Editorship of *Social Studies of Science*

A call for interest

The journal *Social Studies of Science* invites bids for the journal Editorship, with transfer from the journal's current Editor, David Edge, to be completed by September, 2002. A Task Force has been appointed to coordinate bids and to assist the process, led by Lucy Suchman and including Anni Dugdale, Aant Elzinga, Rob Hagendijk and Clark Miller.

A decision on the new Editorship will be taken by the journal's Collaborating Editors and Editorial Advisors, in consultation with Sage Publications Ltd., at the annual meeting of the Society for Social Studies of Science in Cambridge, Massachusetts in November, 2001.

Candidates for the Editorship of the journal should send expressions of interest, requests for details on preparation of a bid, and any other inquiries to Lucy Suchman, l.suchman@lancaster.ac.uk.

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frontpage illustration: Instruction to use Votomatic by Tampa County, Florida, on its web page (http://www.votehillsborough.org/voteamatic.html)

EASST

Review

Virtual Votomatic
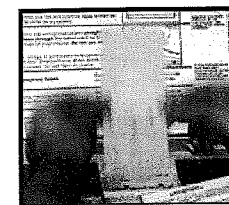
Step 1 - Using both hands, insert the ballot card all the way into the vote recorder until it stops.

IMPORTANT!
Step 2 - Be sure the red tabs are through the corresponding holes on your ballot card. This aligns the punch slots with the holes for your candidates.
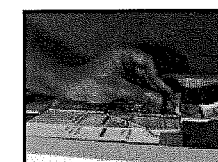
Step 3 - To vote, hold the voting instrument straight up. Punch straight down through the ballot card for the candidates or issues of your choice.

Step 4 - Be sure to go through each page.

Step 5 - Remove your ballot card and place it in a ballot box on your way out.

Instead of Yelling: On Writing Beyond Rationality

by Annemarie Mol
University of Twente

I was going to talk about the constitution of desire – for what the so called autonomous patient is expected to come up with, is an articulation of her or his *will*. It is expected to be there – mostly oppressed – speaking up when given room. But it isn't always there, pre-existing. The typical situation I wanted to start from is that of a doctor asking 'what do you want' – and a patient saying 'I don't know'. How else to read this situation than as a failure? A failure of the patient, that is, who should have a will to begin with.

There is a lot to be said about how 'the will' is constituted in a juridical frame while when it comes to 'deciding' about life what is needed is something quite different that, for the moment, I am inclined to call *desire*.

But this, however, is not what I'm going to further develop now. I haven't been able to work on these questions – I was ill for months. Incapable of working. Which brings home a proper message to our session on dis/ability today: all the talking we may do, presupposes and enacts a specific ability: that of a subject who is articulate. A lot of abilities go into being an intellectual. Skills required to investigate. The ability to use words. And first and foremost: a very basic ability. To think, write, read: to work.

Lacking some of these basic abilities for a while, I have, however, done some further thinking both on earlier material, and on earlier research experiences. This has resulted in a series of questions. Questions I would like to share with you – for if we tackle them jointly, if each one of us takes them along, the chances that answers may emerge are a lot higher than if I chew on them alone.

The topic I want to address today, is that of suffering. In dis-ability – there is a *dis*. Something amiss. Clashing, giving frictions. Sometimes the *dis*-bit may well and rightfully be pushed away from the so called patient and shifted onto the so called surroundings (like in: it isn't the paralysed legs that prevent a person from going to the first floor, it is the staircase) – but not always. It is a bad strategy for 'dis/ability studies', to always

shift out the 'dis'. For whether it comes from elsewhere, or is relational (between person and surroundings) or resides in one's soul or bones – somehow somewhere there is a *dis*. It should not just be shifted, but attended to. What to do with it? Or: what is done with it? The way the question faces me, or the way I face the question, here, now, is as one of method – a method of investigation as well as one of writing. What to do with the *dis* in dis/ability, with lack, with pain, with suffering, when writing?

I'll try to illuminate the problem with personal anecdote. In the late seventies I was a student of medicine and gradually got angry at the way suffering is handled in the caring professions. I realised that, basically, I wanted to react by yelling. By screaming out a revolting, inarticulate, harsh yell. This can't be done in a medical lecture hall, so I went elsewhere, to learn to become articulate. I started to study philosophy. In my philosophy classes we had to read Habermas, who argues that taking up speech is a way of accepting the rules of rationality that come with speach. The only way, then, or so it seemed, of not accepting rational rules was, again, by yelling. However, the followers of Habermas, and most other philosophers as well, exclude those who yell from their *herschaftsfreie Diskussion*. Yelling disqualifies the subject.

When a few years later a locally famous Dutch professor suggested that the patient-movement in psychiatry could be strengthened by drawing on Habermas' theory, one of my friends and I wrote a reaction. She was just then reading one of these huge volumes, and had underlined each time Habermas said in so many words that only the *normal* can participate: in order to enter the discussion, one has to have finished one's therapy first. We wrote that this made us want to yell – but we wrote it, we didn't do it.

Yelling, for all its loudness, doesn't carry very far. But what other repertoires of relating to suffering are there? This is a 'what to do' question. As a way of tackling it, it may help to ask: What is being done?

A first repertoire is *rationalist*. Rationalism doesn't necessarily deny suffering. Denial may occur – but inside and near to the helping professions, and in medical research, a lot of rationality goes round that rather tries to tame suffering. Control it. Ban it through rational interventions. There are, obviously, varieties. Take the treatment of diabetes. A person with diabetes is supposed to balance her food intake, exercise, and insulin dose so as to keep her blood sugar level within limits. Low enough, not too low. Everything can, or so it seems in rationalist mode, be balanced against everything else. Both physiologically (as in a sugar balance) and life wise (as in: which bad life-event to accept in order to gain with good life-event). In decision analysis the latter is made explicit in forms that list the pro's and con's of any given intervention. These forms may ask people to tell what *they, personally* think is worse, say: dying sooner or living with an amputated leg. Rationalism lies in the supposition that such questions have an answer. That suffering may be countered and if not countered, calculated.

A second repertoire is *empathic*. This is vehemently critical of the first. It says that rationalists refuse to listen to the pain of those who suffer. The empathic repertoire takes, instead, this pain on board. There are a lot of varieties. In nursing it is done in small, practical manners, such as by holding someone's hand when they get an injection or are otherwise hurt. In medical sociology it is a popular repertoire as well, but differently so. The sociologists involved take the suffering of those they write about on their own shoulders. And claim they understand. Thus they try to give it voice, bending to someone else, listening – while, also, thereby, as in all charities, 'othering' this other person. One of the – to me – worst version of the repertoire is where it becomes soothing. Smothering the suffering away by too much understanding of it.

A third repertoire is *clinical*. It is typical for the medical tradition. It implies: leaving an open space for the suffering of the other. Like this textbook on 'Clinical Medicine' that I consulted, that tells to medical students: if, at the end of an interview, the patient cries, you have done well, since you have given the patient space for his or her emotions. Do not leave the room. That is the advice – there is nothing about how to listen, or about what to say. There is nothing about touching. Just do not leave the room – and let the patient be. Don't probe into it. This repertoire has been taken up in the social sciences, too. There it

lies in the acknowledgement, the acceptance, of a lack of knowledge when it comes to the suffering part of the sites, situations and people in health care that one writes about.

There must be more repertoires. But let us, for now, have a closer look at these three: the rationalist taming and tackling of problems, the empathic embrace of suffering and the clinical mode in which suffering is given room. All three can be adopted by social scientists or others who, like most of us assembled here, write about medicine and dis/ability. In which repertoire to write?

In order to establish a proper insulin dose rationalism may help. But it will never get close to the *dis* of disability, for it only tries to chase this away. It cannot begin to resemble yelling. When one is having a wound stitched, a nurse who holds one's hand may be wonderful. But empathic sociologists, while pretending to help others, risk, or so it seems to me, to mostly please themselves, for being ever so good. On moral high ground. The method, the style, that I have so far been parasitic on, is the clinical one. What I like about it, is that it does not claim to *know* and thus does not risk to *disown* the suffering one come across. It leaves suffering being *other*, other to talk, to our talking, to our texts.

But the clinical repertoire has it limits. These strike me all the more now that I am no longer primarily studying doctors, but, instead, the way people with diabetes are taught to take care of themselves. For in that process they are taught to be clinical – not just towards others, but as a way of relating to themselves, to their own suffering. Calm, but not heartless. Do not leave the room.

But what does it mean to not leave the room, when one might need to cry oneself? The clinical repertoire is not *made* or *meant* to be used for/by a suffering subject. It has been developped for doctors. Just as the rational repetoire fits in with, say, research and the empathic one with the work of nurses. In none of these repertoires does the subject talking coincide with the subject suffering. This mimics the way the body is investigated in pathology: the body doing the cutting is never the body being cut. Likewise: the subject speaking is never the subject suffering. It may be the same person at some other point in time. But it is not the subject of the text.

One can, as if by definition, not be rational and suffer at the same time. Empathy is an attempt to bridge an alleged great gap towards the suffering of the other: what is there to bridge if the relation

is to oneself? And doesn't empathy with the suffering self, in as far as it is possible, become an emotionally draining complaint – or an entrapment in the role of the victim? The clinical way of dealing with one's own suffering, finally, is not impossible – but it doesn't really touch on the suffering. It is not exactly (like the rationalist mode) cold. But it leaves a blank space for suffering. Which may end up becoming a black hole.

So what other repertoires might there be? How might the subject of the text engage, actively, practically, with suffering – other than by taming and chasing it, other than by taking the suffering of others upon her shoulders, other than by respecting it by leaving it be?

This is the question of method I want to pose. I have no answer to offer at this point, but I think it is a question we urgently need to explore – and experiment with. And maybe it helps to take up this question in parallel with another, equally urgent one. A question that may help us to not get stuck in the ever so seductive position of the victim or the self-satisfied saviour. That is the question how cruelty might be articulated. What is it to make others suffer, to be the actor of their suffering – or, again, that of ourselves? How may active cruelty be made present, presented, in a text?

Another list. For apart from repertoires of relations to suffering, there are *textual modes* to take into account here.

One is the classical, obvious one: description, depiction, *representation*. There are a lot of representational styles involved – from medical text-book photos to those of the famous Benneton advertisements. What do they do, how do they make suffering be – and disappear again? A lot of the STS-lessons about the production of truth need to be taken on here, and adapted, for suffering is never an alleged plain truth but, always already, in different modalities, a moral fact.

Two is *enactment*. Here the yelling I began with fits in. What ways are there of *doing* suffering that hold better on paper? Uttering grief. Raging. Denouncing. What more? There are poems, novels, letters to the editor – and a lot more to explore.

Mode number three is a devilish one, it is to *provoke* suffering in the listener/reader. Remember when Stefan Hirschauer wrote about surgeons operating on genitals: quite a few of his readers felt this in their own private parts. Which emotionalities do texts make space for, or allow,

or induce? Which kinds of suffering may be evoked and to what further effect? And might this be a place where the subject who articulates suffering and the subject who engages in cruelty meet, cross over?

Representing, enacting, provoking. The list surely deserves further exploration. I plan to take it with me into the hospital so as to learn from the way patients handle the issue. How do *they* transport their own suffering to doctors and nurses and what does this do for them? For just as one may be parasitic on the rationalism of researchers, the empathy of nurses or the doctors' clinical style, one may try to learn from various modes and modalities of engaging with the *dis* of disability that patients use in a medical setting – where (in contrast with most other places they inhabit) they exist in and through their suffering. But something changes. When we, as ethnographers, sociologists, philosophers, no longer lean on the styles of the helping professions, the comfortable position of the one who *helps* is lost. Patients come to the hospital in order to *be helped* and that informs the way their suffering is brought into play.

Should we seek help ourselves as well?

I don't think so. By whom? There is nobody for us to call upon. But I *do* know that as a part of the method I am after, it is crucial to refuse to help – or to pretend to do so. No asking for help, no promising of it. How then to engage with the morality implied in the *dis* of dis-ability? For suffering is a non-good – I do not want to get romantic about it, as if, finally, it were 'always good for something, somehow'. No. How to face the non-good – and how to allow oneself to be faced by it? That is the question.

Enough for now. And while usually one ends by saying, 'any questions?' it makes more sense on this occasion, to end by welcoming your answers.

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The Technology of Voting

by Ruth Oldenziel
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Technology entered center stage during the controversial 2000 American presidential elections, showing that the emperor had no clothes on. For all to see, the most advanced country in the world responsible for putting men on the moon or generating sophisticated computer systems simply failed to get its votes counted. Outdated punch-card machines threw out as invalid over 4 percent of the ballots. In court, Republicans pitted the superiority of machines against the subjectivity of human beings to argue manual recount is fundamentally biased and should therefore be halted. On their part, Democrats called IBM inventor Ahmann in the witness stand to show the opposite: IBM's voting technologies were fundamentally flawed and need human precision to correct inevitable machine errors. The judge therefore, the Gore lawyers argued, should allow for a manual recount to adjust for the machines failures. Parenthetically, these arguments represented a sharp reversal from the positions Bush and Gore held in the public mind. Bush, who styled himself as the down-home, handshaking man of the people and defender of state rights, backed the machine count because human beings could not be trusted. Gore, the Clinton administration's most ardent promoter of technology, insisted on the higher precision of counting done by hand.

If anything, the US elections have shown that machines do have politics, to quote Langdon Winner's classic article. Politically speaking, crucial differences exists between corporate-sponsored and market-driven computer technologies or federally subsidized space technologies on the one hand and state-sponsored voting machines on the other. The NASA project enabling the landing on the moon was a big government technology shoring up national prestige. So too, big business technologies rake in money and prestige. Voting machines lack funding and prestige. Is it any wonder underfunded state and local governments when confronted with tight budgets are opting for

investing in repairing potholes rather than replacing voting machines or training of elections officials? Keeping outdated, but cheap, efficient and low-maintenance voting machines running makes more policy sense than replacing them with technologically superior, but expensive optical scanners. Even though the National Bureau of Standards, a federal agency, said twelve years ago that punch-card ballots should be junked, Florida state officials took the calculated risk of keeping the low-maintenance punch-card machines, IBM's Votomatics. They also accepted the higher inaccuracy (4 percent) of this technology over that of optical scanners (1.4 percent).

As it turns out these decisions are not just a matter of policy. They are also deeply political with far reaching political consequences beyond anyone's imagination. Minority voters like Afro-Americans and Hispanics and the elderly became the political casualties. Proportionally more minority and elderly voters were doomed to vote with outdated punch-card machines than white voters in more affluent voting districts: ballots cast by blacks were rejected at a rate of 14.4 percent and those cast by non blacks by a rate of 1.6 percent. Given that Afro-Americans voted overwhelmingly for Gore (90%), that distribution of technological devices turned out to be politically crucial: Eventhough more Floridians voted for Gore, Bush became president. After the 2000 US elections, who can deny the veracity of Langdon Winner's classic assertion that machines do have politics?

From Recollections to Reconnections: An Introduction to Green Knowledge

by Andrew Jamison

I left the United States for Sweden in August 1970 in search of an ecological society. I have not yet found it, but through the years I have caught glimpses, or premonitions, of what an ecological society might be like. This book is, among other things, an attempt to put those experiences into a broader historical and cultural perspective.

When I left for Sweden, I had just graduated from a battle-scarred Harvard, having studied history of science and taken part in the antiwar movement and in the more all-encompassing "dialectics of liberation" that filled the air at the time. I had stumbled into environmentalism a couple of years before, attracted by its combination of practicality and vision, its mixing of science and spirituality, and, perhaps especially, by its uncanny ability already then to make bedfellows of people with the most seemingly incompatible interests.

In those disheartening days, when the shrill, aggressive voices of extremism were taking over the antiwar movement, and the war itself was intensifying beyond belief, environmentalism served for me to reawaken the spirit of camaraderie and collective creativity that had all but disappeared from radical politics, and were fast disappearing from public life in general. Environmentalism seemed to transcend the ideological disputes and other sources of division, like class, race, gender and national identity, that were tearing apart the Movement I had known, and had felt a part of, through much of the 1960s. It was not that the ideologies or social distinctions were not important; it was rather that the ways they were being discussed seemed to stem from another era. There was something fundamental about the new kinds of environmental problems that we were beginning to learn about - in our earth, in our skies, in our waters, in our homes, in our food, in Vietnam - that meant that we had to rethink most of the assumptions and beliefs that we had previously taken for granted. In particular, we had to learn to expand our ideas of solidarity and community and our notions of politics and

social action, so that we might be better able to take into account the diverse array of non-human beings that we shared the planet with.

The environmental movement, as some of us were starting to think of ourselves, was certainly critical of the way things were, but at the same time, it/we was specific, constructive, even hopeful, in many of its emerging visions and practices. Before going off to Sweden, I had made a small contribution, by writing a book about steam-powered automobiles as an "answer to air pollution" in which I presented the coterie of people who were trying to revive steam cars. They were an intriguing collection: air pollution control officials in California, innovative auto mechanics, idealistic engineering professors, and even an entrepreneur of renown, William Lear of Lear jet fame, who had set up shop in Reno, Nevada and was planning to enter a steam car in the Indianapolis 500. I had heard that Sweden, whose government was supporting the Vietnamese, was also developing some interesting approaches to environmental protection, and I wanted to take a look, never imagining that I would stay this long.

In the early 1970s, much of my time was spent talking with scientists and government officials, who were justifiably proud of how effective they had been in reacting to the environmental crisis, as it was often referred to in those days. Sweden was the first country in the world to establish a state agency for environmental protection, and its parliament was the first to pass a comprehensive environmental protection law. With some ecologists from Lund, where I was living, I visited a lake near Växjö, where advanced methods of restoration were being applied to a place where the fish had largely disappeared. Later, I ventured further north to what remained of Lake Hornborga, where millions of kronor were to be spent in the following years dredging up what had become an overgrown swamp, so that the cranes that had traditionally stopped there on their way south would one day return (they have). And I spent some days on an island in the Baltic Sea,

where scientists were developing an ecological systems model of the nature-society interactions in the sea, as an input into the environmental policy process.

Eventually I made my way to a suburban house outside of Uppsala, where a young geneticist lived with his family. Björn Gillberg was creating a different kind of environmentalism, writing newspaper articles about food additives and genetic risks, standing outside of supermarkets with leaflets to warn consumers about the dangers lurking inside, and, most dramatically, washing his shirt in coffee creamer on a television program to show what a common household product could (really) do. I remember being struck by the fact that there was no toothpaste in Björn Gillberg's house - he said you didn't need it to get your teeth clean - and I was also struck by how different he was from the scientists and officials with whom I had been spending so much of my time. He was taking science to the streets.

Gillberg represented the Swedish version of the international environmental movement that I had started to feel a part of. Indeed, in the early 1970s, Gillberg was the movement, at least according to both his own and much of the Swedish mass media's perception of things. In 1975, when other activists wanted to broaden the fledgling movement and one of them, a left-wing journalist, wanted to alter the orientation of the newspaper that Gillberg edited, taking up environmental issues at the work place, Gillberg let the journalist go; and at the annual meeting of the national organization that Gillberg headed, a group of activists demonstrably walked out and started their own organization instead.

I too felt that there was something missing in Gillberg's approach to environmental politics. More was required than a natural scientific education and a strong will; there was also a need for a social and economic analysis, and, even more crucially perhaps, there was a need for an alternative vision and an alternative "practice", if environmentalism were ever to appeal to, and alter the consciousness of, the majority of the world's population.

Over the next few years, after moving to an old farmhouse with a big garden, outside of Lund, where I have lived ever since, I found myself increasingly drawn to developments in Denmark, where I got my first academic job in 1974, teaching a course in science and society at the University of Copenhagen. Reading Danish newspapers and getting to know some Danish

activists, it soon became apparent that the environmental movement was developing quite differently in Denmark. For one thing, it was more of an academic affair, much more strongly based among students and young teachers, especially at the new universities in Aalborg and Roskilde, where environmental issues had come to be linked, according to the fashion of the day, to the marxian "critique of political economy". For another, it drew on a populist tradition of rural resistance that had been mobilized in the 19th century, when, among other things, a network of "people's high schools" had been created in the countryside to provide the farmers with a more practical, but also more spiritual, form of education.

Perhaps most intriguingly, it was more experimental, practicing, more ambitiously than elsewhere in Europe, an alternative, or ecological, way of life, both in the renewable energy "wing" of the movement, as well as at the rural and urban collectives that were becoming such a visible feature of the Danish landscape.

In those years, I met many Danish activists, people like Oluf Danielsen, a physics teacher at Roskilde and one of the more vocal energy debaters of the 1970s, and also a founding member of the Danish journal, *Naturkampen* (Nature struggle); Preben Maegaard, a "grass-roots engineer", who established the Northern Jutland Center for Alternative Technology and helped start the Organization for Renewable Energy (Organisation for vedvarende energi, OVE); and Peder Agger, another Roskilde teacher, in biology, and one of the founders of NOAH, in those days the leading Danish environmental organization, and now the Danish affiliate of Friends of the Earth. Peder also helped establish the production collective, Svanholm, which is now a center for "ecological agriculture".

As the energy debate heated up in the late 1970s, I became more involved in environmental politics, and I experienced the differences between Sweden and Denmark first-hand. In Sweden, we organized our opposition to nuclear energy as a popular front, which came to be dominated by the two anti-nuclear parliamentary parties - the left Communist and the formerly agrarian Center party. I helped edit a journal that tried to offer a socialist voice, as well as some science and technology perspectives, to the opposition to nuclear energy. I even took part in writing, with some other local activists, a contribution to the Environmental Movement's Alternative Energy

Plan, which was supported by the government, and which was directed, from an office at a government ministry, by a young activist, who found our radical alternativism a bit hard to take.

In Denmark, anti-nuclear activism, as it developed into a social movement, was more open-ended and experimental. I visited with a group of students some of the sites of alternative energy technology, such as Tvind, in western Denmark, where the world's largest windmill was being built by amateurs at a newly started people's high school. It was, in many respects, the same movement everywhere - "no nukes", or, as we put it in Scandinavia, "atomic energy: no thanks" (atomkraft nej tack) - but it was striking how the same struggle expressed itself so differently in different countries.

In our journal, we tried to develop a theory of socialist ecology that drew especially on developments in Germany - where anti-nuclear opposition was more left-wing and militant than in either Sweden or Denmark - and in Norway, where environmentalism was a part of a broader movement against European integration. In the process, Norway had also spawned a home-grown form of ecological philosophy, by Arne Næss and Sigmund Kvaloy, that was starting to be called "deep ecology". From the United States, there seemed to be not one but many different kinds of movements developing: revitalized conservation organizations, locally-based campaigns against nuclear plants and toxic waste sites, the media activism of Greenpeace, as well as a number of ideologies that already then seemed to be in competition with one another: the social ecology of Murray Bookchin, the new age politics of Mark Satin, the appropriate technology of Amory Lovins, the ecofeminism of Carolyn Merchant, to name some of those that I became acquainted with.

Meanwhile, environmentalism in other parts of the world was taking on still other shades of green, which I was able to follow rather closely, in 1978-79, as editor of the *Lund Letter on Science, Technology and Basic Human Needs*. The *Lund Letter* tried to provide a forum for discussion about the preparations for the United Nations Conference on Science and Technology for Development, and, through it, I met not only a wide range of activists and academic "experts" throughout the world, but also came more closely into contact with the world of utopian practice. I went to meetings at the "free town" of Christiania, in Copenhagen, often staying overnight in a

converted streetcar, and at the Frostrup camp in northern Jutland, and I soon met communards in Sweden and Norway and Finland, as well, who were living the alternative life rather than (merely) talking about it.

A stint as a journalist on the newspaper at the UNCSTD in Vienna in the summer of 1979 served to reinforce the impression that environmentalism was a broad, diverse, and extremely many-headed movement. It was in Vienna that I met Anil Agarwal, for example, who was on his way back home to India to start his Centre for Science and Environment, after working in Britain for Earthscan. I also met David Dickson, a journalist for *Nature*, and one of the founders of the radical science movement in Britain, and author of the book that perhaps best captures the spirit of the 1970s (*Alternative Technology and the Politics of Technical Change*), one of the few books by someone else that I wish I had written myself. In Vienna, I interviewed Robert Jungk, author of *The Nuclear Tyranny*, and listened to Ivan Illich, author of *Tools for Conviviality*, and, at the NGO (for non-governmental organizations) meeting, which was my "beat" for the conference paper, I saw many examples of the alternative technology movement that, for me, was such a central part of the environmental activism of the 1970s.

From Vienna, I especially remember visiting the "people's forum" one evening with another fellow journalist, Ziauddin Sardar. It was a kind of gathering of the tribes, with representatives from communes and other counter-cultural organizations mixing, not too easily, with the more politically-minded activists from anti-nuclear and development organizations. I recall that Zia, who was soon to go off to revolutionary Iran and discover another kind of politics altogether, had a rather similar reaction to the people's forum to mine; many of the projects that were on display were exciting and stimulating, but it seemed that the alternative, or utopian, activists had grown far too distant from the political activists. Could the gap between thinking and practicing, between theorizing about and living in the alternative ecological society ever be successfully bridged?

The 1980s were not kind to environmentalism. Rather than moving forward and gaining new members and enthusiasts, the environmental movement tended to decompose and split apart, for reasons that were not so much internal as external. There were, to be sure, plenty of disputes

and debates over how to proceed most effectively. How should the opportunities that had emerged in the anti-nuclear movement – to influence policy making, to affect industrial development, to empower local communities – best be utilized? Should environmentalists in other countries follow the example of the Germans and build a political party? Did the movement need to become more professional and hard-nosed in its modes of operation, i.e. was Greenpeace the model of the future?

Lurking behind all the internal debates, however, was the recognition that a counterrevolution was underway. In Britain, Margaret Thatcher had come to power, and in the United States, Ronald Reagan was elected president. Both were not merely anti-environmental but vehemently, aggressively so. The ministers they appointed defended the rights of the exploiters, and their policies favored de-regulation, privatization, commercialization. The ideology of neo-liberalism, as it has come to be called, subsequently took on many manifestations as it spread around the world. There were both "greener" versions and "browner" versions, as corporate leaders, and the public servants they supported, developed their responses to the environmental challenge. The strategies that emerged to combine environmentalism and economics have grown into one of the influential "discourses" of our time – sustainable development or ecological modernization: what I will be calling in this book, green business; while the browner versions have supported many a "backlash", from scientists denying the existence of climate change and global warming, to consumers of ever bigger and ever more unnecessary automobiles, to companies moving their operations in the name of globalization to places where environmental controls are less stringent.

Even more insidiously, however, neo-liberalism helped mobilize what was already afoot in some parts of Europe, and in some parts of the environmental movement: a populist reaction. By now, populist parties of the far right have taken power in many municipalities in France, Austria, and Norway, and they have become significant parliamentary actors in most European countries, as well as in many other parts of the world. Mixing patriotism with racism, and defending national sovereignty against the European Union and other transnational bodies, the populist reaction has become a force to be reckoned with –

both in Europe and the United States. Populism has served to infect many environmentalists with what might be called a traditionalist, or neo-nationalist, bias, and as its political influence has increased, the public concern with the environment has tended to decline. Indeed, populism has helped inspire in Europe an anti-ecological mobilization against "green" taxes on such things as energy use and motor fuel among those who feel that their livelihoods are threatened by certain kinds of environmental policies emanating from the European Union bureaucrats in Brussels. In the United States, populism has fed into the revival of evangelical religion that has been extremely important politically over the past twenty years.

It has not been easy for environmentalists to navigate between the globalists and the populists, the innovators and the traditionalists, but somehow we/they have managed to keep going. Most of the people I met in the early days, for instance, are still active. Björn Gillberg has developed a form of counter-expertise through the years, by which he has contributed his particular skills and talents to the resolution of many environmental controversies in Sweden. He has helped bring polluting companies to court, and he has advised citizen's groups about their rights. Most recently, he has become a discussion partner with corporations, encouraging them to clean their production processes and develop "environmentally-friendly" products.

Across the water, Peder Agger and Oluf Danielsen are still at Roskilde. They have been active in a range of rather unique public arenas in which environmental issues have been discussed in the Danish society: the Technology Board, now Technology Council, where citizen involvement in technology assessment, especially through the so-called consensus conferences, has attracted international attention; the Ecological Council, which provides policy pronouncements and advice to government as well as publishing a journal, Global økologi (Global Ecology); and the Green Fund, which gives support to a wide array of grass-roots projects. All three institutions are conspicuous for their absence in Sweden (and, for that matter, in the United States and Britain, and most other countries, as well).

Anil Agarwal has long been one of the most respected voices of Southern environmentalism, with his active involvement in international networks and organizations, while the Centre for Science and Environment serves as a model of

critical environmental knowledge production and dissemination. David Dickson produced another influential book - on the politics of American science - and served a spell as editor of *New Scientist*, and is now back writing for *Nature*. Ziauddin Sardar, who has done so much over the past 20 years to teach us about the relations between science and Islam, is editor of *Futures*. Vandana Shiva, who spent a semester with us in Lund in the early 1980s, has been at the forefront of a Third World environmental activism that has intensified over the past decade, while Amory Lovins, from his Rocky Mountain Institute, now professes a belief in "natural capitalism", a form of green business that has become an ever more significant part of the ecological culture.

This book is, in many ways, their story, or, to be a bit presumptuous, our story. For I, too, have tried to keep the banner flying through the years, primarily by writing about the environmental movement, and what I have come to call its cognitive praxis. In the 1980s, I wrote about the "knowledge interests" that had developed within environmental movements, and in the 1990s, I have tried to follow those interests as they have increasingly left the movement space behind. Most recently, I have explored the politics of participation in relation to sustainable development, as well as the transformation of environmental activism, in a number of different European countries, which has given me the immediate incentive to write this book and try to work out what it all means.

For while a great deal has been written about environmental problems and environmental politics, the actual historical trajectory of environmentalism, the dynamics of what I have come to think of as an emerging ecological culture, has tended to be neglected. Different authors have focused on different aspects of the social and cultural transformations that have been taking place over the past thirty years in the name of ecology, and, as a result, all too often the forest has tended to be reduced to the trees. Instead of thinking like a mountain, and recognizing that "land is community" as Aldo Leopold put it so many years ago, all too many tend to defend their own private pieces of land. Among those who have analyzed the situation, too many authors have all too often tried to fit their stories into their own professional "discourse" or personal life-world.

There is also, as in so many other topic areas, a huge difference between American writings, with

their patriotic enthusiasms, and their sticking to the "facts", and European writings, with their cosmopolitan sophistication and speculative theories. Americans tend to see the rest of the world as peripheral, while many Europeans, as a kind of reaction to the American media barrage, retreat into a rather ineffectual provincialism. As an American who has lived in Europe for thirty years, I have continually been struck by the discursive dissonances, the interpretative imbalances, between the hemispheres. While Americans, for example, tend to neglect the importance of history, the past weighs heavily on many a European. All that seems to be new comes from North America, while Europeans take on the task of defending all that is old. What makes it across from both sides is thus often neither the best nor the brightest but more like the loudest and the most extreme. So while there is by now a voluminous literature on environmental politics, there still is room, even a need perhaps, for a book that explicitly tries to make connections: across disciplines and social roles, across countries and continents, across the generations, and, perhaps most importantly, across the divisions that have continued to grow between activists and academics, practitioners and theorists, the doers and the thinkers of the emerging ecological culture. There is a need, in short, for a collective memory, a usable past, an attempt to fashion a narrative of our own that might just bring us a bit closer together.

Among other things, this book tries to put into a broader historical and comparative perspective the making of what I call green knowledge in Sweden, Denmark, and the United States. In all three countries, as well as in all the other places that I will, on occasion, try to bring into the narrative, there has been an ongoing political battle for many years now, a battle for recognition, for acceptance, for influence. But there has also been a battle at the level of ideas - a cognitive battle - and, at both levels, it is not so clear who or what has won. Have the Björn Gillbergs, Amory Lovinses and Peder Aggers of the world been forced to change their message and their mission so that they could be taken seriously in high places? Or have their activities helped to change our contemporary political cultures, making them "greener", more aware and conscious of environmental problems?

Put in this way, the answer must be a firm yes - to both questions. Yes, the activism has changed; many of those who were involved in the

environmental movement in the 1960s and 1970s have become less radical (but also perhaps more realistic) in the things they say and the things they do. But yes, environmental activism has also helped to change fundamentally the ambience of our late modern, or postmodern, or not-yet-modern, industrial societies. In bringing environmentalism out of the cold and into the establishment, activists and former activists have played important roles in processes of institutional and policy reform, scientific and technological innovation and, on a more personal level, in changing values, beliefs, feelings and behavior.

It is this circuitous process of social change, this long march through the institutions, this dialectical tension between incorporation and resistance, that forms the subject matter of this book. I want to emphasize the diversity of

processes involved, the contradictions and ambiguities, the differences among the participants that are all too often neglected, and which need to be explicitly recognized and discussed if they are ever to be overcome. There are strong forces of fragmentation and separation at work, and the greater the differentiation the more difficult it seems to retain a sense of unified purpose or to articulate an underlying meaning or coherence in environmental politics. If diversity makes some of us strong, it also seems to make many of us confused and disillusioned.

This article is taken from the introduction to Andrew Jamison's new book, *The Making of Green Knowledge. Environmental Politics and Cultural Transformation*, Cambridge University Press, to be published this Fall.

News from the field

on the GSG

(In the previous issue of the EASST Review, we published a statement of the Governance and Science Group (GSG). Coordinator Jerry Ravetz sends us the following explanatory note on the GSG).

Following on the BSE scandal, there has been a perceived collapse of public trust in science advice in the UK. The official response to this has been dramatic. At the highest level, pronouncements resonate with phrases including "transparency", "openness" and "participation". Also, there are genuine moves to open up the science advisory process; one important body, the Food Standards Agency, has all its activities in public and open to public review. The rationale for all this is still being worked out; and a group of independent intellectuals came together with the purpose of improving our understanding of these issues, partly to prevent these praiseworthy initiatives from failing. They call themselves 'The

Governance and Science Group'. As yet it is a small, self-selected group, operating totally informally and on the margins of time and material resources that its members can provide. However, several meetings are now being planned, including: an assessment of the three new advisory commissions; a response to the Phillips report on BSE; and the implications of the new developments in patenting of scientific discoveries. Further details can be obtained from the co-ordinator, Jerry Ravetz.

Phones/Fax: +44 (0) 20 7+; home 723-0912; home fax 724 9187; work 224-7084; work fax 487-3660

http://website.lineone.net/~jerry_ravetz .

STS and the Dutch

by Sally Wyatt

Have you ever wondered why there are so many STS people in the Netherlands? Approximately one quarter of EASST members are from Dutch universities and there is always at least one Dutch person at any STS-related meeting. Of course, this is partly because the Dutch enjoy a relatively well-resourced university system but it is a very small country. I have wondered why there are so many Dutch STS people, and even put forward an explanation in 1998 when I defended my PhD at the University of Maastricht. For those of you not familiar with the Dutch system, a bit of background: In addition to the thesis itself one has to be prepared to defend a number of self-defined propositions (*stellingen*), several of which must be unrelated to the subject of the thesis. It is a holdover from those days when obtaining a doctorate was an indication of one's wider intellectual development.

My thesis aimed to treat technological determinism seriously, not only as an actor's category but also one for analysts. I identified different types of technological determinism and analysed the variety of purposes for which they are used by social actors. Some of my *stellingen* dealt with this but I also wanted to use the *stellingen* both to promote some of my pet theories about the world and to acknowledge the contribution the Dutch have made to STS. With regard to the latter, I wrote, European landscapes are constant reminders of the fact that the distinction between 'nature' and 'culture' is both constructed and shifting over time and place. This is particularly true for the Dutch land- and seascapes, where the role of science and technology in the re/production of the nature/culture distinction is very visible. This may explain the strength of the STS tradition within the Netherlands.

Many of my Dutch colleagues appeared to miss the irony. They rejected the determinism implicit in this *stelling*, preferring instead to attribute their STS strengths to the political activism of socially responsible scientists during the 1960s and 1970s and perhaps also to their sense of moral responsibility.

I recently moved from London to the University

of Amsterdam. I have been learning Dutch. Language teaching is an important means for transmitting culture. My Dutch lessons often feature videos and articles about aspects of Dutch social and political life, for example about the monarchy, the parliamentary system, the Eighty Year War with the Spanish, and the policy on 'soft' drugs. In the exams, we have to answer questions after watching videos about topics such as seagulls, martens and trade winds. (And after my PhD, I thought my exam-taking days were finally over!) They choose topics we're unlikely to know much about so that we really have to pay attention to the videos. I guess they don't expect many animal biologists. When we had to answer detailed questions about trade winds, I wished I'd paid more attention in my secondary school geography lessons. I'm now in the advanced class and there is one topic which has received more attention than any other – the Delta works in Zeeland, the largest flood protection system in the world. It is an elaborate system of dykes and seawalls which was built after the great storms of 1953 in which 1835 people died. We've read articles and poems, and watched videos. As an STS person, I found it all fascinating – the way in which the debate shifted from one where human safety was paramount to one which sought to find a balance between protecting people and protecting the environment. Not only did the debate shift but so did the design of the dams, from solid ones to more permeable ones. The latter enabled the salt water to remain, together with the plants and sea creatures. Most of the other people in my class found this all rather tedious. The teacher picked up on their boredom. In place of her usual geniality and encouragement with our fumbling attempts at Dutch, she admonished us that this was an extremely important event in Dutch history. I feel my *stelling* has been confirmed, and that the highly constructed character of the Dutch landscape sensitises the Dutch to the rôle of science and technology in the world.

Responsibility under Uncertainty: Science, Technology and Accountability
EASST 2002 Conference, July 31 to August 3, University of York

A key concern for science and technology studies has been to explore and deconstruct the privileging of science and technology as forms of knowledge and practice. More recently, this work has been increasingly accompanied by attempts to build a more accountable science and technology anchored in a more explicit normative and reflexive discourse. Much of the empirical work in STS has demonstrated that things could have been otherwise - materially, culturally and institutionally. The move towards a politics of and policy for science, technology, medicine and engineering that recognises, but is not paralysed by, uncertainty has marked recent debate.

At the same time, science and technology have themselves become politicised and in turn active in the shaping of politics and policy agendas and concerns. The language of uncertainty and 'precaution' and an attempt to enlist rather than enthral the users of science and technology prevail today. Some have argued that science and technology occupy a position in the public sphere that demands their implications be considered at the outset, and not simply when developments are at a point of application. It could be argued that there is a shift towards what can be called *anticipatory science and technology.*

These changes have raised many questions for STS as well as opportunities for the field to develop analyses that acknowledge the intertwined status of its technical and social 'uncertainty'. This poses a key question which forms the focus for this conference: drawing on the diverse theoretical and methodological traditions of STS is it possible, or desirable, to provide a new framework within which an 'anticipatory science and technology' can be grounded in new forms of social accountability and trust?

There are a number of issues this conference hopes to address surrounding anticipatory science and technology. These relate to a range of concerns, as follows:
* how is it possible to understand and respond to the contested futures for science and technology and how are agendas shaped by the agency of different social groups and publics?
* can STS develop new approaches to technology assessment that incorporate a more nuanced understanding of uncertainty and ambiguity?
* what new forms of governance and institutional developments are required to manage anticipatory science and technology in the 'public sphere' over coming decades?
* how might it be possible to respond to commercial and political investment in new sciences and technologies whose social and technical implications are uncertain; how, given this uncertainty, can they be held accountable?
* how can STS analyses provide for a better understanding of the contemporary and future forms of social division and inequality that reflect and are generated by socio-technical systems?
* how can we develop new methodologies that ensure that STS itself is 'made accountable' in terms of the questions it asks of science and technology, and the ways in which it tries to answer them?

These themes are of interest not only to academic researchers but also to those working in government policy, the science, engineering and medical professions, and lay associations concerned with science and the media.

Contributions will be welcome from the range of disciplines found within the broad field of science and technology studies, including those working within the sociology of science and technology, science and technology policy, innovation studies, the history of science and technology/engineering, public understanding of science and technology, comparative international work, and futures and risk analysis.

The 2002 conference will be formally announced later in the summer. In the meantime, the conference theme has now been finalised as above.

The email address for any correspondence is: easst2002@conference-events.york.ac.uk

Conferences and Calls for Papers

The Second European Meeting on Applied Evolutionary Economics (EMAEE), entitled *Advancing empirical research methodologies in Evolutionary Economics,* will be held in **Vienna** on September 13 - 15, 2001. It is organised by the research group "Growth and Employment in Europe: Sustainability and Competitiveness" at Vienna University of Economics and Business Administration together with the Institute of Economics at Vienna University of Economics and Business Administration and the Ludwig Boltzmann-Institut für Wirtschaftsforschung, also in Vienna. The conference will host a number of sessions featuring international and national contributors to the field of applied evolutionary economics and innovation studies. Speakers and discussants invited (stars indicate confirmed speakers and discussants): Uwe Cantner (Jena), John Foster (Queensland), Luigi Orsenigo (Brescia and Bocconi), Pier Paolo Saviotti (INRA-SERD), Jeroen van den Bergh (Amsterdam), Maureen McKelvey (Chalmers), Arnulf Gruebler (IIASA), Hardy Hanappi (TU Vienna), Michael Peneder (Wifo), Wolfang Polt (Johanneum Research), Brigitte Unger (WU Vienna). Further Conference information is available at the EMAEE 2001 website: http://www.wu-wien.ac.at/inst/vw1/gee/emaee/emaee_index.html.

The 2001 Joint Atlantic Seminar in the History of the Physical Sciences, entitled *Historical Interactions Between the Physical Sciences, Business, and Technology,* is to be held at the Chemical Heritage Foundation in **Philadelphia** on September 28-30, 2001. The physical sciences, technologies, and industries have profoundly shaped the history of the world since the late nineteenth century. New scientific disciplines and global industries have been established, e.g., petrochemicals, polymers, solid-state electronics, materials science, pharmaceuticals, and biotechnology. Moreover, the physical sciences, technologies, and industries developed early and had far-reaching connections with public sector-institutions, spanning the range from public health and environmental protection to national defense. These fields and industries have had dramatic effects on standards of living, global economic

patterns and developments, as well as on worldviews. Address all queries to: Thomas C. Lassman, Joint Atlantic Seminar in the History of the Physical Sciences, Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106, toml@chemheritage.org.

Cultural Attitudes Towards Technology and Communication, **Montreal,** 12-15 July 2002, http://www.it.murdoch.edu.au/~sudweeks/catac02

Ethnographies of "The Centre", a workshop at **Lancaster University,** UK, will take place on 10-11 September, 2001, with information at http://www.comp.lancs.ac.uk/sociology/lsuchman.html. The purpose of this workshop is to assemble researchers and scholars engaged in investigating a broad, in some respects disparate, range of sites of contemporary technoscientific, cultural, political and economic practice. The common thread that initially ties these sites together is their identification as "centered" within the social worlds of which they are part. The workshop proceeds from the assumption that such identifications presuppose the ongoing performance of connections, boundaries, and exclusions on which the location "central" relies. Examples of such sites might include the workings of various centres of planning, calculation, coordination and innovation (auditors and policy analysts, financial traders, control rooms, research and development laboratories, and the like); centered sites of cultural production (multi-media design firms; theme parks); sites of technology-intensive and/or esoteric professional practice (surgeries, airplane cockpits, courtrooms); or particular performances of systematic, exclusionary differentiations (e.g. technoscience's constitution of "technical" cores and "social" peripheries). A primary concern of the workshop will be to engage, through close readings of such sites, with recent critical challenges to the tropes of "center" and "periphery," focussing on the problem of how such identifications achieve their distributive effects both rhetorically and practically. Since early in the last century, science, technology, and industry have been focal enterprises for the

production of centers and margins, organized around competitive accumulations of cultural and economic capital. A motivating premise in convening the workshop is that ethnographic investigations of "the centre," as both an imagined and an actualized site of origins, leadership, control and so forth, can be a critical resource for contemporary projects of de-centering, particularly in feminist and post-colonial science studies. By interrogating the center ethnographically, the aim is to de-center its stability from a singular place in the world into the multiplicity of projects, identities and relations that (more and less successfully) hold it together. The aim of the workshop will be to explore this proposition further, from multiple perspectives and in relation to diverse ethnographic materials. To that end, alternate readings of both "Ethnographies" and "the Centre" are strongly encouraged. Confirmed Plenary Speakers: Professor Karin Knorr-Cetina, Department of Sociology, University of Bielefeld and Professor George Marcus, Department of Anthropology, Rice University. Queries to Lucy Suchman l.suchman@lancaster.ac.uk.

The second European conference of the *International Society for Literature and Science* (SLS) will take place at **University of Aarhus**, Denmark, May 8-12, 2002. The conference will gather scholars from human, social, medical, technical and natural sciences as well as artists, who are interested in inter- and transdisciplinary approaches and linkages between the study of culture, literature, visual arts and technoscience, and between science and the arts. Culture and technoscience used to be regarded as disparate activities and fields of study that referred to separate spheres of society, and to different epistemologies, methodologies and practices. But in recent years, a growing number of scholars from many disciplines have forged transversal lines and links between the study of culture/literature/visual arts and technoscience, exploring issues such as for example: links between fact and fiction; transversal lines between science and story-telling; links between cultural imaginaries and scientific practices; semiotic-material practices; how metaphors matter and matter performs metaphorically; intersections and incommensurabilities between visual arts, literature, culture and technoscience; translations between physical and virtual spaces; cyborg

identities and cyborg bodies; and feminist and postcolonial perspectives in technoscience studies. The conference will be a forum for exchange of ideas between senior and junior researchers committed to the exploration of such issues and to experiments with transgression of boundaries between the formerly disparate fields of culture/literature/visual arts and technoscience. In particular, the conference will give space to scholars who want to compare notes cross-nationally and cross-Atlantically. Many European scholars seem to be committed to the study of the new interdisciplinary field of culture & technoscience studies without knowing about the International Society for Literature and Science that originally was started by US-colleagues. The first European conference of the society, held in Brussels in April 2000, initiated a much needed cross-Atlantic dialogue. The idea is that the second conference in May 2002 shall take this process important steps further. Proposals for papers and workshops are invited from both senior and junior scholars from all disciplines who are interested in the links and border transgressions between the study of culture, literature, visual arts and technoscience. Abstracts for papers and workshops (2-300 words) should be sent to SLS@imv.au.dk before Oct. 1, 2001, or by post to Randi Markussen, Associate Professor, Ph.D. Dept. of Information and Media Studies, University of Aarhus, Niels Juels Gade 84, 8200 Aarhus N, Denmark, Phone (switchboard) +45 89 42 11 11, Phone (direct) +45 89 42 19 66, fax +45 89 42 19 52. Conference website from September 1: http://imv.au.dk/SLS-Europe. The City of Aarhus can be visited 'virtually' at http://www.aarhus-tourist.dk/index.htm and University of Aarhus at http://www.au.dk/en/.

A *Conference on Biotechnology and Globalisation: Ethical Considerations* will take place at the Kennedy School of Government, **Harvard University** on 24-25 September 2001. Information is at http://www.cid.harvard.edu/cidbiotech/ethicsconf/description.htm
Ethics claims to address the subject of values in a practical manner. An ethical discussion based on rational arguments is supposed to reduce the appeal to emotion in controversial issues and to foster public confidence. Ethical issues have been extensively invoked in discussions regarding biotechnology. These issues are closely tied to

fundamental differences in worldviews among major regions of the world. Often, depending on the respective worldview, other ethical theories are applied in order to strengthen one particular position. In this context, ethics has to be regarded in a critical light as well, and ways must be found to determine which ethical approach is most appropriate for a specific case. The conference presents the existing ethical theories (for example, utilitarian and transcendental ethics, biocentric and anthropocentric approaches) and how they are used in the context of biotechnology and development. Furthermore, the conference focuses on the key ethical issues that influence policy discussions on biotechnology. This conference is the second of a planned series looking at different aspects of biotechnology and globalization. Other conferences in the series include the International Conference on Biotechnology in the Global Economy: Science and the Precautionary Principle, held in September 2000; as well as future ones on Globalization of Research and Development, to take place September 11-13. For further details, please contact: Brian Torpy, Belfer Center for Science and International Affairs, 79 JFK Street, Cambridge, Massachusetts 02138 USA, brian_torpy@ksg.harvard.edu, Telephone: 617-496-5574, Fax: 617-495-8963.

The Conference, *Innovations for an E-Society: Challenges for Technology Assessment*, will take in **Berlin** on October 17-20, 2001. e-Society, network society, neconomy - these and related designations refer to a significant societal transformation. If we wish to participate in shaping the emerging new societal reality, there is a need for a constructive, design oriented understanding between politics, industry and the public. It is against this background that a conference will be held. Conference objectives are: sounding out potential impacts and implications of information and communications technologies in their political, economic, social cultural and ecological dimensions; analysis of the institutional conditions and arrangements for e-Society; identifying and articulating the opportunities for shaping developments; identifying conditions to reconcile innovations, sustainability and social acceptability. In addition to plenaries, sessions will be held on the following topics: e-Commerce; New Media and Culture; Electronic Governance; e-Health

Services; e-work or social contract?; The vulnerability of e-society; and New approaches to Technology Assessment and Forecasting. For more information, see http://www.itas.fzk.de/e-society or contact John Grin, member of the scientific committee, at grin@pscw.uva.nl.

Postmodern Practices: MediaTraces - DiscourseBodies - TradeMarx, the 4th interdisciplinary, international (post)graduate conference on Postmodernism at the **University of Erlangen/Nuernberg** (Bavaria, Germany) will take place on November 23rd - 25th, 2001. The Departments of Sociology, Political Sciences and American Literature invite young scholars (from graduate students to assistant professors) to participate in the 4th interdisciplinary, international (post)graduate conference at Erlangen University (Germany). Possible topics include, but are not limited to: postmodern criticism - criticizing the Postmodern; postmodern politics - political postmodernism; Marxism and the Postmodern; language and power; truth as difference; alterity as intercultural practice; strategies of identity in the simulacrum; feminism and queer theory; re-presentation and the politics of the body; psychoanalysis and phallocratism; jouissance as surplus value; difference as a symptom; transnational media rhizomes; I is a commodity; the sublime and the affordable; p-commerce: utilizing the postmodern; the true, the beautiful and the goods - the end of philosophy and ethics?; postanalytical philosophy vs deconstruction; usic cultures in late capitalism: song_track_loop; science fiction and postmodern utopia; historiography, narration and biography; hyperfiction and net literature; the fantastic in literature, film and the fine arts; and echoes and reflections in art and literature. Deadline for paper proposals: 15th September, 2001 (other participants may register till November 20th). Please register on our online submission form (http://www.gradnet.de) Each panel will consist of three to five speakers and will last two to two and a half hours. Speaking time for each paper is approximately 12 minutes, which permits ample time for discussion after the delivery of the papers. Contributions of 3 to 10 pages from the delegates will be posted on our web page in order to facilitate discussion and scholarly exchange. The deadline for the submission of these short contributions is 15th October, 2001. Email (Thomas Doerfler or Michael Fritz) proposals as

well as short contributions to: 2001@gradnet.de

The **Wellcome Unit** for the History of Medicine, **Norwich**, UK, has issued a call for papers for a conference entitled *The Rising Dawn: The Contribution of Alchemy to Medieval Medicine and Intellectual*, to take place at the University of East Anglia, on 21-22 March 2002. 'There is a stone, which he that knoweth layeth it upon his eyes, but he that doth not, casteth it upon the dunghill, and it is a medicine which putteth poverty to flight, and after God hath man no better thing.' (Aurora consurgens). Medieval medicine and intellectual life was underpinned by a comprehensive and arcane system of knowledge known as alchemy. This secretive body of learning nevertheless had links with learned traditions in the Greek, Roman and Arabic worlds and played a vital contribution to medieval medicine, philosophy, politics, science, myths, religion and art. This conference will explore these contributions and attempt to add to our knowledge and understanding of the dissemination of alchemical manuscripts in Latin and the vernacular; the contribution of the alchemist to the practice of humoral medicine and surgery; the relationship between the different alchemical traditions, Greek and Byzantine, Baconian and Pseudo Lullian; the evolution of alchemical emblems; and the relationship between alchemy and politics at the royal courts. Academic research into alchemy has been neglected. This conference seeks to raise the profile of this elusive but vital branch of medieval learning by bringing together scholars from different countries and disciplines. 'And therefore the science which I learnt without guile, do I communicate without envy.' Albert the Great, Compositum de compositus. All papers should represent original research. Submissions from younger scholars will be particularly welcomed. Please send two copies of a one page abstract (350 words maximum) to: Dr Jonathan Hughes, Wellcome Unit for the History of Medicine, School of History, University of East Anglia, Norwich NR4 7TJ, UK, or email jonathan.hughes@uea.ac.uk. Please also provide the following: name, preferred mailing address, work and home telephone numbers, present institutional affiliation, and academic degrees. Abstracts must be received by 15 September 2001. For general enquiries please telephone Sarah Browne: + 44 (0)1603 593576

HOPOS 2002, the Fourth Congress of the International Working Group in *History of Philosophy of Science*, will take place in **Montreal**, Canada, on June 21-23, 2002. The International Working Group in History of Philosophy of Science (HOPOS) will hold its fourth international congress in Montreal, Canada, June 21-23, 2002. All submissions should arrive by 1 January 2002. Contact: Alan Richardson, Co-Chair, HOPOS 2002 Program Committee Department of Philosophy, 1866 Main Mall - E370, University of British Columbia, Vancouver, BC V6T 1Z1, Canada.

The 2002 International Symposium on *Technology and Society* (ISTAS'02), to be held at **Raleigh, North Carolina**, USA, on June 6-8, 2002, is entitled Social Implications of Information and Communication Technology. As the scope and impact of information and communication technology (ICT) has grown, society has begun to struggle with such issues as privacy and security, equitable access, freedom and responsibility in online speech, human-machine interaction, and the impacts of ICT on work, leisure and education. In the rush to develop a faster microprocessor or a "killer" application, it often seems that the engineers and computer scientists responsible for the development of ICT have little or no awareness of these matters. Over the past two decades a growing number of engineers, computer scientists, social scientists and ethicists have begun to focus attention on ethical and socially responsible use of ICT, a difficult task that is compounded by the rapid pace of technological development. Submit a one page abstract for a paper, or a proposal for a paper session or panel discussion to the Conference Chair (email preferred): Joseph R. Herkert, Division of Multidisciplinary Studies, Box 7107, North Carolina State University Raleigh, North Carolina 27695-7107, USA, voice: 919-515-7993, fax: 919-515-1828, email:joe_herkert@ncsu.edu. Proposals for sessions, panels, or individual papers: Dec 13, 2001. ISTAS'02 web site is at http://www4.ncsu.edu/~jherkert/istas02.html

The Interdisciplinary Conference, *TECHNOTOPIAS: Texts, Identities, and Technological Cultures*, to be held at the Department of English Studies, University of Strathclyde, **Glasgow** on July 10-12 2002, has issued a call for papers. The guest speakers are Colin MacCabe, Harry Collins, and Bryan Turner. The University of Strathclyde is a world leader in science and engineering yet, like many similar institutions, it maintains a strong commitment to the humanities. In societies that seem to place increasing emphasis on the application of technology and scientific knowledge this kind of commitment is sometimes seen as irrelevant. For humanities departments this situation raises new questions of identity, within both university faculties and cultural discourse itself. In the light of this situation the aims of Technotopias are to: Investigate the complex historical and contemporary interplay between the humanities and technology; Address the impact of technologies upon the formation of physical and cultural identities; Consider historical and contemporary representations of technology; and Reflect upon the place of the arts within modern academia. To realise the interdisciplinary nature of this conference we invite papers from all fields of literary and cultural criticism, as well as the scientific and technological disciplines, at both post-doctoral and post-graduate levels. Suggested topics include Literatures of technology: historical contexts; Frontiers of the imagination: Science and Fiction; (Post) modern texts / (post) industrial spaces; Technologos: technology and the word; The science of Angellica: gender and technology Culture, technology, and the body; Technologies and the self; New media, old academe; and Paradigms of utility in academia. Abstracts of 200 words for a 20 - 30 minute paper by 31 March 2002 by E-mail or post to: technotopias@strath.ac.uk, or to Stephen Jones, Technotopias Organising Committee, Department of English Studies, University of Strathclyde, Livingstone Tower, 26 Richmond Street, Glasgow G1 1XH, UK, Tel: 0141 548 3529 (Tues-Thurs 10am-4pm) Fax: 0141 552 3493. See also the department's on line Journal *Ecloga*: http://www.strath.ac.uk/ecloga.

Geography & Revolution, the International Interdisciplinary Conference at the Department of Geography, The **University of Edinburgh**, on 18-21 July 2001 is to recognise the importance of spaces and the situated nature of knowledge in understanding the history of intellectual and social change. This conference aims to bring together an international and interdisciplinary set of speakers to build upon and extend these interests. The connections between geography and revolution - scientific, political and technical - will be explored by scholars from geography, history and the history of science. The conference is organised around three themes: Scientific Revolutions. Here the sites of scientific knowledge, the geographical patterns of scientific practice and the role of cartographic thinking in evolutionary theory will be of central concern. Political Revolutions. The role of geography in the context of political revolution in the United States, Germany, France, England and Russia at different points in time will be the focus of attention here. Technological Revolutions. The impact on spatial thought and practice of the print revolution, the emergence of clock time, and the development of photographic techniques will be examined. The speakers are Mark Bassin (UCL), Jerry Brotton (Royal Holloway), Graham Burnett (Oklahoma), Peter Dear (Cornell), Paul Glennie (Bristol), Michael Heffernan (Nottingham), John Henry (Edinburgh), David Livingstone (Queen's, Belfast), Robert Mayhew (Aberystwyth), James Moore (Open University), Nicolaas Rupke (Gottingen), James Ryan (Queen's, Belfast), Steven Shapin (San Diego), Nigel Thrift (Bristol), Charles Withers (Edinburgh). For further information, see http://www.geo.ed.ac.uk/geogrev/.

Summer Schools

The main theme of the new Summer School, organised yearly by the **Netherlands Graduate School of Science, Technology and Modern Culture** (WTMC) will be *contentious science*. The weeklong programme will have Aant Elzinga as its anchor teacher, one of the pioneers in the field of science and technology studies. Aant is full professor in theory of science and research at Gothenburg University (Sweden). He has been president of EASST, science advisor to the Canadian government, and dean of the humanities faculty. In his work Elzinga combines history, philosophy, and the politics of science, therewith also casting science policy studies in a broader, reflexive and more critical frame. His recent work on Antarctic science will serve as a window on the socio-political dimensions of present-day research. The Summer School will also take a new look at the way science and technology are increasingly involved in disputes such as the ones over international food policy and in law suits. The programme, with an indication of the other speakers, will be available by the end of April. The language of the Summer School is English. The location is conference centre Logica at the campus of University of Twente (http://www.utwente.nl) . The Summer School is part of the graduate training of the PhD students in the Netherlands. A limited number of places are available for other (foreign) PhD students. The fee is NLG 1400/EURO 635,29, the reduced rate for EASST members is NLG 1200/EURO 544,54. EASST has a tradition of making a few travel stipends available. Please inquire at the EASST secretariat. For registration please use the online registration form.
For inquiries about the programme: Paul Wouters (co-ordinator), paul.wouters@niwi.knaw.nl . For all other information concerning the Summer School: Marjatta Kemppainen, University of Twente, u.m.kemppainen@wmw.utwente.nl , phone +31-53-489 4847, fax +31-53-489 4775.

The CURDS Summer School 2001, at **Newcastle upon Tyne**, July 17th-20th 2001, is dedicated to the theme of *Universities and Cities*. It is to be held at the Centre for Urban and Regional Development Studies at the University of Newcastle upon Tyne, UK. The summer school is aimed at postgraduates and researchers interested in developing an understanding of the interaction between universities and their cities. It will pursue this topic through two themes. Universities and the urban economy; and Universities and urban culture. For further information, please contact Cheryl Conway e-mail: c.d.conway@ncl.ac.uk +44 (0)191 222 7577 or browse http://www.ncl.ac.uk/unireg/sumschprog.htm

A *Genetics and Society Research Training Course* to be held at **Hinxton, UK**, 3-6 September 2001 is calling for applications. The course is sponsored by Wellcome Trust as part of its programme to support research into the wider social, ethical and cultural consequences of biomedical science. This summer school is the third training course in the programme to foster mutual understanding across the academic disciplines in the physical and social sciences, and in the humanities. Informal enquiries to Jo Harkness, j.harkness@wellcome.ac.uk, Tel: +44 20 7611 8791.

Nature vs. Environment: Ecological Discourses at the Beginning of the 21st Century is the title of this year's Summer School at the University of the Basque Country, San Sebastian, on July 19-21, 2001. For more information, see http://www.sc.ehu.es/scrwwwsu/cv.htm

Opportunities Available

The Department of Social Studies of Medicine of **McGill University** seeks an *assistant professor in the history of medicine (tenure track)* in the nineteenth and twentieth centuries. The Department is an interdisciplinary unit within the Faculty of Medicine and includes historians, anthropologists and sociologists. It places strong emphasis on research and graduate supervision, but is also responsible for considerable teaching in the Faculties of Arts and Medicine. The successful candidate must have a Ph.D and publications (an MD would be an additional asset) and must be able to function in both the medical milieu and an interdisciplinary social science environment. We will consider all areas of research interest compatible with the core strengths of the Department in comparative medical systems and medical knowledge in the 20th century. Curriculum vitae and three letters of reference should be sent by December 31 2001, to Faculty Search Committee; Department of Social Studies of Medicine; McGill University; 3655 Drummond Street; Montreal, P.Q. H3G 1Y6; Canada. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. McGill University is committed to equal opportunity in employment.

Applications sought for the position of *Research Assistant* in the Work, Interaction and Technology research group in the Management Centre, **King's College London**. There is growing interest amongst artists, designers, curators and museum managers in experimenting with information and communication technologies to create new forms of artwork, installation and exhibition. Many of these experiments are designed to enhance aesthetic and dramatic experience by providing people with new forms of interaction and collaboration with, within and around artwork and installation. As yet however, we know little of the ways in which these interactive mixed-media exhibits serve to facilitate interaction and collaboration, and even whether they successfully engender new and distinctive forms of experience and participation in the artwork. In this project we will examine interaction and collaboration with and around innovative 'interactive' artworks and installations in museums and galleries, and explore their design, development and deployment. The project involves field studies of galleries and museums, of the design and development process, and active participation in the creation of a number of works. We are seeking applications for the position of Research Assistant to work on the project for its duration of 30 months. Applicants may have a background in the social or computer sciences and/or art and design. Some experience of ethnography would be an advantage, as would an interest in ethnomethodology and conversation analysis. The research assistant will be involved in video-based analyses of conduct and interaction in museums and galleries, field studies of design, and working with artists in the creation of installations. As well as artists and designers a number of major galleries and museums are participating in the project. The research fellow would join the group which specialises in video-based field studies of social interaction. Current projects include studies of control centres, news rooms, medical consultations, and museums and galleries. A number of these studies are also concerned with the design and deployment of advanced tools and technologies and involve close collaboration with academics, and industrial and service sector partners in the UK, mainland Europe and Japan. Further information concerning the research group, current projects and publications can be found on our web site: http://www.kcl.ac.uk/depsta/pse/mancen/witrg/

The Institute for Liberal Arts and Interdisciplinary Studies at **Emerson College, Boston**, seeks a *Visiting Scholar in Science and Technology Studies*. The search has been extended beyond the 1 May deadline. This position is a one-year, non-tenure track appointment (renewable annually for up to three years) which will begin September 1st, 2001. Applications, including a cover letter, curriculum vitae, selected publications, evidence of teaching excellence, and the names and contact information for three references, should be sent to: David Bogen, Executive Director, Institute for Liberal Arts and Interdisciplinary Studies

Emerson College, 120 Boylston Street, Boston, Massachusetts 02116-1596, USA. For more information about the Institute for Liberal Arts and Interdisciplinary Studies at Emerson College go to: http://www.emerson.edu/acadepts/institute

The Centre for Applied Philosophy and Public Ethics (CAPPE) Charles Sturt University, Canberra, Australia and the ARC Commonwealth Special Research Centre for Applied Philosophy and Public Ethics (CAPPE), funded under the Australian Research Council's Special Research Centre scheme, has extended a Call for Expressions of interest in a position in Computer Ethics. For more information on CAPPE see http://www.csu.edu.au/faculty/arts/cappe/. The successful applicant will have qualifications in both Philosophy and Information Technology, with a PhD in one of these disciplines. He/she will participate in the research of the Computer Ethics programme of CAPPE, and will undertake some teaching in either Philosophy or IT, depending on expertise. For further details contact Seumas Miller, Director of CAPPE, smiller@csu.edu.au, or John Weckert, Computer Ethics Programme Leader jweckert@csu.edu.au

The Department of Bioethics in the Faculty of Medicine at Dalhousie University is seeking to appoint an individual to a Canada Research Chair faculty position in Bioethics. The successful candidate will be appointed at the level of assistant or associate professor. Applications including CV, a one page outline of a five year research plan, and names and addresses of three references should be forwarded to: Prof. Françoise Baylis, Acting Department Head, Department of Bioethics, 5849 University Ave., Halifax, NS B3H 4H7, Canada. The review process will begin May 1, 2001 and continue until the position is filled. Website: www.medicine.dal.ca/bioethics.

Marie Curie fellowship places are available over the next four years at the Centre for Urban and Regional Development Studies at **Newcastle**. These are for existing European PhD students based outside the UK to spend up to 12 months in Newcastle on research and associated training. Students will receive support from the European Commission during the stay but will remain registered at their home institution. This is an open call for applications, but a selection will be undertaken on 30 June 2001. Another selection will be undertaken early in 2002. The focus of the training will be on the theme of university-regional engagement. This is defined as embracing a range of important interactions between universities and other actors and agencies at the regional scale, taking into account also the repositioning of universities due to the application of ICTs, and the changing nature of regional innovation systems with regard to the specific role of universities. Fellowships are open to candidates eligible for the Marie Curie scheme and who are not of British nationality. Applicants should be registered for a PhD in another EU country, and able to spend time undertaking research training and research in the UK. Fellowships are available for three to twelve months, although longer stays are preferred to ensure greater benefit to the fellow. Fellows will be supported by an allowance of 1200 Euros per month, plus additional travel and research costs. Any existing grant or bursary in the home country should be unaffected by this allowance which is intended to be additional to existing support. Fellows should be under 35 years of age or less, although some allowance is made for compulsory military or civil service and for childcare. Full details available from the CURDS website www.ncl.ac.uk/curds - follow the link to ARTURI from 'Stop Press' on the home page.

The **Max Planck Institute for the History of Science in Berlin** announces the *Lorenz Krüger Postdoctoral Fellowship* for 2001/02 for an outstanding junior scholar whose current research combines perspectives from the history of science with those of the philosophy of science and/or the history of philosophy. The fellowship is named in honor of the late Professor Lorenz Krüger, of the University of Göttingen, whose work sought to connect philosophy with the history of science. The Lorenz Krüger Fellowship is awarded for a one year stay at the Institute in Berlin, beginning 1 October, 2001. The fellowship is open to scholars of all nationalities who have completed their Ph.D. no earlier than 1996 and no later than September 2001. The stipend for applicants from abroad is 3600 DM per month. Women are encouraged to apply. Qualifications being equal, precedence will be given to candidates with disabilities. Applicants for both fellowships are invited to send a curriculum vitae, a brief research proposal (maximum 1000 words), and two letters of recommendation by 30 June, 2001 to:
Max Planck Institute for the History of Science Administration,
"Lorenz Krüger Fellowship", Wilhelmstraße 44, 10117 Berlin, Germany.

The **Nicholas Mullins Award** is awarded each year by the *Society for Social Studies of Science (4S)* for an outstanding piece of scholarship by a graduate student in the general field of Science and Technology Studies. The prize consists of a cheque for $US 500, a certificate and travel expenses for this year's Annual Meeting of 4S. The competition is for graduate student papers, which must be submitted in English, based on all types of scholarly products in the field of science and technology studies: unpublished papers, published articles, dissertation chapters. It is recommended that dissertation chapters be adapted so as to make them "stand-alone." The work may not be older than two years at the time of submission. The intended readership for the papers is a general STS audience, rather than a specialized disciplinary readership. A graduate student can only make one submission a year. The length of a paper should not exceed 10,000 words -- including notes and references. According to the rules, longer papers will be "punished" in the evaluation procedure, i.e., they do not have to be read in their totality. They should be typed double-spaced. Six (6) copies should be sent to the chair of the Nicholas Mullins Award Jury (see address below), but for students for whom this would be a financial hardship two (2) copies would be acceptable. Initial submission to the Chair of the jury as an electronic email attachment, preferably in Word format, is encouraged. The name and address of the author and the name and address of the author's institution should be on a separate sheet (or file), so that these can be detached from the distributed copies. Deadline for submitting contributions is August 31, 2001. Papers received after that date will be considered for next year's contest. The evaluation is executed blindly by a jury of STS scholars. The winner will be announced at the Banquet at the 2001 Annual Meeting of the 4S (Cambridge, Massachusetts, November 1-4). Winners are expected to attend this meeting. For further information, please contact the chair of the jury: Malcolm Ashmore, Department of Social Sciences, Loughborough University, Loughborough LE11 3TU, UK.

Michigan State University has an unexpected opening for a one-year position (2001-2002) for an instructor or visiting assistant professor of science and technology studies (STS) in the Lyman Briggs School, an undergraduate, residential, liberal arts science program in the College of Natural Science. This person will teach with passion a total of four courses, either four sections of our first-year introduction to science and technology studies course, or three of those plus one upper-division STS courses on the history of biology. All our STS courses are writing-intensive, seminar-style. We would expect the person to hold or be completing a Ph.D. with a specialization in STS, history, sociology, English, philosophy, or a related field, and be able to provide evidence of effective undergraduate teaching experience. Inquiries should be directed by June 30, 2001, to Robert Shelton at shelton@msu.edu

Net News

The Museum of the History of Science, Oxford, Istituto e Museo di Storia della Scienza, Florence, The British Museum, London, and Museum Boerhaave, Leiden, are pleased to announce the online version of "Epact: Scientific Instruments of Medieval and Renaissance Europe", available at www.mhs.ox.ac.uk/epact. Epact is an electronic catalogue of all the Medieval and Renaissance scientific instruments in the four museums. It is aimed at both the general public and the connoisseur of scientific instruments. Each instrument in the catalogue is described by an overview text and a detailed technical description as well as being illustrated by photographs. Supporting material for the catalogue includes an essay on the Medieval and Renaissance mathematical arts and sciences, articles describing the function of different instrument types, entries on makers and places represented, a glossary of technical terms, and a bibliography. Epact was first published in stand-alone form in the four museums in September 1998. The current online version reproduces the contents of the stand-alone edition with pictures of slightly lower resolution as befits an Internet resource. Corrections and additions are currently being compiled, and in the meantime any problems with the online version and suggestions for further improvements should be directed to giles.hudson@mhs.ox.ac.uk

The first issue of POROI: A Journal of Interdisciplinary Inquiry features essays on Rhetorics of Biology in the Age of Biomedical Reproduction. The journal's main page, which also includes information regarding submissions and more, is available at http://inpress.lib.uiowa.edu/poroi."Our goal is to find paths among the many subcultures of learning. We also are interested in understanding recurring forms of scholarly and artistic production: logics and examples, stories and metaphors, arguments and models, styles and tropes, myths and images."

Alex Fernandez, the Spanish science journalist, has developed a website about sci-tech 'divulgation' at http://www.divulcat.com.

As NASA gets ready for the next servicing missions to the Hubble Space Telescope in late 2001, the Exploratorium is teaming up with the Space Telescope Science Institute and Goddard Space Flight Center to look at the accomplishments of this orbiting observatory. After 11 years of operation, the space telescope is still capturing stunning images of distant galaxies and helping scientists answer the most fundamental questions about the origin and fate of our universe. The Exploratorium Live@: Origins crew will take a behind-the-scenes look at the people, tools, ideas, and places behind the Hubble Space Telescope operations. The series will end on the 11th anniversary of Hubble's launch with the first-ever live webcast inside the clean room at Goddard Space Flight Center where telescope hardware is being prepared for flight. See http://www.exploratorium.edu/origins/hubble.html

The Archives Hub at http://www.archiveshub.ac.uk/ provides a single point of access to descriptions of archives held in UK universities and colleges. At present these are primarily at collection-level, although where possible they are linked to complete catalogue descriptions. The Archives Hub forms one part of the UK's National Archives Network, alongside related networking projects. A Steering Committee which includes representatives of the Public Record Office, the Historical Manuscripts Commission and the other archive networks guides the progress of the project. The service is hosted at MIMAS on behalf of the Consortium of University Research Libraries (CURL) and is funded by the Joint Information Systems Committee (JISC). Systems development work is undertaken at the University of Liverpool.

Readers will be well aware of the leading role that Edinburgh has played in the development of medical teaching, research and practice from the eighteenth century to the present day. The city also possesses extremely rich archive holdings relating to these areas, many of which are held in the Lothian Health Services Archive at the University of Edinburgh. These include: institutional records of all major hospitals in the Edinburgh region; records of medical societies, charities and campaigns; clinical case notes; and personal papers of physicans, surgeons, nurses and other health workers. Chronological coverage extends from 1727 to the present. A comprehensive and fully searchable top level listing of LHSA holdings is now available online at http://www.lhsa.lib.ed.ac.uk, and will provide an invaluable resource to anyone interested in researching the history of medicine in the Edinburgh context.

Hermeneutics in Russia, the online journal is at http://www.tversu.ru/Science/Hermeneutics/. Hermeneutics in Russia is an international quarterly intended to answer questions about the problems of hermeneutics. Problems of reflectivity, interpretation and forming readiness for understanding will also be discussed. Not only is philological hermeneutics represented but also hermeneutics of any sphere of human activities where reflectivity and understanding are desirable. That is to say, hermeneutics of a human face, of a landscape, of a national or individual mentality. In its own way, this makes our journal multidisciplinary, while devoted to hermeneutics simultaneously.

The Spring/Summer issue of Scipolicy - The Journal of Science and Health Policy has several new article abstracts at http://www.Scipolicy.net, including those by Henry Etzkowitz on The Endless Frontier; David Guston on Scientific Integrity; and eight new Science Wars Articles - including reviews of the new Bricmont/Sokal article. An invitation is extended to join Scipolicy-L discussion group for science and health policy, which recently saw a debate on "Postmodern Deconstruction Of Newtonian Science" (see http://groups.yahoo.com/group/Scipolicy-L). To join: Scipolicy-L-subscribe@yahoogroups.com.

The RSLP project NAHSTE (Navigational Aids for the History of Science, Technology and the Environment) is pleased to announce the relaunch of its website, to be found at www.nahste.ac.uk The new pages contain, amongst other things: detailed breakdown of the project's methodology; information about the collections being catalogued; sample ISAD and ISAAR records; abstracts from academic papers read at dissemination events; and the online newsletter.

A new issue of 'News in Brain and Behavioural Sciences' is available at: http://human-nature.com/nibbs/issue15.html

Psci-com, http://www.psci-com.org.uk, is a searchable web site which describes and indexes quality web sites on the public understanding of science, science communication and science in society. It includes discussion forums as one of the resources on the web site.

A set of conference announcements, grouped by theme, compliments of Phil Agre.

information systems in context

Second Kyoto Meeting on Digital Cities, 18-20 October 2001
http://www.digitalcity.jst.go.jp/meeting/

Organizations and Society in Information Systems, New Orleans, 16 December 2001
http://www.ifipwg82.org/oasis2001.php3

Information Systems Development, London, 5-7 September 2001
http://www.rhbnc.ac.uk/~uhtm022/isd2001/isd2001c.htm

Information Systems and the Future of Digital Economy, Gdansk, 6-8 June 2002
http://panda.bg.univ.gda.pl/ecis2002/main.html

Critical Research in Information Systems, Salford, UK, 9-10 July 2001
http://www.isi.salford.ac.uk/cris/

Enterprise Information Systems, Setubal, Portugal, 7-10 July 2001 http://www.iceis.org/

Security and Control of IT in Society, Bratislava, 15-16 June 2001
http://www.conference.sk/ifip/cfp.html

Association of Internet Researchers, Minneapolis, 10-14 October 2001 http://www.cddc.vt.edu/aoir/

European Anti-Malware Conference, Berlin, 8-11

June 2002 http://conference.eicar.org/

Geospatial Information and Technology Association, Tampa, 17-20 March 2002 http://www.gita.org/events/02_25_open.html

History of Scientific and Technical Info Systems, Philadelpha, 15-17 November 2002 http://www.chemheritage.org/HistoricalServices/2002HHSTIS2.htm

Road Transport Information and Control, London, 19-21 March 2002 http://conferences.iee.org.uk/RTIC/

European Conference on e-Government, Dublin, 27-28 September 2001 http://www.mcil.co.uk/2c-eceg2001.htm

information society

Information, Knowledges and Society, Havana, 22-26 April 2002 http://www.idict.cu/info2002/venglish.htm

Euro-China Forum on the Information Society, Beijing, 16-20 April 2002 http://www.EuroChina2002.com/default.htm

economics and commerce

New Institutional Economics, Berkeley, 13-15 September 2001 http://www.isnie.org/ISNIE2001.htm

Antitrust Issues in Network Industries, Helsinki, 3-4 August 2001 http://data.vatt.fi/aiini/default.htm

Economics of Information Technologies, Madrid, 14 June 2001 http://www.ucm.es/info/icae/Call.PDF

Economics of Information and Communication Technologies, Mannheim, 18-19 June 2001 ftp://ftp.zew.de/pub/zew-docs/div/ITC-Conference.pdf

Evolutionary Political Economy, Siena, 8-11 November 2001 http://www.econ-pol.unisi.it/eaepe2001/

Institutions in Transition, Otocec, Slovenia, 13-14 July 2001 http://www.gov.si/zmar/conference2001/

Civil Society and the Democratization of Global Governance, Montreal, 12-15 May 2002 http://www.fimcivilsociety.org/co02_anglais_text.html

libraries and museums

Preservation in the Digital Age, Paris, 27-30 May 2002 http://www.cni.org/Hforums/ninch-announce/2001/0034.html

Museums and the Web, Boston, 17-20 April 2002 http://www.archimuse.com/mw2002/

Russian digital library conference, Petrozavodsk, 11-13 September 2001 http://rcdl2001.krc.karelia.ru/

Internet Librarian, Pasadena, 6-8 November 2001 http://www.infotoday.com/il2001/

Library and Information Technology Association, Milwaukee, 11-14 October 2001 http://www.lita.org/forum01/index.htm

Digital Reference Conference, Orlando, 12-13 November 2001 http://vrd.org/conferences/VRD2001/

Information Strategies, Fort Myers, Florida, 14-16 November 2001 http://library.fgcu.edu/Conferences/infostrategies/index.html

Science as Culture

Our culture is a scientific one, defining what is natural and what is rational. Its values can be seen in what are sought out as facts and made as artefacts, what are designed as processes and products, and what are forged as weapons and filmed as wonders. In our daily experience, power is exercised through expertise, for example in science, technology and medicine. *Science as Culture* explores how all these shape the values which contend for influence over the wider society.

Science as Culture is an interdisciplinary journal placing science within the wider debate on the values which constitute culture. Above all, it encompasses people's experiences — whether in the workplace, at the cinema, computer or hospital, in the home or at the academy.

This journal is also available online.
Please connect to http://www.tandf.co.uk/online.html for further information.

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