together with the questions he had written down on the copy, one of which was: 'is it really that easy?' During the session the construction of technology approach (SCOT as an acronym was invented by David Edge) was criticised for not including for instance race (Fouche) and gender (Judy Wajcman) issues, although Wajcman recognised that gender was integrated in the first article. Donald MacKenzie asked how successful the SCOT-based politics of technology had been in practice. Despite these few critical notes, SCOT was regarded as valuable, influential, and as an approach that 'had a lot of life left' (Wajcman). Lucy Suchman remarked that it is now hard to remember that there was a time when the integration of science and technology was heavily debated. Trevor Pinch, in his response to the reflections on SCOT, remembered that a serious question for *Social Studies of Science* was whether the journal should publish on technology. Things have changed since then, partly thanks to that first article on technology that was published in *Social Studies of Science*. Jane Summerton pointed out that the yellow, or school-bus, book (Bijker, Hughes & Pinch, *The Social Construction of Technological Systems*) had even been used by students to contest traditional hierarchies of disciplines (who can interpret technology?). Andrew Feenberg, on a personal note, told the audience how he had academically been raised by Marcuse who saw technologies as politics of domination. He described reading the 1984 article on underdetermination and interpretative flexibility as liberating. Yet, the article and texts that followed were not only influential in the past. Pinch gave an example of someone who had recently read and reviewed a text on the construction of technology and had written that this was an interesting and valuable approach that should certainly be followed up. For some SCOT is still new. Beth Bechky had the impression that SCOT is used more and more in organisation studies. However, her search for references was not very successful. It thus seems that SCOT has only recently become better known in organisation studies. Bijker illustrated, in answer to MacKenzie, how SCOT or STS in general can politicise technology by clarifying hidden politics and by showing the need to discuss hidden politics. In one of his studies he alerted actors to the way in which they handle

practices. The actors themselves then started using STS concepts. According to Bechky's supervisor SCOT could be regarded as a hit record: 'it has a good rhythm and you can dance to it'. Yet, this does not mean that SCOT has become a fixed object. Suchman congratulated Pinch and Bijker for being able to resist the hardening of categories. Bijker explained that he deliberately tells his students that there are many SCOTs and that SCOT has changed over time. Pinch exclaimed: 'That SCOT may long change'.

The last session I would briefly like to reflect on was entitled *SCOT and ANT in 5 minutes: a new counter-networking technique for STS* and was organised by Nina Wakeford and Joseph Dumit. This was, in other words, a speed-dating session that would give people, who would not normally meet, the opportunity to exchange information about their research. Also in this session there was a nice mixture of graduate students and junior scholars on the one hand and well-known people on the other (Bijker, in his own words, has become well-known because he was 'created by SCOT' and the people who read and further developed SCOT). Two rows of

## Dear members

As a result of the amazingly successful 4S-EASST Conference in August (<http://www.csi.ensmp.fr/csi/4S/index.php> is the post-conference site, including all abstracts, 130 full papers, list of participants, photos), we have over 300 new members. I would like to welcome them all to EASST, and express my hope that they will continue their membership in future years.

For those of you who are new and perhaps for some of the older members, this is a good time to remind you of various EASST activities. This *Review* appears four times a year. The editor, Chunglin Kwa ([c.l.kwa@uva.nl](mailto:c.l.kwa@uva.nl)), would be pleased to receive material from you, including reports of meetings you have attended, summaries of PhD theses, book reviews as well as more substantive pieces. The *Review* provides a place for sharing all sorts of views and ideas that may not be appropriate for a traditional academic journal. In addition, for a small fee, we can include flyers for new books and journals – a good way of promoting your new work to precisely the right audience.

We will be renewing the website ([www.easst.net](http://www.easst.net)) in the coming months. Again,

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people sat opposite each other. Both you and the person opposite you had three minutes to explain your research and get the other interested. Then one row would move one place and you would repeat the same with someone else. I very much liked the idea of the session and I did meet people who I had not met during the four days of the conference. But it was hard work, especially at the end of the conference, and at a certain point I decided to do some more in-depth networking at a slower pace with a beer at a terrace outside.

These three sessions were not only successful in the number of participants. They formed nice and informal interactive spaces in which younger and more established scholars could exchange ideas and in some cases advice each other and were a welcome change from sessions with individual paper presentations. I would like to encourage people to organise more such innovative and creative spaces at future conferences.

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I'm sure Richard Rogers ([rogers@hum.uva.nl](mailto:rogers@hum.uva.nl)) would be happy to hear your ideas. The website was one of the first in the mid-1990s and while it now has a rather fashionable retro feel, EASST Council has decided the time has come to invest in updating it.

EASST conferences are once every two years. Thus, the next one will be in 2006. Negotiations about the exact location are not yet completed, but we will let you know the place and the date as soon as we can. EASST Council has decided to support smaller workshops in the non-conference years. Elsewhere in the *Review* you can find details of how to apply for funds for workshops planned for 2005. EASST also provides travel support to PhD students as well as to senior scholars from eastern European and developing countries. Details of how to apply can be found on the website.

This is also a bumper election year. My term as president is coming to an end, as are the terms of five council members: Geoff Cooper, Nadezhda Gaponenko, Joao Nunes, Arie Rip and Ragna Zeiss (student member). Terms are four years, except for the student member who serves a two

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year term. As it is likely that no one heard my speech on the boat during the conference banquet, I would like to express my thanks again to all of them for their work and cooperation. It has made being EASST President a pleasure. Ballot papers for our replacements will be going out in early November, so if anyone would like to put themselves or someone else forward for election, please get in touch with me ([s.m.e.wyatt@uva.nl](mailto:s.m.e.wyatt@uva.nl)) as soon as possible. New members are particularly encouraged – it is not necessary to have been a member forever. In fact, new people and ideas would be very much welcomed. EASST can only provide financial support for the student member to attend meetings. Other members are expected to cover their own costs somehow. Meetings are usually

held once a year, often in conjunction with another meeting many of us are likely to attend. Much of the business is done via email.

Chunglin asked me to include my short speech given at the Presidential session during the conference. I haven't added to it, apart from providing a brief glossary for those of you who don't read Dutch. Having moved a few years ago from an English-speaking country to a Dutch-speaking one, I have become more aware of the politics of language. This is not completely new for me, but rather a return to some of my earliest political experiences: I grew up in Montréal during the 1970s, a time and place where politics of language were very vibrant.

I hope you enjoy this issue of the *Review*, and being a member of EASST.

Sally Wyatt  
*EASST President*

## For opening of 4s/easst Conference, 26 August 2004, Paris

by Sally Wyatt

Thank you Bruno. On behalf of EASST, it is my great pleasure to welcome you all. The programme looks great. Paris is a wonderful city. How could you not have a good time? Apart from expressing my gratitude on behalf of EASST and its members to Madeleine Akrich and her colleagues for all of their hard work, there is not really a lot more to say, but when did that ever stop any of us?

Yesterday during the EASST Council meeting, we looked at the membership figures by country. In absolute numbers, the British are the biggest group, but if we adjust for population, the Dutch emerge as the largest group. And if the Dutch had not been so careless as to lose Manhattan to the English in the 17<sup>th</sup> century, we might all be speaking Dutch today. So I thought it better if I began with a few words in Dutch.

Dames en heren, beste vrienden en collega's – ik heb jullie hulp nu nodig. Kunnen de Vlamingen, Nederlanders en nederlandstaligen hun handen in de lucht steken? Bedankt. Ik spreek nu enkele Nederlandse woorden. Eigenlijk zeg ik niet heel veel maar de andere weten dat niet. Ik wil dat de

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Engelssprekenden voor een minuut het gevoel hebben dat ze wat missen. Heeft iedereen een leuke vakantie gehad? Prima. Hans en ik ook. Wij zijn drie weken bij Bretagne geweest in de buurt van de schelpdieren van St Brieuc. In de komende dagen als iemand met Engels als haar of zijn moedertaal vraag je over wat ik heb hier gezegd dan moet je beantwoorden dat ik heb iets heel interessants over de toekomst van STS verteld, hoe we kunnen verder gaan met het groeiende gat tussen empirische en theoretische onderzoek, en dat ik een verdere stap met het principe van veralgemeende<sup>1</sup> symmetrie heb gemaakt. Als een niet Engelstalig iemand wat vraagt dan kun je de waarheid spreken. Ik wil graag dat jullie nu allemaal lachen en klappen alsof ik iets heel leuks heb gezegd. Hartelijk bedankt.

I have now publicly demonstrated that I can sort of speak Dutch. I have also performed the limits of constitutive reflexivity. What I briefly tried to do is take the principle of generalised symmetry to a completely new level. Dutch is a much better language for such ideas which is possibly the

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reason why there are indeed so many Dutch STS scholars. Apart from sharing those insights with my Dutch-speaking colleagues, I wanted to make two points. One – that one paragraph of Dutch was very difficult for me (and possibly also for the Dutch speakers). I am very used to public speaking, not always in such a grand building, but it is something I do regularly. I actually rather enjoy it. But I had to practise that paragraph and I was very nervous and I probably made lots of mistakes. Conversation is one thing, projecting your voice with the right emphasis is another. Imagine what it is like to give a presentation about your PhD, possibly for the first time in a language other than your own. Two – it really is frustrating if you don't know what's going on. I'm sure the good people of Paris will ensure that many of us have that experience in the coming days, but some people will also have it during the conference sessions themselves if we English speakers don't make a bit of an effort to be comprehensible.

Short Dutch-English glossary:

beantwoorden	to answer, respond
eigenlijk	actually
het gevoel	feeling
graag	please/thank you/welcome
iemand	someone/anybody/person
leuk	amusing, nice, pleasant
de lucht	air
schelpdieren	shellfish, including scallops
de taal	language
de toekomst	future
vragen	to ask
de waarheid	truth
weten	to know
zeggen	to say

Native English speakers: we are an extremely privileged group. Try not to abuse that privilege. As I said a moment ago, the programme is great, Paris is fabulous, Bruno has organised a session full of interesting people with interesting ideas who all speak English better than I speak Dutch. Actually, we are all rather privileged. I hope you enjoy this session and the conference. Thank you.

Note

Ik weet dat 'gegeneraliseerd' ook kan, maar dat is erg moeilijk uit te spreken voor mij.

Further resources:

Link to website for presidential shoes:  
[www.hestervaneeghen.com](http://www.hestervaneeghen.com)

## Shifting Boundaries between Science and Politics? Recent work on new governance arrangements in science policy

by Martin Lengwiler

*Social Science Research Center Berlin (WZB)*

**Report on the conference "Shifting Boundaries between Science and Politics: New Research Perspectives in Science Studies", Social Science Research Center (Wissenschaftszentrum Berlin für Sozialforschung WZB), June 25-26, 2004.**

Most studies on the current state of science policy in Western countries converge on a similar historical picture. Denominations for the periods change and the exact chronology differs from author to author, but authors usually distinguish between two periods in the history of science policy since the Second World War. The first period is usually set between 1945 and the early 1970s. In this era, science policy was based upon a "social contract for science", under which the relations between science and politics were guided by the principle of "blind delegation" granting science wide autonomies of self-regulation (Guston 2000). Since the 1970s or 1980s, as most scholars would argue, this social contract has been replaced by new forms of governance in science policy. As part of this process, the seemingly clear-cut boundary between science and politics was redefined and science in particular was held more accountable to political authorities and to the public. The current literature offers different interpretations for this process: some understand it as the contemporary answer to the "delegation problem of principal-agent-relations" (Braun/Guston 2003); others see the process as the emergence of complex, heterogeneous "government arrangements" (Rip 2002) or as a new regime of "collaborative assurance" in science aiming at increasing the integrity and productivity of research (Guston 2000: 144f.); again others highlight the changing models of innovation, distinguishing the traditional linear from a new co-evolutionary model of innovation as illustrated, for example, in the "triple-helix" model (Etzkowitz/Leydesdorff 1997). Finally, there is a wide literature on the changing research practices, stressing the rising significance of interdisciplinary or transdisciplinary approaches when research is increasingly done in applied contexts with close interactions between theoretical and practical

work (Rammert 2003; Nowotny et al. 2003).

This conventional wisdom was the starting point for a conference on the "Shifting Boundaries between Science and Politics". The event took place on June, 25<sup>th</sup> and 26<sup>th</sup>, 2004 at the Social Science Research Center Berlin (Wissenschaftszentrum Berlin für Sozialforschung, WZB). The conference aimed at discussing the ways in which boundaries between science and politics blurred and shifted in recent years. In this sense, boundaries were not seen as fixed and a priori given entities, but as continually and controversially redefined distinctions between the fields of science and politics. The question was not only how boundaries get drawn but also how they get surmounted and crossed. Actors involved in this reformulation include political and scientific actors but also business and industry representatives or actors speaking for the public. In order to examine its topic, the conference attempted to compare different national case studies in a European and transatlantic context.

On a disciplinary level, the conference brought together two distinct but overlapping traditions: science policy studies on the one and STS on the other side. In recent years, the correspondences between these two approaches have intensified. Science policy studies have started to take constructivist STS and its findings into account, whereas work in STS has increasingly opened up to macro-level analyses. Of course, STS has always been interested in the notion of the political ever since the field emerged in the 1970s. The sociology of scientific knowledge already pointed out the social and political interests involved in the production of scientific knowledge; the social construction of technology programme revealed the hidden "politics" of artefacts; and more recent work, inspired by a social anthropological perspective, criticised the historical divide between the realms of nature and of society (including politics), calling for an encompassing "parliamentary of things" (Cambrosio et al. 1990; Latour 2004). But over the past years, STS has increasingly examined the political institutions themselves and their relevance for scientific research – not least in the context of

this year's joint EASST/4S conference on "Public Proofs: Science, Technology and Democracy" (Jasanoff 2004; Guston 2000: 27-30).

The distinction between approaches of science policy studies and of STS mirrors two different perspectives from which the speakers at the conference looked at the shifting boundaries between science and politics: a top-down perspective on the one hand, favoured by science policy studies, and a bottom-up perspective more prevalent in STS on the other hand.

1. Papers favouring the top-down perspective discussed what Andy Stirling (SPRU, University of Sussex, UK) in his talk on "Opening Up and Closing Down? Justification, precaution and pluralism in science and technology policy" called the "unitary and prescriptive" aspects of science policy, referring primarily to new arrangements for the governance of science by political and administrative authorities. This research stresses the new bureaucratic instruments and administrative procedures, which political authorities and boundary organizations introduced in recent years, often along with increasing financial restrictions from funding agencies, as in the case of Germany. Peter Weingart (University of Bielefeld, Germany) highlighted the significance of bibliometric ranking, one of the most controversial instruments for the governance of science that became the pervasive answer to recent legitimation pressures on the research system. Weingart criticised the many inadvertent consequences of the ranking system, such as the effect of "oversteering" by forcing less competitive institutions to be closed down or as the permeation of the academic system by market-oriented ranking companies as the Thomson Corporation with its ISI Web of Knowledge<sup>SM</sup>. Other aspects of the changing governance regimes were pointed out by Dietmar Braun (University of Lausanne, Switzerland) in his talk on "New Policy Rationales in the Funding of Research". Braun argued that the currently emerging new mode of governance could best be described as "governance by networks". In his understandings, networks are cooperations between actors participating voluntarily on the base of equality and mutual recognition of interests. With this framework in mind, Braun called for a move in science policy from the old "government" style of policy to new "network forms of governance".

2. The bottom-up perspective of STS usually focuses on the problem of participation and on

the interaction between science and the public – a theme that Andy Stirling called the "plural and conditional" side of science policy. That perspective was taken up by several speakers at the conference, namely by Brian Wynne (University of Lancaster, UK) in his paper on the "Reflexive Character of Science in Policy", by Michel Callon (CSI, École des Mines, Paris) when talking about whether patients' organizations might build new regimes of science policy, or by Christophe Bonneuil (CNRS, France) and Claire Marris (INRA, Ivry-sur-Seine, France) in their case study on the effects of the French public controversy on genetically modified organisms on research orientations. Several concepts were brought forward to stress the role of non-scientific groups or "ordinary people" in the research process, like Callon's notion of the "emerging concerned groups" or the concepts of "public arenas" and "public networks" coined by Bonneuil and Marris. These papers all shared the basic argument by Brian Wynne that scientific research has to be amended by an "upstream engagement" of the public in science.

Several speakers addressed the obvious question of how to relate more closely top-down and bottom-up perspectives. Some like Andy Stirling argued for attempting to integrate both perspectives – the unitary, prescriptive and the plural, conditional side of science policy – even if the tensions between the two poles remained ultimately irreconcilable. Others placed their emphasis more on the participation of the public. Sheila Jasanoff (Harvard University, Cambridge MA) for example called for a "New Social Contract" between science, the public and the state, in order to meet the democratic challenges to science and technology policy. The contract she outlined would include some basic constitutional principles defining the meaning of a new citizenship in a knowledge society, based for example on the right to cognitive representation of the knowledge-bearing citizens of a knowledge society.

To some extent, the tension between the top-down and the bottom-up perspective is related to a theoretical division that split the papers at the conference. The way in which boundaries were reflected was dominated by two distinct theoretical approaches. The first, top-down approach was often inspired by a system-theoretical approach stressing the functional differentiation of society. This framework underlines the differences between social sub-systems and the problems of adaptation, coordination and steering at the boundaries between the sub-systems (illustrated for example

by the work of Dietmar Braun). The second approach, more prevalent in science and technology studies, highlights the notion of agency and the actors' perspective, as illustrated for example in actor-network-theory. Actor-oriented approaches, represented for example by Michel Callon, are not *per se* interested in boundaries, but rather in how individual actors are *crossing* boundaries and building up *heterogeneous* networks. These approaches do not deny boundaries, but they understand them to be in permanent flow, in a constant reorganization and reconstitution undertaken by the actors.

Looked at it more closely however, the distinction between the two approaches is not so clear-cut. Since the 1990s, system-theoretical approaches, at least in Germany, have tried to integrate the actor-perspective into the theoretical framework. Scholars in the STS community on the other hand have tried to open up actor-oriented perspectives and address wider questions of the political and economic context of science. At the conference, such a line of argument was held by Dominique Pestre (EHESS, Paris) who demanded a critical broadening of science and technology studies on questions of the financial and political context of science. Drawing on Luc Boltanski's and Eve Chiapello's "New Spirit of Capitalism" he warned that STS was at risk of becoming caught up in today's dominant social and political discourses. STS would only be able to escape this risk by thinking more globally and radically broaden the areas of study and forms of action.

A final point that was discussed at the conference was the historical assumption behind most interpretations of current transformations in science policy. Although most papers agreed that the old model – the old social contract – in science policy passed away, it was not clear yet what "new model" had replaced it. Some speakers argued that has the old model was not fully replaced but rather amended by the new model or new features. The transition into a new area of science policy would not mean that the characteristics of the old era have vanished completely. Ulrich Wengenroth (Technical University of Munich, Germany), Henry Etzkowitz (State University New York) and Dietmar Braun argued that there was still a lot of mode-1 research going on and that mode-1 was still an important source of scientific innovation. Sheila Jasanoff showed how the Old Social Contract is still used as a source of legitimacy for scientists like the Union of Concerned Scientists trying to restore scientific integrity in policymaking. Her talk also made clear that the

concepts of an "old" and a "new" model in science policy were also used as rhetorical resources for the public debate – a fact that should be taken into account when using these terms in an analytical framework.

The caveat brought up at the conference was that the transition from the old to the new era of the relation between science, policy and society was far more complicated and inconsistent than most concepts and models would suggest. One way of conceptualizing these parallel phenomena, suggested by Aric Rip, was the notion of concentric and historically developed layers.

Another suggestion from a historical point of view was to broaden the timeframe of analysis. Most historical models discussed at the conference and in the literature focus on the post-war decades. In his historical paper, Ulrich Wengenroth pointed out the potential for a historical analysis stretching back beyond the Second World War. The point when taking a 19<sup>th</sup>/20<sup>th</sup> century perspective on current science policy was that it uncovered new continuities and discontinuities. For example, taking into account the close interaction between government authorities and universities (notably technical universities) in the late 19<sup>th</sup> century, or the far-reaching direct intervention of the state in the research system during the First and the Second World War, the period of the "old" contract between science and politics based upon the autonomy of the scientific system would be reduced to a comparably short (and exceptional) period between the 1950s and the mid-1970s – two or three decades only. From this long-term perspective, the relation between science and policy becomes much closer entangled – with much closer interactions between the two spheres. Most speakers agreed that the understanding of the history of science policy is only starting to take shape and that large research lacunas still remain to be investigated.

It was not a coincidence that the conference was held at the Social Science Research Center in Berlin. Currently, the WZB fosters its activities in the fields of science studies and science policy studies. By its mission, the WZB is committed to problem-oriented basic research based on a strong empirical foundation. It investigates developmental trends, problems of adaptation, and possibilities for innovation of modern societies with a strong emphasis on international comparisons, processes of transnationalisation and the historical conditions of these trends. The conference has encouraged the WZB to continue investigating the relations and boundaries between science and politics



from a historical and an international comparative perspective. Also, the event has illustrated the need to contextualize the current changes in science policy by reflecting their wider social, cultural and economic conditions.

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## Science Narratives

by Ronlyn Duncan

University of Tasmania

Writing for the EASST Review feels somehow cathartic at the end of a long journey, otherwise known as my Doctorate. You see, I need to confess that I nearly tossed STS. It seemed an interminable task to merely demonstrate the contingency of what was deemed 'scientific'. Actor Network Theory didn't help either. Although everyone around me appeared to be using it – colleagues were even meeting in pubs late at night discussing it – I couldn't help feeling I was too much of a constructivist. I was told that ontology is the fundamental issue. Epistemology, it seemed, was passé. I regained my STS-constructivist nerve after identifying epistemology with asking *how* questions and ontology with *what* questions (Gubrium & Holstein, 2000). With this, my methodology took the form of an STS-inspired narrative analysis (Roe, 1994). A narratological lens raised the prospect of shedding light not only on the epistemological, but also the ontological.

My dissertation focused on the predictive economic and environmental modelling used in an impact assessment process for a major energy infrastructure development in Australia known as Basslink. At issue were the potential environmental impacts of Tasmania exporting hydro-electricity to Australia's mainland and into the national electricity market via a 350 kilometre sub-sea power cable. Exports from Tasmania require changes to the state's hydro-power operations, in particular higher and more variable power station discharges down the World Heritage-declared Gordon River. Although Tasmania's sole power generator and joint Basslink proponent maintained that there would be no significant environmental impact from Basslink operations, its own modelling and the many studies it commissioned painted a rather different picture. Despite this, the hydro-generator's position of 'no significant impact' prevailed and was validated by the project assessment body.

My research was guided by *how*, given the considerable extent of uncertainties and limitations with the inputs and outputs of the modelling, was the hydro-generator's case in support of the development constituted, deployed and, thereby, legitimated by the decision-making

body charged with the task of assessing the project? I found that three stories played a pivotal role. With an epistemological focus, I was able to identify their origins as well as examine their mobility and durability. Mapped from their tenuous beginnings, through the assessment process and then into the regulatory outcomes, I looked at how these narratives were packaged, how they stabilised the proponents' knowledge claims as well as what influence they had on judgments about impacts. Consequently, I was able to illustrate the extent to which stories can bridge empirical gaps, explain and obscure inconsistencies, erase unexpected model outputs, contextualise findings and mobilise ontological claims.

Two stories related directly to the predictive modelling. The first was about how the hydro-generator's *with* Basslink model was biased. The second was how operations at the Gordon Power Station had been restricted in the past due to power generation load constraints. The message these stories conveyed was that Basslink did not pose a problem because the identified environmental impacts had been substantially over-stated. This meant that the presentation of the hydro-generator's findings was accompanied by claims about the implausibility of the predictive modelling from which it derived its conclusions. The third story was about how the Gordon River was already so degraded by hydro-operations there was no going back.

Having identified the narratives, which were repeated again and again through the impact assessment documentation, it was interesting to trace not only the ontological claims that they mobilised but also their discursive effects. For instance, although other constructions were plausible, the story about a biased model constituted its model outputs as a worst case scenario. This conception provided empirical stability and confidence to the hydro-generator's in-house consultants in their evidence tendered to the assessment process. It also closed off questioning by the project's assessors of a critical component of the model.

Several constructions were mobilised by the story about the river. For instance, conceptions of the river as degraded and modified diminished its

value and were applied to all of the riverbanks instead of a far smaller zone affected by past hydro-operations. This disparity was reconciled by a convergence of the story about load constraints in the past at the Gordon Power Station and the river in the construction of the river as not in equilibrium. This meant that although only the lower zone of the riverbanks had been degraded, it was argued by the hydro-generator that a similar fate was in store for the upper section – it was simply a matter of time. This equilibrium construction depicted future degradation as a natural progression instead of arising directly from future hydro operations. It also meant that conceptions of the river as degraded and modified were applied to *all* of the river.

The story about load constraints contributed to this unfolding. With the introduction of a second *without* Basslink baseline, intended to quantify the load constraints issue, past (constrained) operations of the Gordon Power Station were rewound and the future replayed as an ideal of that past without constraints. In other words, the hydro-generator subsequently assumed that the Gordon Power Station would be run absolutely flat-out *without* Basslink. This resulted in a curious situation. In terms of a comparison of full capacity power station discharges (the most damaging for the river), the gap between *with* Basslink and *without* Basslink (without constraints) was reduced to virtually zero, yet the gap between *without* Basslink (without constraints) and *without* Basslink (with constraints) became considerably large. This means that the second baseline, which sanctions many more full capacity discharges to be sent down the river, marks the boundary from which Basslink impacts will be measured in the future, not the zone on the river that physically identifies what has happened in the past.

This scenario demonstrated the success of the narratives and the constructions they mobilised. In effect, yet-to-occur impacts on the riverbanks, the subject of the impact assessment process, were deemed as belonging to the past and, therefore, outside the remit of the public process. And although the load constraints narrative could have

been read to depict the upper zone of the riverbanks as still intact and worth conserving, constructions of the river as degraded and substantially modified meant that the story was read in the negative. The story over-ruled what was evident in the physical environment on the river.

My research also traced the coalescence of the three narratives and the constructions they mobilised in the concept 'no net Basslink impact'. This precept, a construction of the hydro-generator's legal team, reconciled the problems with the model and their outputs, as well as the divergence between the story about the river and observations that not all of the river had been substantially degraded. Importantly, the no net Basslink impact construction allowed the hydro-generator to avoid an invocation of legislation which would have required it to obtain government consent to extend its hydro-operations on the river, an onerous and potentially obstructive prerequisite.

In essence, then, using STS theory combined with a narrative analysis, I was able demonstrate that assertions from the proponents that the case for Basslink was 'scientific' and 'objective' could not be substantiated. Instead, it was one contextualised by the hydro-generator's stories. The constitutive influence of narratives was evident in respect of Basslink with the assessment body's validation of the stories rather than the evidence put before it. Crucially, a narratological lens proved to be a useful analytical tool that shed light not only on the epistemological but also the ontological.

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## Applying For Financial Support For Easst Workshops In Non-Conference Years

In non-conference years, EASST Council would like to support other academic meetings of interest to members of EASST. To do this, we are offering small grants (maximum 2500 euro) to help with the costs of organising such meetings.

For 2005, the EASST Council has decided to prioritise the following areas:

The future of STS, including new theoretical developments and the relationship between empirical and theoretical work;

New scientific and technological areas which have so far not been the subject of extensive STS analysis, including nanotechnology.

The procedure is as follows:

Applications must be submitted to the EASST President ([s.m.e.wyatt@uva.nl](mailto:s.m.e.wyatt@uva.nl)) by 1 December 2004.

A decision will be made within six-eight weeks of receipt of the application. (A sub-committee of council will review applications and make recommendations to the full council.)

The application must contain a one page outline

of the purpose of the meeting, a list of actual or potential participants and a budget. EASST support will only be considered if PhD students and/or 'young' researchers are included and the application must indicate how this will be achieved. Participants must come from at least three European countries. The budget should include all costs, indicating clearly what is being requested from EASST.

Applicants must be members of EASST, though not all participants need to be members.

If financial support from EASST is provided, all meeting material should acknowledge the support of EASST, EASST membership forms should be included with the meeting papers and a report of the meeting should be submitted to the *EASST Review* within two months of the meeting or at a date agreed with the *Review* editor.

Payment may be made prior to the start of the meeting, subject to EASST Council being satisfied the meeting is going ahead as planned. Otherwise, payment will be made after the event.

## Conference announcements and Calls for Papers

*The Human Sciences and Religion Conference*, hosted by the Société Française pour l'Histoire des Sciences de l'Homme (S.F.H.S.H.), will be held in Paris, September 2005. According to Auguste Comte's famous law, mankind was supposed to have gone through three stages: theological, metaphysical, and positive. The reign of sciences (the 'positive' age) was supposed to take its origin at the very moment when men abandoned the religious stage of their existence after the transitional stage of 'metaphysics'. The founder of positivism considered that the law did not apply only to natural sciences but also to the science of Humanity, which was the highest point of the positive knowledge, 'Sociology'. The same Auguste Comte nevertheless founded with his disciples a Church, whose dogmas and rites were carefully written down under an openly admitted fascination with Catholicism. This oversimplified summary shows the complexity of the relationship between the sciences of man and religious thought. The object of this conference is to organize different questions, to assess the current research on the topic, or even to question accepted ideas. By crossing epistemological questions and an original rigorous historiographic approach, different levels of discussion can be distinguished. 1. Science and religion - Confrontation and imitation. According to Comte's scheme, it is generally admitted that the human sciences take their flight in Western societies when beliefs and religious frames become less important, not only in individual consciousness but also among institutions. The development of the human sciences implies a rationalization of knowledge which entails the development of our modern academic institutions. Within these, religion became one of the privileged objects of the young human sciences. A 'science of religions' proper developed, whereas psychiatry, psychology, history and sociology aimed at turning religion into something 'religious' but human and only human, submitted to neutral or would-be neutral approaches. These were logically considered as hostile to official religions, and so they were under the eyes of the scientists themselves. But such general considerations raise new questions and deserve mere subtle answers. As an example we can more openly question what has been often described, perhaps too hastily, as the warfare between the sciences of man and the

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limits to which religion tried to confine them. One of the most typical examples is probably the polygenist or evolutionary theories concerning the origins of man, and the consequences they had on the sciences of anthropology, ethnology, and prehistoric archaeology, problems which we know are not yet solved. But, if we may sometimes legitimately speak of struggle, we can also speak of borrowings, since the human sciences made use of and are still making use of some concepts and religious practices. Psychologists in the nineteenth century offered psychotherapies which were very similar to confessions, direction of conscience or cure of the soul. Academic institutions can also be studied themselves as the heirs of religious institutions, with their dogmas, rites, and hierarchy. Educational institutions, especially in France, inherited from a long clerical tradition. The actors on the academic stage, scholars or intellectuals, are bound together by common creeds which take sometimes the form of lay religions, so that scientism as well as free thinking were able to take the same form as the one which was adopted by their ideological opponents. 2. Religion and positive knowledge versus the sciences of man as messianism. Religious discourses, which also aim at the knowledge of the world, can both rest upon elements borrowed from data produced by the sciences of man and contribute to their development. It will be probably necessary to re-estimate the contribution of religious scholars to the development of human sciences in many fields. Famous cases exist concerning prehistoric archaeology and human palaeontology or, in a more distant time, ethnology and geography which rest upon the knowledge of missionaries. More recently, other missionaries contributed to the development of urban socio-ethnology or the sociology of labour. And if psychologists inherited practices from the priests, the latter, in their relationship to their congregations, may have drawn inversely part of their experience from psychologists or psychoanalysts, or may have become themselves psychologists and psychoanalysts. The border line between the apologetic and the political dimensions of scientific discourses is porous and calls for more detailed studies.

But the actors of human sciences may have themselves been inspired by apologetic ends. The sciences of man, as well as religions, aimed

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sometimes at reforming man and society. One of the openly admitted objectives of the founders of sociology was to present theoretically the understanding and render practically possible a society where religion and the ethical prescriptions it conveyed had disappeared. One should not be surprised by their propensity in the course of the nineteenth century to found churches or chapels and publish catechisms. Marxism could be considered as the last messianist movement of the Western world, and in the same way psychoanalysis may have been viewed as a movement which offered a new faith and a new form of spirituality. Such questions have been carefully studied, but they still deserve to be discussed. 3. The theological foundations of the sciences of man and the practical limits of rationality. In the last instance, the very status of the discourse of the sciences of man could be questioned from the standpoint of religious thought. The most relevant examples can paradoxically be found in the most advanced fields of knowledge from an analytical standpoint: could we not assert polemically that political economy and psychology have both become in a way contemporary theological forms? Is not pedagogy, in its very attempts to become scientific, still resting on religious conceptions, in spite of the proclamations of neutrality of most of its exponents? A careful reading of authors and trends of thought in these disciplines often reveals the religious foundations of their thought, sometimes implicit, sometimes quite explicit. Practices stemming from the human sciences and claimed to be rational are still today competing with other practices which are avowedly magical or religious. The confrontation is obvious in the sphere of psychology, where there often exists a direct competition between the practitioner and the priest, the marabout and the clairvoyant, provided the former does not himself build up some form of theoretical syncretism, such as the one which is proposed by ethno-psychiatry. But recent sociological studies on the Stock Exchange show that magical practices are also here competing against rational religious practices. What should we think of the new forms of management inspired by 'new age' forms of religiosity? On such issues many fields remain to be explored. 4. Space and time. The themes concern every human science, in various and often intertwined modes. They rest mostly on the history of the Western Christian world, but comparative investigations in other cultural and religious spheres are welcome. As far as time is concerned, the Conference intends to treat such themes on a wide temporal scope, from the Renaissance or even before to our present days.

Treating this temporal scheme, as is often done, as a linear western movement of secularisation of knowledge, here again according to Comte's scheme, calls for new shades of meaning and new questions. The Conference will take place in Paris, from September 21st to 23rd. Proposals for papers (one or two pages) must be addressed before January 15th 2005 by post to SFHSH, Centre Koyré, Pavillon Chevreul, 57 Rue Cuvier, 75231, Paris Cedex 05, or by e-mail to Jacqueline Carroy, jcarroy@chess.fr or Nathalie Richard nrichard@univ-paris1.fr.

The Institute of Advanced Studies at the University of Surrey, UK, has issued a call for papers for its conference, *Modeling Urban Social Dynamics*, to be held on 7-8 April 2005. Policymakers and academic researchers have a longstanding interest in understanding how cities evolve and change. However, conventional methods of modeling urban development have not been able to capture the complexities and historical particularities of urban social dynamics. Recently, new forms of computational modeling, including agent-based modeling, have begun to be used, but as yet there is no agreement about how such models should be constructed and evaluated, and the kinds of task for which they are best suited. This interdisciplinary workshop aims to provide a forum for current work in this area, bringing together the leading social scientists, computer scientists, physicists and policy specialists to discuss these exciting developments. Contributions to the workshop are invited on the topics of: Approaches to modeling using complex adaptive systems; Agent-based modeling of urban development and change; Modeling residential mobility and residential segregation; Modeling political divisions and coalition formation in cities; Modeling cultural divisions and the construction of urban categories and distinctions; The use of social simulations in understanding cities and influencing policy; The roles of stakeholders in urban simulations; Tools for computational modeling of cities (e.g. combining MAS and GIS); Visualizing urban development; and Empirical evaluations of simulation models. Contributors should submit an abstract of the work that they wish to present, of about 2-3000 words, by 1 December 2004. Authors of accepted abstracts will be invited to submit a full paper (4-7000 words) by 1 February 2005. A selection of the papers will be published in a special section of the *Journal of Artificial Societies and Social Simulation*. The workshop will be held at the University of Surrey, in Guildford,

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UK. Guildford is a market town in the Green Belt surrounding London and is located about 35 minutes by train from central London and within easy reach of London's Heathrow and Gatwick airports. As a consequence of support from the European Commission's EXYSTENCE Network of Excellence and the University of Surrey, we are able to offer contributors of accepted papers free registration, meals and a grant towards their travel costs. Partial support may also be available for other attendees. The workshop is organized by: Elizabeth Bruch, UCLA, USA and Nigel Gilbert, University of Surrey, UK. Abstracts should be sent to Nigel Gilbert ([n.gilbert@soc.surrey.ac.uk](mailto:n.gilbert@soc.surrey.ac.uk)) by 1 December 2004, as anonymous PDF files attached to an email including full contact details. Requests for participation and financial support should be sent to the same address by the same date. For further details see: <http://www.soc.surrey.ac.uk/ias/musd.htm>

On December 1-3, 2004, the National University of Colombia, **Bogotá** will hold an international symposium, entitled *Architects of Public Health*. During the last decades, social history of science and medicine has been worried about the study of economic, social and cultural elements determining historic processes, leaving aside the study of biographies. The old descriptive and hagiographic style of writing biographies was considered as an exclusive patrimony of the old-fashioned positivism way of thinking. Furthermore, anti-positivist authors considered the individual as playing an insignificant role in the construction of historical process. According to these ideas, the study of the protagonist participation of social actors in history of science and medicine has thus been left aside for a long time. Nevertheless, the renaissance of this literary genre has reborn an intense polemic and has revived old controversies in the academic field. Some authors attribute historic biography some value, meanwhile others do not stop in disqualifying it. In order to analyze the threads that involve this problematic, it is necessary to consider a question that has been discussed some years ago: Which is the subject's role in the historical process? This symposium proposes retaking the analysis of the individual's role singularity in public health development. The aim is discuss the possible existence of personal, political, economic and ideological networks of relationships and interests in which the individuals who participated in the history of public health were immersed in, in which ways

this networks determined or not the ways of understanding and acting, and in which ways they influenced or not the decision-makings which have oriented public health politics and sanitary actions at the international, national and local levels. The challenge consists in writing small biographies not just resembling some passionate and chronologic stories about artificially constructed events but facing the reconstruction of an individual life that, on the one hand is collective and on the other is singular. The challenge is to mend this temptress and inciting plot. On the other hand, the 3rd December, symposium's last day, corresponds with the birthday celebration of Dr. Carlos Finlay, who formulated the theory concerning to the mosquito's role in the transmission of yellow fever. It will be a fine day to do a special tribute to Dr. Finlay in the frame of the symposium. The symposium will be divided in six half-day sessions: 1. The illustrated hygiene (18th century); 2. Liberal hygiene, colonialism and imperialism (19th century); 3. The hygiene's bacteriologization (end of 19th century and beginning of 20th century); 4. International organizations and public health's internationalization (first half of 20th century); 5. Well-being state, public health's epidemiologization, health and development and social medicine (second half of 20th century); 6. Globalization, social security and public health's economization (20th century). Scholars are welcomed to present papers and posters about the different social actors who have played an important role in the hygiene and public health development in their country. Abstracts of 300 words maximum must be sent to the following e-mail address: [equevedo@juval.com](mailto:equevedo@juval.com), before September 30th. The list of accepted papers and posters along with the editorial rules for its presentation and publication will be announced October 16th. The dateline for reception of the definite text of conferences, papers and posters, will be November 16th. For more information, contact Emilio Quevedo, Scientific Coordinator of the Symposium, Centro de Historia de la Medicina, [equevedo@juval.com](mailto:equevedo@juval.com).

The Graduate Programme "Entering the Knowledge Society" and the Institute for Science and Technology Studies, Bielefeld University, will organize the conference *Towards a multiversity? Universities between national traditions and global trends in higher education at Bielefeld University*, November 11-13, 2004. For more information, see [www.uni-bielefeld.de/iwt/gk/multiversity](http://www.uni-bielefeld.de/iwt/gk/multiversity), or contact Georg

Krueken, phone +49-521-1064659, or [www.uni-bielefeld.de/~kruecken](http://www.uni-bielefeld.de/~kruecken).

*Interfaces between Risk, Regulation and Culture: Exploring National Variation in Waste Management, Food Safety Regulation and the Control of Biotechnology* is a workshop organised by the Graduate Programme, Institute for Science and Technology Studies, and International Graduate school in Sociology, **Bielefeld University**. It takes place on January 27-28, 2005. See <http://www.uni-bielefeld.de/iwt/gk/interfaces>.

All of us hold images of science. But not all of us hold the same images of science. Some of us still treasure the notion of scientists in their ivory tower, hardly aware of the social questions their work arouses. No matter this persistent image, reality is different. Ever more scientists are realising only too well their tower is part of a world that affects them too, and are increasingly sensitive to the social consequences of their work. In fact, scientists are receptive to the Ethical, Legal and Social Issues (ELSI) related to or resulting from their activities. But how exactly do they respond? Is interaction between science and society across the various disciplines equally strong? Why have ELSI been attracting more attention over recent years? And what exactly is the role of religion, views of life and ideology in all of this? These and other questions on the relationship between science and society are to be reviewed and discussed at the international conference *Images of Science - New Interactions between Science and Society*, in **Amsterdam** on 6 and 7 December 2004. The conference is intended for scientists, politicians, policymakers and other parties interested from European Union states. In plenary sessions and workshops participants will receive an overview of developments over the past 15 years and a fresh look direction future. Attention will be dedicated to experts' ideas, but (relative) outsiders too will be able to contribute their opinions. Images of Science is organised by the Rathenau Institute, the Social Sciences Council of the Royal Netherlands Academy of Arts and Sciences and the All European Academies of Science (ALLEA). The conference is part of a series of events organised during the Netherlands' European Union presidency under the theme of The European Knowledge Society. This conference is realised with the support of the Dutch Ministry of Education, Culture and Science. We hereby invite you to attend this

conference and to discuss your images of science. To learn more about this event or to registrate, please visit [www.imagesofscience.com](http://www.imagesofscience.com).

The European Molecular Biology Laboratory (EMBL) and The European Molecular Biology Organization (EMBO) will hold their *5th pluridisciplinary Science and Society* conference in **Heidelberg**, Germany on 5 - 6 November, 2004. The theme of this year's conference is "Time & Aging - Mechanisms and Meanings". These joint EMBL/EMBO conferences bring together over 250 life scientists, social scientists, philosophers, journalists, science writers, students, and other members of the general public. More information concerning the conference, such as the program and online registration, is available on the EMBL Science and Society web site: <http://www.embl.org/aboutus/sciencesociety/conferences/2004/scope04.html>

The British Sociological Association's Annual Conference, *The Life Course: Fragmentation, Diversity and Risk*, will be held on 21-23 March 2005 at the **University of York**. The new social demands and complexities of life in 'late modern' or 'postmodern' global societies are transforming the life course. In an age of 'flexible' working practices and shifting family arrangements, the fundamental co-ordinates of social life are becoming ever more transitory and uncertain. At the same time, increasing social pressures towards individualisation and a common (mediatized) knowledge of 'panics', 'crises' and 'catastrophe', leave the majority with a heightened sense of personal insecurity and social unease. Under such circumstances it appears that we are made increasingly conscious of the fact that social life is characterised above all by experiences of fragmentation, diversity and risk. People are being made to question the prevailing ideas of who they are and what they should get out of life. Moreover, it can be argued that the cultural pluralism and reflexivity of society at large is mirrored in the extent to which western sociology has become a repository for expressions of personal discontent and a 'celebration' of ideologies of difference. It is no longer possible to identify sociology with a common set of intellectual practices and disciplinary concerns; the sociological enterprise is as fragmented and uncertain as the societies it seeks to explain. How should we respond to this state of affairs? What is the 'promise' of sociology for our times? E-mail:

Conference2005@britsoc.org.uk or visit the BSA Website: [www.britsoc.co.uk/conference](http://www.britsoc.co.uk/conference). Conference organising team and stream convenors Larry Ray, Miri Song, Sarah Vickerstaff, Azrini Wahidin and Iain Wilkinson (University of Kent).

The International Conference, *Sharing Knowledge? Exploring the interfaces between science and society and the role of science communication*, hosted by the Da Vinci Institute, centre for science communication IITTO, Institute for Innovation and Transdisciplinary Research, in cooperation with the University of Antwerp and the Rathenau Institute, will be held in **Amsterdam**, 1-2 November 2004. The key issues are: What are the new roads for science communication: science centres, TV, internet? How can we incorporate different types of knowledge in the research process? What are the risks of 'public communication about science and technology' for the public and for politics? Why should and how can we organise interaction between science and policy?

Location: Auditorium, Vrije Universiteit, De Boelelaan 1105, Amsterdam. Contact: [info@davinci-instituut.nl](mailto:info@davinci-instituut.nl). For further information see: [www.davinci-instituut.nl/conf/](http://www.davinci-instituut.nl/conf/)

In the eighteenth century Giambattista Vico formulated his theories of history of human civilization as *The New Science*, in a gesture, which curiously parallels the proclamation of a new epistemology by the father of history, Herodotus, in the fifth century BC. In the history of history, we continuously see this mode of knowledge re-created and displayed anew, as new, and the discourse from which it repeatedly emerges is most often that of myth. This relationship is not simply one of opposition, as the early historians appropriate myth even while they seem to separate their works from this kind of story-telling. A similarly complex relationship can be seen today between myth and history. Contemporary views of the social significance of myth have clear affinities with histories of mentalité, and the importance of history in shaping individual and collective identity. In both oral and written history can be seen mythicizing structures, through which events in time can be made meaningful beyond time. In the twentieth century, the importance of memory, and of the performance of memory, has become pressing for the reaffirmation of humanity. At the same time, we see that history has become one of the most dominant systems of knowledge in the

Western World, subsuming almost entirely literary and art criticism, and placing strongholds in the domains of philosophy and the sciences. This conference aims to explore the question of the many relationships between different forms of 'scientific' knowledge and myth, with especial focus on the claims made in different epochs to the instauration of a 'new science', and the mythic status of those very claims. *The Myth and the New Science* conference will take place in the **University of Bristol** in July 2006. Papers are welcomed on any of the following aspects: myth and the new sciences of antiquity, Renaissance humanism, the Enlightenment, history of science, the new historicism, psychoanalysis, postmodernism, and the role of history in the discourses of mythology. Pre-arranged panels will also be welcome. Proposals for papers should come in the form of abstracts (one side of A4/US letter) to Dr. Ellen O'Gorman, Department of Classics and Ancient History, University of Bristol, Bristol BS8 1TB (tel. +44 117 928 9848; fax. +44 117 928 8678; email. [e.c.ogorman@bris.ac.uk](mailto:e.c.ogorman@bris.ac.uk)), by 30 June 2005.

A workshop, *Imaging NanoSpace - Bildwelten der Nanoforschung*, will take place on May 11-14 2005, at the Zentrum für interdisziplinäre Forschung, **Universität Bielefeld**, Germany. Images and the power of image-making are defining the field of nanoscience and nanotechnology. This is reflected in the founding myths of the field (which is said to have begun with STM and AFM microscope) and its popular representations that feature dramatic molecular landscapes, visionary devices, or the manipulation of molecules. Much of nanoscale research practice revolves around the creation and interpretation of images. The workshop will focus on the specific characteristics of images as visual representations. It considers the whole range of images from microscopy and simulation to popular culture. Scientists from the fields of STS, art theory and history, cultural studies, communication studies, and history and philosophy of science are invited to contribute. The full call for papers takes the form of an internet-exhibition at <http://www.ifs.tu-darmstadt.de/phil/NanoSpace>. This virtual gallery features 14 families of images. These are supposed to serve as a starting point and common referent for the talks and workshop discussions. While contributors are therefore asked to relate their proposals to one or more of these 14 families, they are not restricted to the images in the web gallery but invited to expand the pool.

Please send a 200 to 500-word abstract in the form of a word-document by December 1, 2004 to: [jochen.hennig@staff.hu-berlin.de](mailto:jochen.hennig@staff.hu-berlin.de) (Jochen Hennig, Helmholtz Zentrum für Kulturtechnik, Humboldt University, Unter den Linden 6, 10099 Berlin, Germany). Please indicate the families of images from the web gallery that relate to your proposal. The conference language is English, and a publication is planned. For further information please contact: [jochen.hennig@staff.hu-berlin.de](mailto:jochen.hennig@staff.hu-berlin.de) or [nordmann@phil.tu-darmstadt.de](mailto:nordmann@phil.tu-darmstadt.de)

The ESA Sociology of Science and Technology Network (SSTNET) is organizing a workshop focused on the general topic of *Biotech Age*. This event will occur in **Lisbon**, on 28-29 January 2005 (see also <http://www.mpi-fg-koeln.mpg.de/sstnet/news.html>). The interest and development in biotechnology and its applications is rapid and awesome. By means of this development we are now able to influence our own evolution and the development of other organisms, which raises a number of ethical, legal, political and social concerns. Generally, biotechnology affects human life in a number of ways where currently the optimistic views are counterbalanced by public concern of the risks involved. These are some of the issues we would wish to be elucidated in the Lisbon workshop: New perceptions of health, disease, normality and functional impairment are potential breakthroughs for the human kind and concurrently frightening if issues concerning privacy and the use of such information in biobanks are not handled properly. A great interest has been attached to stem cell research, therapeutic cloning, xenotransplantation and pharmacogenetics. Controversies surrounding genetically modified organisms concern positive effects on agricultural productivity and its potential promises in the fight against malnutrition and starvation as well as a lessen dependence on pesticides versus negative effects such as threats to human health, food safety and adverse effects on biological diversity. R&D in biotechnology is often financed by private capital due to its potential commercial possibilities. This raises concerns about global and state regulations, governance and other economical, ethical and legal actions. Discussions entail issues such as intellectual property rights, patenting of genes, monopolization of discoveries, public attitudes and protection against risks. There is a growing need to analyze and carry out empirical investigations on these and other pertinent issues in the fields of

biotechnology from a social science perspective. Therefore we welcome sociological, ethical and interdisciplinary research that could bring new ideas, theories, methods and data to elucidate the profound consequences of biotechnology and its applications. Contact Luísa Oliveira, Dinamia - Centre for Socioeconomics Change, ISCTE (Instituto Superior de Ciências do Trabalho e da Empresa), Av. Forças Armadas, 1600 Lisboa, Portugal, Phone: (351) 21- 7903078 Fax (351) 21 7940042; E-mail: [luisa.oliveira@iscte.pt](mailto:luisa.oliveira@iscte.pt)

The conference, *Seeing, Understanding, Learning in the Mobile Age*, is to take place in **Budapest**, April 28-30 2005. Speakers will include Maurizio Ferraris, Peter Glotz, Rom Harré, James Katz, Marcelo Milrad, and Mike Sharples. Contributions are invited from philosophers, psychologists, education theorists, and other interested scholars on the following and related topics: from seeing to understanding; visual communication and pictorial meaning; from static pictures to dynamic images; writing, speaking, messaging; collective thinking and the network individual; mobile communication and scientific change; technology, media and the dissemination of knowledge; and ubiquitous learning and the transformation of education.

Target dates: Submission of abstracts (max. 300 words) and short biographical statements (max. 150 words) by Dec. 1, 2004. Early submissions are strongly encouraged. Please send your submissions to Kristof Nyiri, [nyiri@phil-inst.hu](mailto:nyiri@phil-inst.hu). Those submitting abstracts will be notified of the decision concerning acceptance by January 5, 2005. Deadline for receipt of draft full-length versions of papers: March 15. Receipt of draft papers by this deadline is a condition for inclusion in the program. The papers will be compiled and distributed to all participants at the time of the conference. -- Deadline for receipt of final manuscripts for inclusion in the published conference proceedings: Sept. 1, 2005. The conference is organized by the Institute for Philosophical Research of the Hungarian Academy of Sciences and T-Mobile Hungary Co. Ltd. Conference website: <http://www.fil.hu/mobil/2005> See also the Website of the research project, Communications in the 21<sup>st</sup> Century – The Mobile Information Society: <http://21st.century.phil-inst.hu>. Earlier volumes published in the framework of this conference series: <http://21st.century.phil-inst.hu/volumes.htm>

The conference, *Advancing Science and Society Interactions*, will be held in **Seville**, Spain, 3-5 February 2005. The conference is organised by the International Science Shop Network 'Living Knowledge' and supported by the European Commission under its Science and Society Programme. This international conference will provide a forum where information on community based research, carried out in both community and academic settings, can be shared and developed. It will reflect the social impact and scientific and democratic value of research from a range of disciplines including social, natural, physical and technological sciences. This conference will be of interest to people who are active in, or interested in, the field of community-based research. Practitioners from non-governmental organisations (NGOs), research institutes, universities (both academics/faculty and students) and science and society policy makers are invited to share their experiences. The conference themes will include (1) The impact of communities on the research and policy agenda; (2) Citizen participation in research and policy making; (3) Development of infrastructures for mediation and communication of community based research; and (4) Local and global demands for access to research, science, education and technology. The official languages of the conference are English and Spanish. Translation will be available throughout the conference. The Conference will include plenary sessions, oral presentations, workshops, poster sessions, exhibitions and a marketplace. There will be opportunities for field trips, excursions and networking. Childcare will be offered during the conference. For further information please contact the Conference Secretariat [conference@paxmediterranea.com](mailto:conference@paxmediterranea.com) or visit the conference website [www.cienciaysociedadsevilla.org](http://www.cienciaysociedadsevilla.org) or [www.sciencshops.org](http://www.sciencshops.org)

From 1995 to 2003, **Manchester Metropolitan University** hosted a series of very successful annual international conferences on *Alternative Futures and Popular Protest*. The Tenth conference, planned for April 2004, had to be cancelled. We're very happy to announce that the Tenth conference will now be held, between Wednesday 30th March and Friday 1st April 2005. The Conference rubric remains as in previous years. The aim is to explore the dynamics of popular movements, along with the ideas which animate their activists and supporters and which contribute to shaping their fate. Reflecting the inherent cross-disciplinary nature

of the issues, previous participants (from over 40 countries) have come from such specialisms as sociology, politics, cultural studies, social psychology, economics, history and geography. The Manchester conferences have also been notable for discovering a fruitful and friendly meeting ground between activism and academia. We invite offers of papers relevant to the conference themes. Papers should address such matters as: contemporary and historical social movements and popular protests; social movement theory; utopias and experiments; ideologies of collective action; and others. To offer a paper, please contact either of the conference convenors with a brief abstract: Colin Barker, Dept. of Sociology, or Mike Tyldesley, Dept. of Politics and Philosophy, Manchester Metropolitan University, Geoffrey Manton Building, Rosamond Street West, Manchester M15 6LL, England, email: [c.barker@mmu.ac.uk](mailto:c.barker@mmu.ac.uk) or [m.tyldesley@mmu.ac.uk](mailto:m.tyldesley@mmu.ac.uk) Fax: +44 161 247 6312 (Wherever possible, please use email, especially as Colin Barker is now a retired gent, only occasionally collecting physical mail from the Department.)

*Mephistos* is an international graduate student conference in the History, Philosophy, and Sociology of Science, Technology and Medicine. The purpose of the conference is to stimulate open discussion among graduate students. The graduate community at **Brown University**, in association with the Committee on Science & Technology Studies, is proud to host the twenty-third annual edition of the event, which will be held on March 5-6, 2005. The 2005 Mephistos Organizing Committee welcomes proposals for individual papers from graduate students interested in the topics named above and/or the interdisciplinary field of Science & Technology Studies (STS). Please submit all of the following by email to Tanya Sheehan, Chair of the Organizing Committee, at [mephistos@brown.edu](mailto:mephistos@brown.edu). Cover letter including your name, institutional affiliation (department and college/university), title of proposed paper, complete mailing address, and telephone number(s). Include a one-page abstract of the proposed paper (200-300 words-MS Word attachment preferred), and a curriculum vitae (no more than 3 pages-MS Word attachment preferred). Only complete submissions received by December 1, 2004 will be considered. Letters of acceptance will be emailed to applicants no later than January 1, 2005. Please keep in mind that Mephistos conference papers are expected to

be formal presentations of 20 minutes in length. The 2005 Organizing Committee plans to continue the conference's long tradition of providing modest travel grants to each of the conference speakers. For further information, please consult the conference website (<http://www.brown.edu/Students/Mephistos/>)

*Environment, Knowledge and Democracy*, an international sociology conference, sponsored by the RC24 of the ISA (Environment and Society Research Committee of the International Sociological Association), and organised by the University of the Mediterranean, Department of Human Sciences, DESMID-UMR Espace and the SHADYC (EHESS-CNRS), will be held 6-7 July 2005, at the Faculty of Sciences of Luminy, **Marseille**, France. This is the call for papers. Biodiversity, global change and risk management are among the main contemporary environmental issues. Most of the international conventions signed since 1992 on the theme reaffirm the development of democracy as a condition of sustainability. Such an "environmental democracy" rests on the mobilisation of participative democratic procedures bringing together politicians, economic actors, scientists, and citizens. In these forums, socially differentiated forms of knowledge, representations, and practices about the environment confront each other. Thus, the development of these forms of "environmental democracy" raises, as central issues, questions about the production, diffusion, and uses of knowledge about nature and the environment. For the past 30 years, protectionist positions about environment have been widely developed and diffused. Scientifically based, this discourse has been progressively appropriated by the public, even among popular classes. This historical evolution raises the question of the relationship between scientific and lay knowledge. A double process of attraction/repulsion can be observed between these two forms. On one hand, an explicit hierarchy still exists between them; on the other, they seem more borderless than they used to be, with popular discourses calling on forms of scientific expertise, and scientific discourses emphasising the importance of uncertainty. Environmental issues seem particularly propitious to the development of what A. Giddens calls reflexivity. In this context, what is the place of science within environmental controversies? In Western countries, the wide diffusion of the environmental discourse no longer allows strong oppositions between the

representation of the different social classes to be made. However, differences are still observable in social practices. Moreover, on the international level, strong differences are clear, especially between the North and the South. For instance, Western NGO's and scientists have become actors in the management of the environment in Southern countries, where they tend to impose their own conception of nature, often to the detriment of local populations. In this context, the issue of the knowledge will allow us to rethink the social and cultural relationships involved into the management of the environment. Management of the environment is more and more oriented towards the development of participatory democracy. Public debates, consensus conferences, local fora, etc. belong to what has become to be known as "governance." These different forms of debate introduce a plural conception of knowledge(s). Science is explicitly replaced by "the sciences" in such debates, and the monopoly of the scientific community breaks down, leading to a hybridisation of the political, economical and juridical fields (Callon and Rip 1992, Latour 1999). The traditional dualisms-object/subject, Nature/culture-and the old debate around realism versus constructivism are brought into question. For the "ordinary" citizen, the media are an important source of information on environmental problems; they configure and relay both local and global discussions and debates in the public sphere. Press, radio, television, and the internet frame environmental problems in various manners but also echo the different visions of nature harbored by their publics. What role do they play in enabling citizens to take part in democratic processes around environmental problems, what forms of knowledge circulate in their pages or on their screens, how are culturally diverse conceptions of the place of humans in the world reflected in the media? Environmental issues break down the borders between scientific and popular knowledge, between sciences and society, between North and South. They also affect the internal partitions of scientific knowledge. The classical divisions between the scientific disciplines do not always manage to catch the complexity of environmental issues. Then, pluridisciplinarity and interdisciplinarity - even transdisciplinarity - tend to be developed. What can we learn from these experiences? Are these borderless sciences an appropriate answer to the implication of scientific knowledge in the management of the "environmental flows" (Mol and Spaargaren 2003)? Deadline for submission of abstract (1 page in English): December 31

2004. Further information about the conference and submissions of abstracts:  
Conference.Sociology@luminy.univ-mrs.fr.

The 5th EPIP International Conference, entitled *European Policy on Patents and Intellectual Property: What direction should it go?*, will be held at the Department of Social Science, **Roskilde University**, Copenhagen, Denmark, 10-11 March 2005. The world of intellectual property rights in Europe is changing at a breathtaking speed. This does not just refer to the increasing efforts by the EU to harmonize and regulate these matters following the logic of the single market, or to the new trans-national dynamics emerging from this, but also to the equally rapidly changing praxis and appropriation strategies of innovating firms in virtually all industrial sectors. This EPIP conference focuses precisely on the challenges and opportunities related to these transformations. The topics include the organization of the patent system in Europe; comparing the US, EU and Japanese patent systems; litigation, enforcement and other legal implementation issues in IPR; industrial dynamics and IPR regulation in Europe; university patents in Europe; copyrights protection in Europe; software patents in Europe; database protection and innovation in Europe; and trademark protection in Europe. Full papers should be submitted no later than December 1st, 2004 to Susana Borrás (epip@ruc.dk). The selection will be communicated in January 10th, 2005. More information about the conference can be found at: <http://www.epip.ruc.dk>. EPIP (European Policy for Intellectual Property) is a Research project funded by the European Commission within the Specific Programme "Improving the Human Research Potential and the Socio-economic Knowledge Base." EPIP website: <http://www.dauphine.fr/imri/EPIP/welcome.html>

For the 5<sup>th</sup> *International Triple Helix Conference* (<http://www.triplehelix5.com>), colleagues from around the world with backgrounds in all three helices (academics, practitioners and policy makers) and interested in the interaction between University, Government and Industry, are invited to present a paper on issues related to the conference theme: economics of innovation, organizational sociology, regional policy, business & management, cognitive economics, finance, law & economics, industrial economics, scientific & technology policy, political science.

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Any other contributions in line with the Triple Helix concept are welcome. Two types of papers may be presented. 1) Papers based on academic research, which may be either conceptual or empirical. Conceptual papers should develop strong arguments and new theoretical perspectives on issues related to the Triple Helix concept (i.e. a comprehensive review, support or confrontation of the existing literature to develop a new theoretical perspective). Empirical papers should instead have a short and focused literature review to develop the research hypotheses, explain the methodology, present the data and their analysis, draw appropriate conclusions and discuss the theoretical and practical implications of the findings. 2) Papers based on policy practices or practitioner's reflections. These papers should contain a brief narrative section describing the policy or practice presented and explaining its purpose and objective. The presentation section should elaborate on the different issues involved in the implementation of the innovation in question and/or present a case study. The conclusion should contain recommended solutions and/or the outcomes of the study in question. The review and selection the International Scientific Committee's referees will be made on extended abstracts (1500 words or 3 full pages) and will be based on the quality and relevance of the paper. The deadline for submission is 1st November 2004. Full papers must be submitted by 1 February 2005 (though it may be sent together with the extended abstract) and should not exceed 7000 words. They should allow 20 minutes for presentation and up to 5 minutes for discussion. Young researchers and Ph.D students, particularly from transitional and developing countries are encouraged to participate. Grants are available upon request depending on resources available. University departments, research groups and academics associations are invited to submit workshop proposals (maximum 3 pages), illustrating contents, aims, methods, relevance of the theme and a draft list of the main contributors. All submissions (in PDF or MS Word format) should be sent to Paola Caretta or Rocio Ribelles Zorita at: [organization@triplehelix5.com](mailto:organization@triplehelix5.com).

The annual *British Society for the History of Science Postgraduate Conference* will take place at the Department of History and Philosophy of Science, **Cambridge University**, January 5th-7th, 2005. The conference provides an opportunity for postgraduates working in history of science, technology and medicine, as well as those researching relevant topics in other

disciplines, to meet and share their work. Organized to include as many participants as possible, this conference is an ideal way to meet other postgraduates in a relaxed and friendly atmosphere. It is also a great place to share new or developing ideas and test presentation skills on an audience of your peers. In order to give as many people as possible the chance to share their work, papers should take no more than fifteen minutes to present. The conference will begin with a welcome reception hosted by the Department of History and Philosophy of Science on the evening of Tuesday, 5th January. Talks will be presented Wednesday, 6th and Thursday, 7th January. A conference dinner will be held at Pembroke College on Wednesday evening. We will also schedule a visit to the world-class Whipple Museum of the History of Science. To download a registration form, please visit: [www.hps.cam.ac.uk/bshs](http://www.hps.cam.ac.uk/bshs). Please send a brief abstract (no more than 250 words) to: [bshspostgrad2005@hotmail.com](mailto:bshspostgrad2005@hotmail.com). The deadline for applications is WEDNESDAY 3rd NOVEMBER. Applications after that date will be considered if places are still unfilled, but please contact the organisation committee before completing a registration form, to check the availability of presentation slots. The BSHS Butler Fund makes grants of around £20 to £50 towards the travel costs of students attending the Postgraduate Conference. Application forms are available on the BSHS website (under 'Documentation' on <http://www.bshs.org.uk/conf/>), and should be sent to the BSHS Treasurer by December 3rd 2004. Applicants must be members of BSHS, and must be currently registered for a postgraduate degree. Please send applications to: BSHS Treasurer, Dr A. Fyfe, Dept of History and Philosophy of Science, Free School Lane, Cambridge CB2 3RH. The organising committee for the BSHS Postgraduate Conference 2005 is happy to answer any questions you may have. We are: Sarah Dry, Anke Timmermann, Sadiya Qureshi and Patrick Boner. Please contact us at [bshspostgrad2005@hotmail.com](mailto:bshspostgrad2005@hotmail.com).

International conferences in the *History of Science* at the Maison Française, **Oxford**, organized with the support of the Service Science et Technologie of the French Embassy, London are taking place this autumn. Friday 5 November (9.30am-5.30pm) and Saturday 6 November (9.30am-5.30pm) at the Maison Française, Norham Road, Oxford -- Special effects: artifices and magic. Convenors: Emmanuel Grimaud et Sophie Houdart (University of Paris X) and

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Denis Vidal (IRD). Speakers will include: Cécile Chesnais and Lubomira Palikarska (University of Paris X); Arnaud Deshayes (Ecole d'Art d'Avignon); Graham Jones (New York University); Elizabeth Claverie et Xavier Marie (EHESS, Paris); Andreas Mayer (Ecole des Mines, Paris); Stéphane Van Damme (CNRS-MFO); Albena Yaneva (Max Planck Institute). All the papers for this meeting will be in English. Friday 26 November (2-6pm) and Saturday 27 November (9.30am-6pm) at the Maison Française, Norham Road, Oxford -- Atomism in medieval philosophy. Convenors: Aurélien Robert (University of Nantes-EPHE, Paris) and Christophe Grellard (University of Paris I). Speakers will include: Joël Biard (CESR, Tours); Jean Celeyrette (CNRS-University of Lille III); John Murdoch (Harvard University); Sander De Boer (University of Nijmegen); Cecilia Trifogli (All Souls College, Oxford). For further details, please contact Dr Stéphane Van Damme [stephane.vandamme@history.oxford.ac.uk](mailto:stephane.vandamme@history.oxford.ac.uk).

The e-science conference, the *Fist International Society on e-Social Science*, to be held at the **University of Manchester**, UK, on 22nd - 24th July 2004, has issued a call. The vision of the 'Grid' first emerged as a solution to the highly specialised computing infrastructure requirements of particle physics. The past five years, however, have seen the Grid's potential recognised by the wider scientific research community and the emergence of new forms of research practice now encapsulated in the notion of 'e-Science'. Now, members of the social science research community in the UK and elsewhere are beginning to explore how they can use the Grid and to explore the prospects for 'e-Social Science'. This year, for example, has seen the creation in the UK of the National Centre for e-Social Science (NCeSS). The opportunities presented by the Grid for social science research are numerous and intriguing. The Grid will make it possible for new computational tools to be brought to bear on a diverse range of social science research problems; it will make established social science datasets more readily accessible and easier to integrate; it will make feasible the collection and management new kinds of data on an unprecedented scale. Beyond enhancing existing research methods, however, e-Social Science also brings with it the prospect of articulating a radically new research agenda and encouraging the formation of new forms of research community. Realising the full potential for e-Social Science will be a major challenge and calls for a major collaborative effort from

social scientists and Grid developers. As a contribution to meeting this challenge, NCeSS is very pleased to announce the first international conference on e-Social Science. We invite contributions from members of the social science and Grid research communities with experience of - or interests in - exploring, developing and applying e-Social Science research methods, practices, tools and technologies. Submission categories include: long and short papers, posters, workshops and tutorials. Topics of interest include, but are not restricted to, the following: Enhancing existing research methods; Novel research methods; Challenges of large scale collaborative research; Experience of e-Science and e-Social Science practice; Research ethics; Socio-technical issues in the development of e-Social Science; Standards for metadata, ontologies, annotation, curation, etc; Middleware for data collection, sharing and integration; Tools for data mining, visualisation, modelling and collaborative research; and Usability issues in tools and middleware. Details of submission formats and deadlines will be announced shortly. The conference mailing list can be found at - <http://www.jiscmail.ac.uk/E-SOCIAL-SCIENCE-NEWS>. The website is [www.ncess.ac.uk](http://www.ncess.ac.uk).

The relationship between communities and technology is an increasingly important research topic as the number of communities turning to technology for online and face-to-face support grows. The *Second International Conference on Communities & Technologies (C&T 2005)* conference, Milan, Italy, 13-16 June, 2005, provides a forum for stimulating and disseminating research about all facets of community and technology support for communities. To be successful this field requires multidisciplinary research efforts involving researchers from different fields of applied computer science (Computer Supported Cooperative Work, Computer Supported Collaborative Learning, Artificial Intelligence, Information Retrieval, Human Computer Interaction, Information Systems), the social sciences (Economics, Management Science, Psychology, Political Science, Sociology, Ethnography, Linguistics, Cultural Studies, Economics) and many application areas, such as Education, Business, Medicine and civic engagement. Communities are social entities whose participants share common goals, needs, interests, and practices: they constitute the basic units of social experience. For a number of reasons, researchers are increasingly interested in

the topic of communities. First, within a global knowledge-based society, communities play a pivotal role. Problems such as new forms of political participation and civic engagement, maintenance of cultural identity, or the integration of minorities need to be tackled on the community level. Second, communities also re-shape the processes of learning and sharing knowledge in and among organizations, formal and informal groups. The Internet and the Web make communication possible across national boundaries and between cultures in ways that could not happen before. Furthermore, mobile devices, particularly advanced phone technologies, promise to open the Internet to people who have been denied access for financial, technical and cultural reasons. For information technologies to support communities research is needed to understand the social, technical and usability needs of participants. Many topics need to be addressed including: trust-building, maintaining (awareness of) social relations, social capital, visualization of social relationships, matching (unknown) participants, bridging between physical and electronically-mediated interaction, cultural needs.

The conference offers an opportunity to present and discuss empirical and conceptual research. Topics covered include, but are not restricted to the following subjects: (1) Social science approaches of communities and technologies: models and theories; online communities and organization theory; communities and social network analysis; ethnographic studies of virtual communities; (2) Social dimensions of community technologies: privacy and security; empathy and trust; participation and non-participation; community learning; (3) Local communities and social capital: technologies and social capital development; community informatics / digital cities; case studies of community building and development; cross-cultural communities; communities and NGO's; local, rural and regional communities; (4) Communities in organizations and business: communities and business models; consumer communities and electronic commerce; online consumer and brand communities; communities and knowledge management; (5) Communities and innovation: communities of practice and communities of interest; communities and innovation; open source communities; epistemic communities and technology development; (6) Technologies for community support: virtual, networked and mobile community formation and development; novel forms of technology support; design and development methods; technical

architectures; interoperability among community systems; virtual community support for education, business, government, civic activities, light-weight technologies; visualization.

**Paper submission:** Full research papers of not more than 20 pages should be produced in the conference publications format. Papers must be submitted electronically. The conference website will have a facility for this.

**Workshops:** Proposals should be no longer than 4 pages in the conference publications format and should include a summary of no more than 150 words describing the theme(s) of the workshop, a longer description of the workshop activities and goals, the background of the organizer(s), the maximum number of participants, the means of soliciting participation, and the means of selecting participants. Submissions are due in PDF or Word format attached to an email sent to the following email address: [workshop-cct2005@disco.unimib.it](mailto:workshop-cct2005@disco.unimib.it); the sender's email address will be used for further contacts.

**Proceedings:** The proceedings will be published

## Web news

Colleagues may be interested to see two websites recently launched by the Science Museum in London. [www.ingenious.org.uk](http://www.ingenious.org.uk) contextualises and presents 30,000 images of pictures and artefacts from the museum's collections. [www.makingthemodernworld.org.uk](http://www.makingthemodernworld.org.uk) presents an animated history of technology since 1750 and links scenes to educational material for high school students. Further information is available from Robert Bud at the Science Museum, [robert.bud@nmsi.ac.uk](mailto:robert.bud@nmsi.ac.uk)

*Surveillance & Society, The international journal of surveillance studies*, is at <http://www.surveillance-and-society.org>. The managing editor is Dr David Wood, [d.f.j.wood@ncl.ac.uk](mailto:d.f.j.wood@ncl.ac.uk).

A new email discussion list has been launched to encourage the development of an international research network on the attempts at political engagement by scientists from the 1930s to the 1950s. Along with the forthcoming symposium at the Beijing XXII International Congress, the

by Kluwer Academic Publishers  
Important Dates: November, 12, 2004:  
Submission deadline for papers; December, 03, 2004: Submission deadline for workshops;  
December, 23, 2004: Notification of acceptance for workshops; January, 15, 2005: Notification of acceptance for papers; February, 15, 2005: Submission of camera-ready papers; May, 13, 2005: early registration;  
June, 13 to 16, 2005: Conference held in Milano.  
**Website:** <http://www.cct2005.disco.unimib.it/>  
Conference Co-Chairs: Giorgio De Michelis (University of Milano Bicocca), Carla Simone (University of Milano Bicocca); Program Co-Chairs: Jennifer Preece (University of Maryland), Peter van den Besselaar (Royal Netherlands Academy of Arts and Sciences and University of Amsterdam); Workshops Chair: Fiorella De Cindio (University of Milano); Organization Co-Chairs: Alessandra Agostini (University of Milano), Marcello Sarini (University of Milano Bicocca).

list is the product of the excellent international colloquium held at REHSEIS, University of Paris 7 in June 2004. We hope to publish the papers from this event in the near future. The email list is titled 'Collegevisible@jiscmail.ac.uk' in honour of Gary Werskey's marvelous characterization of some of the key figures in the period as a 'Visible College'. The list takes the French variant in honour of the research group that stimulated the project (and French historians continue to form the majority of subscribers).

The relationship between politics and science, between science and society, and the particular manifestation of this in the period from 1930 is the main concern of the research network. However, those with interests in this field in other historical periods are also welcome to join the list as we seek to develop analytics on political engagement and science throughout the history of science. If you would like to subscribe, please contact the list manager, Chris Chilvers, Senior Research Fellow, Science Museum, Exhibition Road, London, SW7 2DD, UK, [christopher.chilvers@nmsi.ac.uk](mailto:christopher.chilvers@nmsi.ac.uk)



## News from the Profession

An exhibition, "Macht und Kraft der Bilder. Wie ueber Nachhaltigkeit argumentiert wird" is on tour in Switzerland. Sustainability (Nachhaltigkeit) is a well-known concept trying to combine ecology, economy and society in a balanced way. It is an aim of the exhibition not only to introduce the concept of sustainability, but also to question and discuss it. Visitors will be led by images through the exhibition, which were published in the process of the implementation of the Entlebuch Biosphere and the World Natural Heritage Site Jungfrau-Aletsch-Bietschhorn. According to the angle a visitor takes to look at the exhibition (tourism, agriculture, industrial production, nature conservation etc.), he or she will take a different path through it. Additional information: [www.machtderbilder.ch](http://www.machtderbilder.ch)

The Department of Social Sciences of the

## Opportunities available

The Department of Sociology and Anthropology at **Bar-Ilan University** (Ramat-Gan, Israel) is looking for candidates to fill several tenure-track positions over 2005 and/or 2006, pending university's budgetary approval. Candidates can come from all fields of sociology, but preference will be given to the following areas: organizations (including macro-organizational analysis and theories); economic sociology; stratification; Israeli society; health, body and medicine; comparative sociology; sociology of culture; environmental/urban sociology. Candidates must have a completed Ph.D., a strong research and teaching record, and the ability to teach in Hebrew. Successful candidates need have publications in peer-reviewed journals and books, including publications not based directly on their doctoral research. Please send your CV, list of publications, list of courses you taught/can teach, one or two samples of published work, a statement of research interests and projects (up to 3 pages), and the names of three referees (including their academic affiliation and e-mail addresses). Applications will be received until October 30, 2004. Please

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Institute of Economics and Management Studies of the Technical University of Lisbon has now launched the new version of the PhD Program in Economic Sociology and the Sociology of Organizations. Details are available at [http://www.iseg.utl.pt/doutoramentos/seo/pdf/seo\\_ingles.pdf](http://www.iseg.utl.pt/doutoramentos/seo/pdf/seo_ingles.pdf) For further information, please contact Prof. Carvalho Ferreira - [jmcf@iseg.utl.pt](mailto:jmcf@iseg.utl.pt); Prof. Joao Peixoto - [jpeixoto@iseg.utl.pt](mailto:jpeixoto@iseg.utl.pt); or Prof. Rafael Marques - [rmarques@iseg.utl.pt](mailto:rmarques@iseg.utl.pt)

There is a new English-language curriculum at Ghent University (Belgium) in Postgraduate Studies in Logic, History and Philosophy of Science. For more information, see: <http://logica.ugent.be/centrum/postgrad.html> or contact Prof. dr. Diderik Batens: [Diderik.Batens@UGent.be](mailto:Diderik.Batens@UGent.be).

send all materials to Dr. Ilana F. Silber, Chair, Department of Sociology and Anthropology, Bar-Ilan University, 52900 Ramat-Gan, Israel. E-mail: [ifsilber@mail.biu.ac.il](mailto:ifsilber@mail.biu.ac.il).

An **Oxford University** Lectureship in the History of Medicine, in association with St Cross College is tenable from 1 October 2005. The successful candidate will be offered a non-stipendiary official fellowship with St Cross College. The salary will be according to age, on a university scale, to a maximum of £45,707 per annum. The successful candidate will have a high standard of research ability and a record of successful teaching with a wide range of teaching interests. Candidates should have a research specialism in an area of the history of medicine in a non-Western context. This specialism links to the research strategy and international reputation of the Wellcome Unit for the History of Medicine, Oxford, recently endorsed by the grant of a major Strategic Award by the Wellcome Trust. The new lecturer will be based at the Wellcome Unit for the History of

Medicine. The appointee will participate in the delivery of the highly successful and expanding M.Sc./M.Phil. in the History of Science, Medicine, and Technology (which has a specific 'stream' in the history of medicine), and undertake some teaching for the new M.Sc. in Medical Humanities, as well as supervising doctoral students. The appointee will also, along with the Director of the Wellcome Unit for the History of Medicine, co-manage and develop research initiatives, seminars, and conferences. Further particulars may be obtained from the Administrator, Modern History Faculty, Broad Street, Oxford OX1 3BD (telephone: Oxford (2)77253, e-mail: [administrator@history.ox.ac.uk](mailto:administrator@history.ox.ac.uk)), or can be downloaded from <http://www.admin.ox.ac.uk/fp/>. Applicants should send ten copies of their application (or one only from candidates overseas) to the Chairman of the Modern History Faculty Board at the above address by 4 p.m. on 5 November. Note that applications cannot be accepted by e-mail. Candidates are asked to arrange for three references to be sent to the above address by the closing date.

Those eligible are encouraged to submit entries for the BSHS Singer Prize. Please note the deadline, 15 December, rather than the October deadline that has been used in the recent past. The Singer Prize, of up to £300, is awarded by the BSHS every two years to the writer of an unpublished essay based in original research into any aspect of the history of science, technology or medicine. The Prize is intended for younger scholars or recent entrants into the profession. The Prize may be awarded to the writer of one outstanding essay, or may be divided between two or more entrants. The Prize will usually be presented at the BSHS annual conference and publication in the British Journal for the History of Science will be at the discretion of the Editor. Essays on offer or in press will not be eligible. Candidates must be registered for a postgraduate degree or have been awarded such in the two years prior to the closing date. Entry is in no way limited to British nationals. Essays must not exceed 8,000 words (including footnotes following the style guidelines in the British Journal for the History of Science), must be fully documented, typewritten with double-line spacing, and submitted in English. Use of published and unpublished primary material is strongly encouraged, and full and correct use of scholarly apparatus (eg footnotes) is expected. Entries (3 copies, stating the number of words)

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should be sent to arrive not later than 15 December 2004. Essays must not bear any reference to the author, either by name or department; candidates should send a covering letter with documentation of their status and details of any publications. Entries should be sent to BSHS Secretary, Dr. Sally Horrocks, School of Historical Studies, Leicester University, Leicester, LE1 7RH, UK. Enquiries only by email to [smh4@le.ac.uk](mailto:smh4@le.ac.uk). Do not send essays as email attachments. Sally M. Horrocks, School of Historical Studies, University of Leicester, Leicester, LE1 7RH, UK, tel. 0116 252 5070/ 2803; fax. 0116 252 5081; email [smh4@le.ac.uk](mailto:smh4@le.ac.uk); <http://www.le.ac.uk/history/people/smh4.html>

The Gallery of Research (Galerie der Forschung) in Vienna is seeking applications for 3 positions of research fellows. The candidates should hold a recognized postgraduate qualification (PhD) in social sciences: history, sociology, psychology, anthropology, literature, philosophy or political studies. Consideration will be given to candidates with other qualifications who demonstrate an active research agenda in science communication or scientific management. The successful candidates should possess a proven interest in studies of science and technology. Knowledge in museology and visual arts, as well as previous experience in events organization in an academic or museum setting will be well regarded. Working in a dynamic and innovative environment, the successful candidates should demonstrate the ability to conduct research and to translate this knowledge and understanding into various novel visual forms. Therefore, imagination, daring creativity and innovative stance on scientific issues and research will be essential. Perfect working knowledge in English is required; skills in other European languages will be valuable assets. The Gallery of Research (Galerie der Forschung) is a new scientific and social policy institution recently established by the Austrian Academy of Sciences in Vienna. Its purpose is to make public on-going scientific research and current debates at European and international level. It will also foster original research on Austrian scientific life past and present. The ambition of The Gallery is to develop a novel intellectual design and forms of display for communicating scientific research dissimilar with those of science museums and science centres (for more information see <http://www.oeaw.ac.at/gallery>). Appointments will be for one or two years in the first instance, with the possibility of renewal. Salary will be

dependent on qualifications and relevant experience, as well as on the specific duties of the fellows. Candidates interested in applying are invited to send a CV and discuss the positions in confidence with the designated Programme Director of The Gallery of Research (Galerie der Forschung), Dr. Albena YANEVA, who will be happy to provide further information on the positions and the duties of the post holders. Dr. Yaneva can be contacted by email: [Albena.Yaneva@ocaw.ac.at](mailto:Albena.Yaneva@ocaw.ac.at). The positions are open until filled.

Posts in the Department of History (Lancaster University) The Lancaster University Department of History is advertising two professorial chairs and three lectureships. The field for the chairs is completely open and historians of science, technology and medicine are warmly welcome to apply. The field for the lectureships will be decided in light of the professorial appointments. See also [Jobs.ac.uk](http://Jobs.ac.uk). Details available from Paolo Palladino [P.Palladino@lancaster.ac.uk](mailto:P.Palladino@lancaster.ac.uk).

The Chemical Heritage Foundation ([www.chemheritage.org](http://www.chemheritage.org)) invites fellowship applications for 2005-2006. Fellowships Applications must include a research proposal of no more than 1,000 words that addresses the relevance of CHF resources. The proposal should also explain how the work advances scholarship and how the outcome might be published. Include a c.v. and arrange for two letters of reference to be sent directly to CHF. Send applications to: Fellowship Coordinator, Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106-2702 Ph: 215 925 2222 Fax: 215 925 1954 Email: [fellowships@chemheritage.org](mailto:fellowships@chemheritage.org). The deadline: January 15, 2005. The Cain Fellowship is open to Ph.D. scholars who plan to conduct historical research on the development of the chemical industries. The outcome of this research should further public understanding of the relationship between technology, policy, management, and entrepreneurship and shed light on the complex development of modern society and commerce. Working with Beckman Center staff, the Cain Fellow will also organize a one-day conference, inviting scholars to discuss the subject of the fellow's research. Stipend: \$43,000. The Haas Fellowship is open to Ph.D. scholars whose projects will enhance public understanding of the chemical industries in relation to societal, environmental, health, and safety issues. Stipend:

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\$38,000. Two Fellowships offered. The Price Fellowship is open to scholars pursuing research on the history of the chemical sciences and technologies. Preference is given to applicants with projects on the history of polymers. Scholars interested in other fields are also encouraged to apply. The Charles C. Price Fellowship was created by friends and admirers of Professor Price. Stipend: \$20,000. For opportunities in the Summer 2005, with a deadline of February 15, 2005, the following fellowships are available. The Roy G. Neville Fellowship is open to historians of science, technology, and allied fields, as well as to historians of the book and of print culture, bibliographers, and librarians, who will make use of the Roy G. Neville Historical Chemical Library. The Neville collection contains approximately 5000 titles dating from the 15th to the 19th centuries and covering all aspects of the history of chemistry and of allied fields. Ph.D., Ph.D. candidates, or equivalent preferred but not required. Stipend: \$6,000. Two Fellowships offered. The Société de Chimie Industrielle (American Section) Fellowship is designed to stimulate public understanding of the chemical industries. Applications are encouraged from writers, journalists, educators, and historians of science, technology, or business. The fellow will spend three months in residence at CHF during the summer of 2005. Multi-media, popular book projects and web based projects are encouraged. Applicants must specify how the outcomes of their project will reach a broad audience. Stipend: \$13,000. The Glenn E. and Barbara Hodsdon Ulliot Scholarship sponsors historical research that promotes public understanding of the chemical sciences. Applications are invited from scholars, graduate students, science writers, and journalists. The fellow will spend a minimum of two months in residence at CHF during the summer of 2005. Stipend: \$4,600. Research Travel Grants for the Beckman Center for the History of Chemistry are offered for research in CHF's Othmer Library of Chemical History and CHF's historical archives and instrument and art collections. Applicants must submit a c.v., a one-page research project statement and the applicability of CHF's resources, and have a letter of reference sent directly to CHF. Grants in the \$500 range are for researchers within the U.S. Grants for those traveling internationally are in the \$1,000 range. See our website or contact [travelgrants@chemheritage.org](mailto:travelgrants@chemheritage.org) for deadlines. The Beckman Center is the historical unit of the Chemical Heritage Foundation (CHF). The Beckman Center supports independent research

aimed at preserving and publishing the history of the chemical and molecular sciences and industries. Fellows have access to the Othmer Library of Chemical History and the Roy G. Neville Historical Chemical Library, also located at CHF, as well as CHF archives, and instrument and art collections. Please visit the new Web site: [www.chemheritage.org](http://www.chemheritage.org)

The Institute for Advanced Studies on Science, Technology and Society (IAS-STS), Graz, Austria has announced its 2005-2006 Fellowship Programme. The IAS-STS promotes the interdisciplinary investigation of the links and interactions between science, technology and society as well as research on the development and implementation of socially and environmentally sound technologies. For this the IAS-STS invites researchers to apply for a stay between 1 October 2005 and 30 June 2006 as Fellows (up to nine months) or as Visiting Scholars (up to one month). We also encourage senior scientists - working within the framework of the issues listed below - to apply as Guest Lecturers. The IAS-STS offers excellent research infrastructure. Close co-operation with researchers at the IFZ (Inter-University Research Centre for Technology, Work and Culture; see: [www.ifz.tugraz.at](http://www.ifz.tugraz.at)), guest lectures, workshops and conferences provide an atmosphere of creativity and scholarly discussion. Furthermore we can offer five grants (EUR 1,000 per month) for long term Fellows (nine months) at the IAS-STS in Graz starting 1 October 2005, ending 30 June 2006. The fellowship programme 2005-2006 is dedicated to projects investigating the following issues:

1. Gender - Technology - Environment. Women with their various interests, competencies and potentials play an important part in the process of shaping socially sound and environmentally friendly sustainable technologies - be it as users and consumers, or as experts. Applications should focus on research in the field of women in traditionally male fields of engineering, on ways of creating cultures of success for women engineers (students, graduates), and on masculinity and the culture of engineering.

2. Ethical, Legal and Social Aspects of Human Genetics and Biotechnology. A main focus of the fellowship programme lies on research projects providing a better understanding of human genetics or biotechnology in the context of fabrication, application and regulation. Researchers investigating socio-cultural aspects of genetic testing or risk issues in biotechnology

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are especially encouraged to apply. 3. Technology Studies and Sustainability. Fellowships will be awarded for research projects contributing to the issue of sustainable development from the perspective of social studies or the history of science and technology. Projects should aim at socio-economic aspects of environmental technologies or at strategies of environmental technology policy, such as user participation, strategic niche management or ecological product policy. We encourage both theoretical analysis and practically oriented case studies. Applications must be submitted to the IAS-STS together with a research proposal by 15 January 2005. Prof. Arno Bamme, Director of the IAS-STS, decides on the awarding of fellowships and grants in consultation with the Scientific Advisory Board.

For application forms and further information, please visit our website: [www.sts.tugraz.at](http://www.sts.tugraz.at). Institute for Advanced Studies on Science, Technology and Society (IAS-STS), Attn. Guenter Getzinger Kopernikusgasse 9, 8010 Graz - Austria, E-mail: [info@sts.tugraz.at](mailto:info@sts.tugraz.at)

Cushing Memorial Prize Nominations, 2004-2005, are being taken. The family, students, friends, and colleagues of Jim Cushing are pleased once again to solicit nominations for the James T. Cushing Prize in the History and Philosophy of Physics. This annual prize is intended to recognize and reward the work of younger scholars. The next winner will receive \$1,000 and an invitation to deliver a paper in Notre Dame's History and Philosophy of Science Colloquium series during the 2005-2006 academic year. Eligible are all papers in the history and philosophy of physics published by a younger scholar within the three years prior to the nomination (e.g., for the 2004-2005 competition, no earlier than September, 2001). Work is eligible only by nomination. While we offer no explicit definition of the term "younger scholar," our intention is to favor work produced by scholars who are no more than about five years past the completion of the Ph.D. or, in a comparable way, new to the fields of the history and philosophy of physics, in recognition of Jim's well-known role as a nurturer of younger talent in the profession. A nomination should consist of a brief description of the significance of the nominated work and such information about the author as the nominator might think helpful to the evaluation committee, such as an abbreviated c.v. The deadline for receipt of nominations is January 15, 2005. Nominated work will be evaluated by a committee of three