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Living Knowledge

International Journal of Community Based Research

Science in Conflict Resolution

- Defending Local Natural Spaces
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Living Knowledge
The International Science Shop Network

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Focus: Science in Conflict Resolution

Editorial

We cannot communicate without a dialogue. Stimulating the dialogue between science and society at large has become one of the main objectives of the European Commissions current work programme as well as promoting a responsible research and application of science. And the 'public' demands to discuss questions on social values, and the risks associated with scientific progress - still emotional but no longer ignorant on technical questions. Citizens more and more refuse the 'traditional' process of passive consumption of a knowledge actively acquired by experts. Facing problems and involved in conflicts on different levels citizens want to be able to take part in the decision making process.
Science Shops and equivalent organisations facilitate scientific communication and societal demand driven sharing of knowledge with societal groups using a huge variety of methods and tools. Once asked for support in a conflict situation they - as independent bodies - are able to conduct their own research and disseminate the results either the 'traditional way' by publications, workshops and lectures or by technical advice. But more and more they change their role from being advisors to mediators in participating processes, citizens' juries and consensus conferences.
And although "there is still a tendency to present 'the public' and 'the experts' as two separate monoliths", as Alan Irwin writes in his contribution for this magazine: He continues "we should be aware of the challenges (and opportunities)" the new openness for public engagement and scientific citizenship offers for the future.

Enjoy this second issue of "Living Knowledge" and get a good impression of the various facets of Science Shop work. And remember that networking and making a magazine lives from participation. The next issue will be published in July 2004, focusing policy recommendations. Please check www.scienceshops.org for details, and feel free to contribute!

Yours sincerely,
Norbert Steinhaus

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Living Knowledge - International Journal of Community Based Research is a four-monthly publication. The next issue will be published in July 2004. The magazine welcomes the contribution of reports, articles, news, press releases and clippings, letters, contribution to discussions, job offers, internships, internet links etc. Reports and detailed articles should follow the editorial guidelines. Information about the magazine and the editorial guidelines can be found at the homepage of the Science Shop network (www.scienceshops.org). Please feel free to contact the editors for your questions and any support.

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Innsbruck, A

The Knowledge Shop

Science Shop expertise for developing new concepts in adult education

Since August 2003 the FBI Centre Innsbruck, Austria (a non-university based Science Shop), has been collaboration with adult education organisations and Universities from Germany, Italy and Bulgaria in a two years learning-partnership project called "the Knowledge Shop" (GRUNDTVIG II within the LEONARDO programme). The project which is lead by the German Akademie Überlingen aims at developing a concept on how to involve "learners" more actively into the process of learning and the development of courses, and to integrate their experiential knowledge. During the course of the project existing models such as "Sportello" from Italy or the "Science Shop" concept will be analysed to see if elements can be adopted to develop a "Knowledge Shop" concept. The FBI Centre´s task will be to bring to bear its specific experience as a Science Shop and as mediator between science and society at large as well as between theory and praxis, and their expertise in participatory methods.

The first meeting in Rinn, near Innsbruck in Austria (30.10. – 1. 11. 2003) provided the setting. It facilitated the presentation of different Science Shop models and projects (SCIPAS, INTERACTS and ISSNET) as well as further Science Shop elements and approaches which could possibly be adopted for the purpose of the project. The second meeting in Bourgas, Bulgaria, in March 2004 has further elaborated on a draft of the "Knowledge Shop" concept and actively involved learners from Bulgaria.<

Information

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Bonn, D

Connected

Community Foundations

It took a long time until the idea of community foundations came up to Germany. But once the first community foundation had been formed, they caught dwelled on quickly. Last autumn, the Bonn Science Shop has carried out at survey: 120 German community foundations and foundation initiatives have been asked for their relation to Sustainable Development and for their main fields of work. 80% of the foundations focused on education aspects, 76% on environment and nature and 70% on the welfare of the elderly or help for young people. The impressing average of 94 % saw a direct connection between the idea of Sustainable Development and the general goals of their foundation – irrespective of their specific orientation. Other questions were aimed at the foundation's projects, their capital, and their development within the last years. All results have been feed into a network of community foundations the Bonn Science Shop is co-ordinating.<

Information

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Utrecht, NL

Researchers as Advisors

Teaching course on community based research

In the beginning of 2004 the Science Shop for Biology organised a new bachelor´s course. In a 7 week full time course four groups of 5 students, each had to conduct a real life research project in request of a community group. The course has been evaluated by the education expert group of the university. The results of the evaluation were very positive. For students most important added value of this course was their training in academic skills in combination with the real-life aspect of the research. In the near future this course will be transformed in an interdisciplinary course that will be open for students from all departments of the university. The concept of the course can also be used by other Science Shops. Together with partners of the international Science Shop network the Science Shop for Biology will try to organise a more structural exchange of training information and documentation as a follow up of SCIPAS report no. 3.<

Information

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Lyngby, DK

SnikSnak

A computer game for children with speech disorders

A computer is funny. There is no question about it by most of the kids. In close co-operation with the Science Shop at the DTU (Technical University of Denmark, Lyngby), language pedagogues and children a student project led to a flexible instruction programme for children with speech disorders, adaptable to the individual demand. 'SnikSnak' is a game where children – usually at the age of 3-5 years - are asked to talk a lot. The language pedagogues have the possibility to choose different types of sound and partly extend the amount of words, sounds and portraits, kids have to work with. The game´s objective is both to entertain and stimulate. After every ended lesson an animation sequence starts with music or speech and a clown invites the children to make a break and get up and move or act. It can be either used in schools or can also be taken home on a floppy disk. The project offered the chance to apply theory and techniques from different branches of software development. To be user-friendly has been a central goal of the work. The programme should be used by both adults and children with huge differences in computer experience. To ensure this aspects of man-computer interactions and the knowledge of interactiondesign-technicians were considered. During the whole project end-users have been involved to prove that the demands were fulfilled. The urgent need has been a great motivation factor the project group.<

Information

Programme and documentation (in Danish) can be downloaded from http://sniksnak.cti.dtu.dk. Videnskapsbutikken, DTU, DK-2800 Lyngby, Phone +45 4525 6042, vb@vb.dtu.dk, www.its.dtu.dk

Bacau, RO

Remarkable Support

Science Shop Projects integrated into university curriculum

Voluntary work within universities is a new concept for Romania, and there were a lot of enthusiastic students willing to take part in Science Shop projects. So voluntary work for the Science Shop became part of the university curricula within an optional course "Environment and Society". By this students had the opportunity to exercise planning an environmental project and were enabled to apply gained knowledge into practical situations. Working in interdisciplinary teams and co-operating with citizens to improve environmental quality, the students developed important skills for the latter professional practice. Some of the projects, based on requests received from citizens from Bacau county, related to problems of local communities, such as "Sustainability of public transport in Bacau City" or a study on the "introduction of environmental management system in factories". Currently, two students are writing at their graduation thesis about "oil pollution in the soil" and " the management of the urban garbage system".
Introducing these kinds of projects into university courses has led to an enhanced interest and involvement towards these projects. The support given by university staff is remarkable, realizing that scientific research is more valuable if it is applied in the everyday life of civil society. Lecturing, which is actually the dominating method of teaching in universities, tends to be less effective. Nowadays, the trend in effective science education is to use the new approach of co-operative learning and problem solving. Reforming the curriculum is a complex process that involves important changes in approaches to teaching, applied research, and involvement in projects. The project is based in the realisation that approaches to scientific research determine students' understanding of the key concepts of a college education.
Five years ago there was no Science Shop in Romania. Now there are 8 Science Shops, and they just have started a national organisation INTERMEDIU NET (INRO) to strengthen national cooperation and to face future funding problems.<

Information

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Sydney, AUS

UTS Shopfront

A Unique Community Programme

UTS Shopfront at the University of Technology Sydney is a university-wide and non-profit programme that acts as a gateway for community access to the University. It links disadvantaged and under-resourced community groups to university skills, resources and professional expertise. This allows projects that would not otherwise proceed to be completed with multiple benefits for both the community and students.

Bangarra Dance Theatre: Partner in a UTS research project with five cultural groups

The initial concept for the Shopfront came through a Steering Committee, within the Faculty of Humanities and Social Sciences. Seeding money came through a Quality Assurance Grant. During a restructure in 1999 the Shopfront became part of the Pro-Vice-Chancellor External Affairs' portfolio.
UTS Shopfront has a broad skills base with access to the expertise of all nine UTS Faculties. Since 1996, more than 200 community projects have been completed such as the "Indigenous Law Centre "Plain English" Website Project". The Indigenous Law Centre develops and co-ordinates research, teaching and dissemination of information in the multi-disciplinary area of Indigenous peoples and the law. This project developed the content of a website that provides plain language explanation of the major national indigenous legal issues - including discrimination, customary law, bail and dealing with the police. The given information is a valuable resource for grassroots Indigenous groups and individuals throughout Australia.<

Information

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Belfast, UK

Danger Danger

Child accident prevention in households

According to the Child Accident Prevention Trust, every year in the UK over 600 children under five are admitted to hospital with a severe scald caused by bathwater, whilst a further 2,000 suffer less severe scald injuries.
Currently in Northern Ireland social housing providers do not have to install thermostatic mixing valves which allow the temperature of the water coming out of taps to be moderated. Claire Acheson, a Queen's University law student, provided the Child Accident Prevention Trust with the legal background to this decision, and both a standard letter and a follow up letter to be used by tenants to challenge housing providers to fit thermostatic mixing valves. This work was undertaken by Claire on a voluntary basis.
Another law project focused on the effectiveness of international legislation relating to agricultural machinery and child safety. Jennifer Connolly undertook this work as part of the Clinical Law module in the School of Law. She found that Northern Irish law falls behind its' international counterparts in terms of legislation for young people on farms who

are not employees (usually family members). She recommended that occupational health and safety legislation in Northern Ireland should be widened to cover everyone present on a farm. She also recommended that information and training should be offered to ensure that awareness is raised of the dangers around farm machinery.<

Information

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Interview

Stepping up the Science & Society Dialogue

On 17 December 2003 the EU Commission published a call for proposals in the field of "Governance, scientific advice, outreach and communication" within the Science & Society Work Programme 2004. Georges Vlandas from the European Commission talks about objectives, structure and overall approach of the current call.

Mr. Vlandas, at the end of December the European Commission published the Science & Society Work Programme for 2004. Can you explain the guiding principle of this programme?
The Science and Society work programme forms part for the FP6 specific programme 'Structuring the European Research Area'. It draws up a detailed implementation plan and describes objectives, activities to be undertaken and the areas to be addressed. It also mentions the instruments to be used as well as deadlines for proposals, and the selection procedures and criteria.

What is the central idea of the work programme?
The central idea of this work programme is to stimulate structural links within the European research area for a more dynamic interaction between scientists, policy-makers and society at large. These objectives are organised along three axes. The first axe aims to bring research closer to society, the second is concerned with promoting responsible research and application of science and technology; the third intends to stimulate the science & society dialogue, and addresses also the role of women in science. By the way, the work programme for 2004 took in account the expression of interests submitted by invitation of the Commission between April and June 2003.

Some activities within the work programme are of special interest for Science Shops such as "Networking of "Science Shops" or equivalent organisations".
Yes, the work programme sets an emphasis on promoting science and scientific culture. Science shops are independent bodies that facilitate scientific communication and societal demand-driven sharing of knowledge with civil society groups. The aim of this particular topic is the reinforcement of the European dimension of Science Shops and the dissemination of their activities. It not only promotes the creation of networks and the creation of new Science Shops, but will also enable the production of on-line information, training materials, guidelines as well as the creation of specific tools for communication; scientific expertise and advice.

Improving the communication between the scientific community and the public on issues of European research is another focus. What kind of activities will be supported in this field?
This part of the work programme seeks both a better integration of science in society and society in science. But we cannot communicate without a dialogue. And there are a lot of organisations starting to think "There is something about my work people have to know". For this the call includes actions to promote an interchange of scientific information products for the general public between European countries – taking into account tools like travelling and permanent exhibitions, or documentaries. But it also considers the adaptations which are necessary for transposing the products to other countries, including translation into other languages.

Another emphasis was set on the 'embedding' of science and society issues across the Framework Programme. What does the Commission intend with this part of the call?
The concerns related to the "Science & Society" dialogue should become a natural part of the European scientific efforts. A contribution towards this objective requires project participants linking their work to societal issues by addressing public outreach, dialogue, ethics, education and gender questions. The Commission will support a number of embedding measures as "horizontal actions".

What kind of activities will be taken into account for this topic?
This topic includes innovative pilot communication activities which bring together partners from already existing FP6 actions and new participants, particularly on a local or regional level. Possible actors might be local authorities, museums and schools, as well as local media and Science Shops. The aim is to reinforce the local and regional impact by making citizens more aware and involved throughout the life cycle of the project or network.

What budget is intended for the current call?
The total indicative budget for this call is 7.1 million Euro. The topics "networking" and "communication" have a budget of 400.000 Euro. The topic "embedding" has a budget of 300.000 Euro at its disposal.

When is the closing date for submission of project proposals and how will proposals be selected for funding?
Closing date of the call will be 11 May 2004 at 17:00 Brussels local time. The extent to which a proposal addresses the objectives of the relevant work programme is one of the most important evaluation criteria – it would be hard to prepare a successful proposal without studying the work programme.

Mr. Vlandas, thank you for this information.<

Information

A list of the general activity areas addressed within this call as well as specific topics explicitly open for this call with an indication of the types of instruments is available under http://fp6.cordis.lu/fp6/call_details.cfm?CALL_ID=119.
Here you can also download the complete call text and the work programme `Science and Society 2004´. The Commission strongly encourages to refer to both the call text and the work programme for further information.
An overview of expressions of interest (which are ideas for projects) related to this call can be found at: http://fp6.cordis.lu/eoi/ss/eoi_srch.cfm.
Also the „Living Knowledge" news and discussion list (www.scienceshops.org) can be used for sharing ideas on possible projects.

La Laguna, E

Defending Local Natural Spaces

Environmental protection and new forms of knowledge production

by José Manuel de Cózar-Escalante,
The Eco-Social Studies Centre (CEES) in Tenerife, Canary Islands

Las Cañadas with the Teide

The Eco-Social Studies Centre in Tenerife is a university centre and was established at the beginning of 2003 by a group of professors and researchers belonging to different fields of work: biology, education sciences, law, economics, philosophy, geography, history, psychology and sociology. In addition to the university staff, other persons co-operate with the centre on an individual basis, due to their involvement in the issues addressed by the centre, or else as exponents (and not elected representatives) of civil society or other institutions or universities.
The adjective „eco-social" was adopted to underline the fact that the CEES operates basically in the interface between ecological and social issues. The centre's concerns are located in the intricate relations established between societies and their environment. Its main objectives are to study the eco-social problems of the Canary Islands from a multidisciplinary perspective and to spread the knowledge acquired and foster the eco-social values not only within the university, but also among institutions and civil society. Its aim is to act as liaison or as an institutionalised crossroads between the university community, institutions and civil society.

The eco-social situation in the Canary Islands

The Canary Islands are composed of a rich and varied ecosystem with mild climatic conditions. However, due to their insular nature and the pressure of tourism and demographic growth, they are characterised by marked fragility. In particular, the coastal natural spaces are continuously submitted to enormous pressure, due to the construction of housing estates and tourist resorts, roads, ports, etc. Despite official appeals for sustainability, the policy behind these initiatives is still linked to obsolete growth patterns.

The PROTEA Project

In response to this alarming situation, the CEES is carrying out a series of research projects which pursue better understanding and improvement of the eco-social problems of the islands
The main project is known with the acronym PROTEA ("environmental protection and the quality of democracy: functional evaluation of the environmental institutions of the Canary Islands"). The project has two main guidelines: First there are numerous legal instruments which would permit adequate defence of local natural spaces without jeopardising the living standards of the islanders. But the majority of these laws and regulations are not instrumental. They do not provide real solutions to the problems, while possessing a simply „ceremonial" (formal) function to maintain the status quo. And second, the scientific and democratic standards of environmental issues in the Canary Islands (as anywhere) increase significantly when decision-making processes take stakeholders into account.
The accuracy of the above theses is being verified through the analysis of a number of case studies and through the enactment of a series of participatory experiences.

CEES and the new forms of knowledge production

Regarding expert knowledge production relating to non-expert contributions, the philosophy of the CEES accords with the tendency of recent years in considering that it cannot limit itself to a one-way relationship between the acquisition of knowledge by experts, the transmission of this knowledge to the non-experts, and their passive assimilation of such information, without a possibility of interpretation or further intervention in the process
CEES has started to develop different communication of environmental information experiences, where information gives way to knowledge *through* a co-production process, involving experts on the problem under discussion, NGO representatives such as ecology groups and platforms, and other invited citizens. These experiences are inspired by the citizen participation methodologies developed some decades ago in other European Union countries.

Experiences

Despite its limited lifespan, the CEES has already organised several activities, such as seminars on public environmental policies from a multidisciplinary perspective and conferences on the environmental situation in the Canary Islands open to non-academics with an active exchange of opinions. It organized participative forums on two important infrastructure projects in Tenerife: the construction of a large industrial port and an incinerator plant in the south of the island, both potential causes for serious environmental impact
The procedure, following others put into practice in different European countries and in the United States, has consisted

in inviting a group of citizens, representatives from associations or platforms, independent experts and technicians from public institutions. After the speakers gave a brief thesis to explain to the non-specialised public the arguments that, in their opinion, justify (or not justify) the planned environmental interventions the public breaks up in small groups to draft a list of questions. Once these questions have been answered briefly, the groups identify a series of priorities and proposals, which are gathered into a final list of recommendations in order to make them public and to submit them to the pertinent authorities.

LESSONS

The objectives and results of this type of initiative are to establish an institutionalised arena for reflection and exchange of knowledge and methodologies, beyond simple academic interchange, and to spread available knowledge, results obtained and potentially relevant information to bring further public understanding and citizens' awareness of the issues under discussion.

These activities actively pursue the establishment of liaisons between the university community involved in eco-social issues and the institutions responsible for environmental matters, environmental conservation organisations, and civil society in general.

To summarise, the CEES and its associated PROTEA project, is enacting new experiences in the Canaries regarding participation in environmental problems with the objective of improving democratic standards. <

Information

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Amsterdam, NL

Changing Cultural Attitudes

Science Shop presents report at Day against Female Genital Mutilation

by René Rector,
Science Shop of the Free University of Amsterdam

Abstract

It is not known just how many girls and young women in the Netherlands have been the victim of female genital mutilation. However, there is no doubt that it does occur. It is very deep-rooted in some cultures, with an ignorance of the consequences to be considered normal. In a project organised by the Vrije Universiteit Amsterdam's 'Science Shop', ten students investigated the problems involved in trying to discourage the practice. Their results were presented at the recent International Day Against Female Genital Mutilation, held on 6th February. An intense discussion between the audience and various politicians ensued.

Photo: AVC René den Engelsman

A Somalian spokeswoman.

In the 1980s, the arrival of large numbers of refugees, particularly those from Somalia, brought with it a cultural phenomenon that can claim no support or understanding in the Netherlands: female genital mutilation. In the countries of the Sahara region, this is a custom which dates back thousands of years. The most extreme and relatively rare form is known as *infibulation,* which involves the excision of the external genitals (*labia majora*) whereupon the vagina is sewn up. The more common forms involve the removal of the inner labia (*labia minora*) and/or the clitoris in a procedure known as a *clitoridectomy.* All such interventions are regarded as mutilation under Dutch law. Because the practice is usually carried out at an early age, it is also a serious form of child abuse. Being illegal, female genital mutilation is a taboo subject. According to some reports, young girls are taken out of the country to undergo the procedures. However, these are unconfirmed reports: because female genital mutilation is prohibited by law, no one really knows how serious the problem really is.

The role of information and education

Ten students were asked by the Vrije Universiteit's Science Shop, in association with Pharos (an organization devoted to promoting health among the refugee population in the Netherlands) to investigate the role that education and information can play in preventing female genital mutilation. The students - all female themselves - presented their findings at a very well-attended symposium held to mark the International Day Against Female Genital Mutilation on 6 February. A panel of politicians faced questions from the audience, which included gynaecologists, paediatricians, lawyers, men and women from the Somali community in the Netherlands, and the Science Shop researchers themselves.

The symposium took place just a few days after Ayaan Hirsi Ali, a right wing member of the Lower House of Parliament representing the VVD (Dutch Liberal Party), had called for an annual medical examination of girls from the 'at risk' countries. Under Ms. Hirsi Ali's plan, the girls would be required to report to the local health service each year to allow a doctor to determine whether genital mutilation had taken place. Because parents have a legal responsibility for their children's welfare, they would then be liable should this be the case. Ms. Hirsi's proposal prompted some criticism during the symposium, since such an intimate examination would be extremely embarrassing for the child concerned and difficult to justify in the case of those who do come from an 'at-risk' country but are nevertheless not part of a risk group. The effect would be to deter those in the risk groups from seeking any form of medical attention: anyone who would willingly mutilate a child knowing it to be illegal is unlikely to worry too much about denying the child proper medical care if this is incompatible with 'custom'. Moreover, genital mutilation is irreversible whereupon detection after the fact is of little avail. While it may well be desirable to punish the parents, it has to be asked whether this is really in the best interests of the child. (Child protection agencies usually take action only if there is any likelihood of recurrence.) On the other hand, there is little point in having a law which is never enforced.

Debate during the congress.

Science Shop study suggests different approach

In its study, the Science Shop proposes an alternative to prosecuting and sentencing that aims at changing the cultural attitudes. The doctors of child health departments could indeed play a part in identifying the problem. Genital examination is already quite common for boys, to determine whether the testicles have descended properly. A genital examination for girls would therefore not represent any major departure from current practice. However, certain practical objections remain, as Marjolein Zwaan pointed out in the study. In many cases, the doctor will see the child at the age of six, while female genital mutilation is generally carried out when the child is seven or eight. Moreover, the embarrassment factor remains, whether the genital examination is a specific procedure or is part of a regular check-up.

Not within one generation

The ideal situation is to ensure that no genital mutilation occurs at all. Pharos has set up an information and education campaign with this aim in view. The Science Shop study shows that such information does have some effect, but that it will not lead to the eradication of female genital mutilation in the short term. In a culture in which 98% of women have been 'circumcised' in this way, it is unrealistic to suppose that the practice can be stopped by educating a single generation. The researchers identified a certain fear among the Somali community of being 'different from the others' and of harming their daughters' marriage prospects. Many did not know that women of other cultures are never mutilated in this way. Few had given any thought to the relationship between female genital mutilation and medical complaints such as urinary tract infections, scarring, vaginal adhesions and stenosis, and persistent bleeding. The Somali community tends to regard such problems as part and parcel of being a woman, just as the pain of the procedure itself is regarded as 'a woman's lot.'

Information meetings are a first step

While information may serve to sow the seeds of doubt concerning the justification for the practice, it will not immediately lead to the discontinuation of female genital mutilation. In the words of one Somali woman, "I believe that female circumcision is important. If other people change their views, that will not affect me. Nothing I heard at the information evening about it being bad for the health will change my mind. If I ever have a daughter, I will have her circumcised but I will not have her vagina sewn up." But another respondent had indeed been persuaded by the information meetings: "I attended all the meetings and I learned that female circumcision is illegal in the Netherlands. This was the first time I had been told how bad the practice is for the health. If I can play an active part in helping to stamp out female genital mutilation, I shall certainly do so." The information has therefore started to cast doubt in people's minds, but anyone who thinks it will eradicate female genital mutilation in the short term is sadly mistaken. Such a change in culture will take a long time.

During the symposium, the politicians were asked to make more funding available for information, even though the effects are difficult to gauge. This is largely because the extent of the problem is itself unknown. The debate continues: something must clearly be done, but exactly what is not yet clear. In any case, the Science Shop has been successful in placing the issue on the political agenda and hopes that the Pharos education projects can be continued with government support.<

Information

For further information, please contact Wetenschapswinkel Vrije Universiteit, De Boelelaan 1091, 1081 HV Amsterdam, the Netherlands, wetenschapswinkel@dienst.vu.nl, tel. +31 (0)20 444 5650. The Science Shop has produced a series of eight articles (in Dutch) written by students. A free copy can be obtained by sending an e-mail to the above address.

Groningen, NL

Odour

From Technical Advice to Mediation

by Dr. Henk A.J. Mulder,
Chemistry Shop, University of Groningen

Abstract

Ugly smells are annoying and infringe on your health. Regulation and calculation of odour-annoyance are complex. The Chemistry Shop Groningen supports citizens in discussions with authorities. Sometimes their advice is fully rejected or fully accepted. Mostly, it is in-between: a discussion is started to find an acceptable solution. In Steenwijk, a polarised situation was resolved: the independent support from the Chemistry Shop allowed the citizens to participate on an equal level in the discussion, which ultimately benefited all actors involved. Mediation as a side-effect of technical advice.

Stank is hinderlijk en een aantasting van je gezondheid. De regulering en berekening van stankhinder zijn complex. De Chemiewinkel Groningen ondersteunt burgers in hun discussie met overheden. Soms wordt hun advies totaal verworpen en soms compleet aanvaard. Meestal ligt het hier tussenin: er wordt een discussie gestart om een acceptabele oplossing te vinden.
In Steenwijk werd een gepolariseerde situatie opgelost; de onafhankelijke ondersteuning van de Chemiewinkel maakte het voor de burgers mogelijk om op een gelijkwaardig niveau mee te doen aan deze discussie, hetgeen uiteindelijk alle betrokkenen ten goede kwam. Conflictbemiddeling ofwel "mediation" als een bij-effect van technisch advies.

We suffer from ugly smells, what should we do? This is a recurring question posed by citizens to the Chemistry Shop in Groningen, the Netherlands. The Chemistry Shop answers questions posed by society on chemistry, environment and safety. It operates since 1979 at Groningen University's Chemistry Department and is currently run by two lecturers, Henk Mulder and Karin Ree. Their advice is usually free of charge. The research is often performed by students, for course credits or their Master´s thesis. From 1999, Henk Mulder has been supporting citizens in the city of Steenwijk who complain about odours from two local carpet factories. The shop's role developed from technical advisor to the citizen group into that of an unintended mediator.

Odour and Health

Unwanted odours form an infringement of your health, since they interfere with your "state of complete physical, mental, and social well-being" (WHO definition of health). It usually leads to stress. Dutch odour policy was decentralised and left to local authorities in 1995. They are now responsible for assessing the "acceptable annoyance level". From our work we can see that this often leads to heated discussions. Local authorities sometimes classify odour issues as "subjective" and lack insight into the technical and regulatory aspects of odour annoyance.

The Chemistry Shop can not do odour analysis itself, but we can make model calculations with the official models, based on literature data or analysis that have been done by others. We can thus perform counter expertise and sensitivity analysis to reports.

All or Nothing?

The next two case examples show clearly that, for our clients, we sometimes achieve absolutely nothing and we sometimes achieve everything:
In Bergum, a family lived directly (15 m) next to an industrial laundry. What they smelled was a washing machine/ironing odour. After their retirement, they were home more often and annoyance started. A consultancy firm made a standard calculation and a report, which stated that there was no problem, except maybe at a window on the first floor. However, the models used do not have this accuracy! Despite our comment, the local authorities decided to stick to the original assessment. We did a manual calculation, with all required corrections for the vicinity-effect, but unfortunately we could not firmly state that there was a violation of applicable limits. The family eventually had to relocate. For the other people in the street the annoyance was less, and they are still coping with it.
In Kollum, a family lived directly (5m) next to a small bakery. After an alteration in the bakery, the odour problems started. The family did not get much response to their complaints. Based on a branch survey on larger bakeries, which was used in the legislation of them, we made a tentative model calculation to show to the local authorities that a problem was quite possible. We also explained that even if fresh bread smells nice, this is different when this odour is constantly present from 4 a.m. The local authorities negotiated with the baker, and even before we had a formal meeting at Town Hall our technical recommendations to the chimney, an investment of 5,000 Euro, had been implemented!

Mostly, however, the outcome of our involvement is a little more nuanced, and we play a role in advancing communication between those involved.

Towards Mediation

In Steenwijk, there had been already a long debate on the toxics and odour from emissions by two adjacent carpet factories. From the early 90s, the actors involved seemed to communicate only through press-headlines. Citizens did not believe the companies and the local authorities, which claimed, based on research, that there were no health issues at stake. In 1999, new leaders in the citizen group asked us for advice. So, one of our students investigated the combined toxic emissions and odour pollution from the two adjacent factories. We showed that there was a good chance that the odour limits from the environmental permits were exceeded, and the odour in the neighbourhoods was larger than had previously been established by consultancy firms – even for one individual firm [Van der Werf and Mulder, 1999].

The citizens then asked the City Hall for a meeting with all involved. In this first meeting, the companies not only took their technical consultants, but their lawyers as well. They were very surprised by our first conclusion, namely that we did not consider current emissions as toxic. The citizens accepted our judgement because we were impartial in this case and only paid by Groningen University. This paved the way for a discussion on the odour issue, without being troubled by fears for carcinogens. A discussion also seemed a better way than having an expert vs. expert battle before a -lay- judge.
Jointly, we decided to have a steering group of City Hall, companies and citizens, all with their advisors, to have a new investigation into the odour issue. We also decided to have a few substances measured again to check data from the reports that had to use for our assessment on toxicity, which were made by state institutes or paid by the factories. With us as an advisor, the citizens were confident enough to join in the committee, in which every step of the new research was agreed on before implementation. As a Science Shop co-ordinator, I took part in a steering committee as advisor to the citizens group. To make a long story short: The new research focused specifically on peaks in the emission, which was a complaint voiced by the citizens, and on combined effects of both factories. In 2003, all research was finished. Mainly due to changes in the types of carpets made, the companies turned out to be only just below their limits. Due to the scientific uncertainties in these analysis, however, one can not state that "there are no problems".
This outcome led to a 24/24 environmental complaint hotline - in co-operation with the Provincial Environmental Phone - and the guarantee that people who complained would receive fast feedback from the local EPA. After the final presentation, one of the company directors asked us if we could keep this steering committee going as a discussion platform. What a change from our first meeting!

Conclusion

For authorities, having a single indicator to assess whether there is annoyance or not would be ever so easy. However, odour and annoyance are complicated issues, and a lot of research is still required. Until then, we will see from case to case if we can achieve something. Sometimes we can, sometimes we cannot. But mostly we can at least get a discussion going in which citizens - with our independent support - can participate on an equal level. Mediation as a side-effect of technical advice!<

Technical aspects of Odour

Odour concentrations in air can be established in so-called odour-units per cubic meter. A half odour unit per cubic meter is a concentration that half of the odour panel can just distinguish from odour free air. One can start by measuring (by olfactometry) the odour in exhaust-gas directly, or by "sniffing" in the surroundings. From that, one can apply a computer programme to model air-pollution dispersion and calculate the average odour levels in the surroundings. If you know how often the wind comes from the south, and at which force, you can already more or less establish the odour problem north of the source.
The calculation models contain many years of average meteorological data, which allow for calculating long-term averages. Once you have calculated the odour concentrations in a neighbourhood, you can compare these with standards used for that type of odour. For most smells, it is deemed acceptable if the concentration remains below 0.5-3.5 odour units per cubic meter for 98% of the time.
As with all modelled results, care should be taken in interpreting results. The allowable margin of error is a factor 2 in the establishment of odour concentrations. Additional problems occur when there are more sources near to each other, when the distance to populated areas is small, and when the odour is normally seen as "nice". These issues all come back in the stories from Science Shop clients.

Agenda setting

In the Netherlands there are many efforts to come to better methods for assessing odour annoyance. An important actor in the discussion is the Odour Platform of the Dutch Association of Environmental Professionals. In this platform, six firms certified to conduct odour analysis are represented, as well as the Industry, Ministry of Environment and, from about two years, two chemistry shops. In the platform, the chemistry shops voice the daily problems for citizens who are confronted with odour pollution and try to get issues like these on the agenda. In 2003, the annual Dutch odour-conference has paid specific attention to the position of citizen groups. This breaks the trend from the previous years, when the focus was rather technical. That year's conference was even opened by a speaker from a citizen group [VVM, 2003].

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Information

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Bacau, RO

Mushroom Intoxication

Consumption without criteria for recognition in rural areas of Romania

by Laura Pricope and Cristina Ichimas
InterMediu Research Centre for Civil Society, Biology Department, Bacau University

InterMediu Research Centre for Civil Society, a part of Biology Department within Bacau University, is organised on the template of Dutch Science Shops in The Faculty of Biology, as the result of a mutually co-operative programme between the Bacau University and University of Groningen (NL). Its founding was possible by means of the MATRA project which is financed by the Dutch Ministry of Foreign Affairs. Five years ago there was no Science Shop in Romania. Now there are eight Science Shops, and the national organisation INTERMEDIUNET ROMANIA (INRO) just started to establish a good national cooperation between Science Shops from Romania.

First effects

The InterMediu Research Centre for Civil Society in Bacau is a 'window to society'. Their basic objective is to provide independent research advice and information, to organise expertise especially for non-profit organisations, residential associations and any organisation or group interested in improving environmental aspects of the region. In addition, it offers possibilities for students to gain experience in working within a project and to co-operate with citizen groups to develop praxis-oriented approaches to environmental problems.
The first projects had no direct clients, 'just' partners. The objective of the international 'pilot' was Water pollution in lakes in the Netherlands and Romania, and the national 'pilot' lead to a brochure listing all the books available in the libraries from Bacau city dealing with environmental protection.

Bacau Science Shop projects

SCHOOLS: Environmental education - two publications, Restoration of oil polluted soils
RURAL VILLAGE: Sustainable management of garbage from villages, Edible and non-edible mushrooms
HOSPITAL: Microorganisms and better cleaning of rooms in Buhusi Hospital (Bacau County)
MUSEUM: Microorganisms from the rooms of Natural Museum and the methods to combat their growth
NGO: Antimicrobial activity of some essential oils over few pathogenic microorganisms

The civil society in Romania is not as organised as the Netherlands. But clients actually come from different collaborating groups and usually get deeply involved in Science Shop projects as active partners. Although the involvement of civil society in environmental issues in Romania is not very strong, a series of improvements in client attitudes towards the environment in general and towards decisions concerning environmental conflicts can be noticed. But this is a field of work where lots of changes can still be made.

Edible and non edible mushrooms

The question for one of the most representative projects was as a result of a practical application of an international conference. The conference "Conservancy of Mushrooms Biodiversity" took place in Slanic-Moldova in Bacau-County, a wood surrounded water resort, very popular for tourists. It was co-organised by InterMediu and gathered scientists and researchers, as well as volunteer students from the InterMediu Science Shop. During a practical application, mushrooms were collected from the woods in the neighbourhood of the city. After the conference, scientists have exhibited all collected mushrooms, and over 1000 tourists have visited the exhibition. On this occasion, a citizen group addressed the question of edible and non-edible mushrooms because mushrooms had made persons from the surrounding rural area highly intoxicated.

Work with and for the civil society

The project involved three phases. First, 1000 persons were asked in interviews and questionnaires about their system of recognizing and identifying mushrooms. The results showed that consumption is largest in rural zones and 80% of the persons do not use any system of recognizing except other people's experience. Only 10 species of mushrooms are most frequent in consumption.
After these interviews a bibliographic research and the consultation of specialists showed that intoxication are caused by the confusion in recognizing edible and non-edible mushrooms. It became obvious that the colour is not sufficient to distinguish mushrooms and that all necessary details need to be assessed. To disseminate the results the Science Shop published 200 complete booklets with descriptions and photographs of the edible and non-edible mushrooms along with descriptions of their ecology. Classes about mushrooms in 50 schools from Bacau County were held. Now the Science Shop tries to relaunch this report and support its dissemination by a national exposition about Romanian mushrooms and their edibility - using the network INTERMEDIUNET (with all Science Shops from Romania). The next national conference of Science Shops from Romania, which will take place in July 2004 in Brasov, will present palpable results of this project to prevent intoxication with non-edible mushrooms.<

Information

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Column

Scientific Governance and Democracy in Europe

Seven challenges and opportunities for the future

by Alan Irwin, Brunel University, UK

These are fascinating times for the politics of European science – especially for those interested in the relationship between scientific governance and scientific democracy. The European Commission's 2002 Action Plan announced the ambitious objective of 'changing the relationship between science and society'. In the UK, a 2000 House of Lords select committee recommended that dialogue with the public should move from being an 'optional add-on' and become instead 'a normal and integral part' of the scientific policy process. Major debates over GM food have taken place in The Netherlands and, in 2003, the UK. A new policy mantra of openness, participation, and accountability has emerged since the mid-1990s – as, for example, in the 2001 European Commission white paper on governance. All this has provided a substantial boost to the Science Shop movement. It appears that what started as a radical experiment in scientific democracy has come into welcome vogue. Where once we had the deficit model of an uninformed and irrational public for science, we now have vigorous moves to bring science and society closer together. Science shops are certainly well-placed to respond to this new European objective. In this situation, it is important to inquire as to what could have happened to make talk of public engagement and scientific citizenship become so mainstream. In the UK, techniques of public consultation and participation were barely considered during the early 1990s – now they are seen as essential for the treatment of major socio-scientific issues such as the disposal of radioactive waste or the commercialisation of GM crops. Later in this article, I also want to explore where such talk can go from here.

Previous policy approaches failed

The motivation for a fresh outlook on citizenship and consultation lies partly in the failure of previous policy approaches – although critical social scientists have also played a role in establishing the new vocabulary of trust, two-way communication and multiple publics. Nirex, the UK body responsible for dealing with the UK's long-term radioactive waste, was defeated in its attempt to impose a local solution on the waste problem. The case of mad cow disease (BSE) likewise cast a long shadow over policy deliberations in the late 1990s. The official report into BSE concluded that science-public relations had been badly managed, leading to an erosion of public trust. The conclusion drawn from such cases – and other food scares – was that greater openness, better risk communication and an overhaul of the governmental treatment of uncertainty were required. Previously, the tendency had been to treat such issues as food risk, nuclear waste and environmental regulation as essentially 'technical' matters to be dealt with by sound science alone. From the late 1990s, in the UK and at European level, the search was on to find new ways of consulting with the wider publics and so re-building trust in science and scientific governance. When public reactions to GM food became problematic for governments in the late 1990s, greater public engagement was seen as the obvious way forward. In linking the 'new' style of scientific governance to previous policy failures, it must be noted that there is nothing necessary or inevitable about the linkage between enhanced public engagement and increased levels of trust. After all, it is quite possible that greater public insight into scientific decision making will *increase* levels of concern and distrust: in certain cases, the more the public knows, the more critical it may become. The search for *consensus* can also be both misguided and misplaced: in a complex society, why would anyone expect a broad agreement over such issues? More generally, there can be a certain naivety in calls for a rapprochement between science and society – as if these two ever could exist apart from one another in the first place. There is still a tendency to present 'the public' and 'the experts' as two separate monoliths rather than recognising the diverse, dynamic and overlapping character of such assemblages .

Europe is not a homogeneous entity

Looking across Europe, it is also apparent that experience varies considerably. The UK, for example, was something of a latecomer to these issues compared to The Netherlands (where I first learnt about Science Shops in the late 1970s) and Denmark (where consensus conferences have been institutionalised for some time). Finland has apparently taken a much more positive approach to scientific innovation than many of its neighbours. Meanwhile, the countries of the South (for example, Portugal or Greece) may have a less developed scientific culture. In talking about action plans and new styles of scientific governance we should be careful not to present Europe as a homogeneous entity – a point made even more valid by recent European expansion. At the same time, the tendency to force individual nations into rigid frameworks of 'pro' or 'anti' innovation should be avoided. Public passivity over innovation in certain countries could easily conceal an underlying ambivalence – as would appear to have been the case with British attitudes to GM during the mid-1990s. Rather than simply extolling the virtues of the 'new' style of European scientific governance – or else dismissing such moves as mere rhetoric – I would like in this short article to raise some questions for wider discussion. In particular, I want to outline what I see as some of the main challenges to scientific democracy in Europe right now.

The danger of over-selling the new engagement

Underlying my discussion there is a lurking anxiety that, having turned towards openness and engagement in a relatively short time period, it is also possible that a turning away can occur with equal speed: a concern only increased by discussion with certain colleagues in Sweden and, to some extent, Denmark. If greater engagement is presented as a quick fix for socially divisive social issues, what hap-

pens when the fix is seen not to work? Equally, over-selling of the new engagement possibilities can lead to cynicism when the linkage between consultation and actual policy-making becomes tenuous or non-existent. What happens when all these vigorous efforts at engagement are seen as just talk? One of the concerns regularly raised by participants in consultation exercises is that they would like their views at least to be listened to. Otherwise, why waste one's time? In looking to the future, we must also take stock of the actual achievements to date. Many of us will wish to acknowledge the positive changes that have occurred over the last decade. However, amidst such celebration we should be aware of the challenges (and opportunities) ahead. I would like to stress that these are preliminary thoughts based on my own experience (recently, through the STAGE thematic network: Science, Technology and Governance in Europe).

Disparity between rhetoric and reality

The first and perhaps most obvious challenge for me concerns *the potential disparity between the broad rhetoric of change across Europe and the practical realities of scientific citizenship and scientific governance.* This point can be made in a number of ways. One could contrast the small number of high-level (and often high profile) consultation exercises that have taken place with the sheer bulk of policy discussions that involve little or no public engagement. One could compare the claims made for public consultation with the actual effectiveness of such exercises in influencing policy (as seems relevant to both the British and Dutch GM consultations). One could consider the amount of governmental resources poured into 'mainstream' research policy compared with the limited budget for engagement initiatives (including Science Shops). In short, and despite the rhetoric, this is still a relatively minor field of activity with a restricted level of tangible influence on policy. Whilst recent official statements suggest a policy shift, everyday experience of many areas of scientific governance is still largely 'business as usual'. The challenge then is to give substance to citizen engagement rather than risk such exercises being seen as merely legitimatory. This is not to say that consultation exercises should dictate government policy. In my experience, citizens are content for final responsibility to remain with democratic governments. However, it is vital that the implications of consultation and engagement exercises are seriously considered and (very importantly) responded to rather than simply being ignored.

Firewalls between 'public' and 'experts'

Secondly, and despite talk of the death of the deficit model and its assumption that the public is emotional and ignorant in its treatment of technical questions, *the institutional tendency to keep 'public' views apart from 'expert' assessment must be kept under constant review*. This was exemplified by the 2003 UK debate over the commercialisation of GM crops. The exercise was eventually divided into three strands: the public debate, an economics-based analysis of costs and benefits, and a science review. I know that various cross-connections took place between those steering each of these strands, but for members of the public who took part in one element there was no way of asking questions of, or placing demands upon, the other two. There is still a tendency to present the public as being equipped to deal with ethical and social questions but not to interrogate expert analyses. One key justification for public consultation is that the opening up of expert opinion to wider critical scrutiny can help ensure that the right questions are being asked about the right issues. Institutions also need to be challenged lest bureaucratic cultures avoid awkward issues and public reassurance takes the place of open communication. Equally, public groups may have expertise and experience of their own to contribute (in this case, concerning the practicalities of everyday crop administration in contrast to the carefully controlled conditions of the tests). I accept that there will be times when different groups may need to meet separately, but at an institutional level the construction of firewalls between the 'public' and 'experts' must be resisted.

Open and reflexive response to change and uncertainty

The third significant challenge that I can see concerns *the need to design institutions capable of dealing openly and flexibly with change and uncertainty* – rather than simply assuming that consultation is a 'one-off' affair. Current discussions of nanotechnology illustrate this point nicely. Given the critical climate for GM, a number of international institutions are anticipating public anxiety and seeking ways of dealing with this. The problem of course is that discussion before the options (and problems) are known will be premature, whilst discussion after all this has become clear is likely to be too late. David Collingridge described this over two decades ago as the 'dilemma of control'. Rather than viewing public consultation as a one-off process, the challenge is to build more reflexive – but also resilient - institutions and processes that can respond appropriately as issues arise. In previous cases such as civil nuclear power and agricultural biotechnology this has proven difficult to achieve. Looking to the future, we now have an opportunity to do better.

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Distinction between innovation and public concern

Linked to this point, the fourth challenge that I see concerns *the relationship between public engagement initiatives and what I described earlier as 'mainstream' science and technology policy*. One potential strength of Science Shops has been their ability to shape university research agenda and to influence the selection of appropriate research problems. Early work by Zaal and Leydesdorff on the Amsterdam Science Shop was able to demonstrate such a link. The challenge now is to build upon such possibilities at a local, national and even international level. Without the bringing together of public aspirations and expressed needs with the direction and planning of technical change, engagement initiatives will remain restricted in scope. Rather than creating new possibilities, the inevitable consequence will be for public engagement to appear as a check on change – an obstacle to innovation rather than a spur to future activities. The challenge here is to see public engagement as a forward-looking as well as a responsive activity. Techniques such as 'backcasting' may have something to offer here. However it is done, we need a more integrated approach that can overcome the distinction between 'innovation' (mainly in industry) and 'public concerns' (usually expressed after the innovation has occurred).

Accompany globalisation with localisation

The fifth challenge concerns *the operation of scientific citizenship in a Europeanised (and globalised) environment*. This seems to represent something of a dilemma. The particular strength of citizens' juries, consensus conferences and Science Shops is that they offer a well-contextualised and specific treatment of issues as they arise within everyday life. The difficulty here is two-fold. How can such exercises meaningfully take place in an international setting? How can such exercises have any significance in an era of global capital and transnational organisations? This is a major issue that needs much fuller treatment than I can offer here. All I will suggest right now is that globalisation is generally accompanied by localisation. 'Europeanisation', for example, has the odd quality of emphasising local difference rather than simply eliminating it. Hence my comments above about the differences in national contexts for public engagement. Ireland is not the same as Germany and the differences do not seem to be disappearing due to common regulatory frameworks and a shared currency (even if there are more BMWs in Dublin every time I visit). It must also be said that certain forms of 'globalisation talk' can in themselves be disempowering – as if local cultures are about to be swept aside by a tide of Coca Cola and Big Macs. None of this however is to play down the challenges of citizenship in more globalised settings. For example, the freedom of individual nations to decide on technology policy may become more limited than has previously been the case (with GM food an obvious example). This is a challenge for both scientific governance and for scientific democracy.

Acknowledge co-existing forms of citizenship

Sixthly, I think that *traditional definitions of citizenship need to be revisited*. In Britain, the need for citizen engagement has at times been presented by government under the revealing heading of 'confident consumers'. Early in the Science Shop movement there were lively discussions about whether individual shops should perform consultancy work or take money from sponsors. At the heart of these discussions there is a tension over what is meant by 'citizenship' in contemporary life. Is it purely a political category or does it include economic decisions, personal choices and broader representations of cultural identity (for example, matters of taste and friendship networks)? Too often I think well-meaning people (often on the left) equate the 'good citizen' with the active, cause-related, non-consumerist citizen. However, citizenship can take many forms in contemporary life – from individual decisions made at the grocery store through to internet debates and more traditional expressions of political protest and support. In this, the close link between one's sense of citizenship and broader social identity should be acknowledged. Issues of empowerment and social alienation must also be considered. Equally, romantic ideas of each citizen engaging fully in high-level debates and wishing to influence government policy on every issue are simply unrealistic. It seems to me that we should acknowledge the co-existing forms of citizenship today rather than trying to impose one particular model which can then be applied to everyone across Europe. Citizenship cannot simply be a moral imperative. Instead, we need to explore – and, as necessary, enhance - multiple forms in keeping with the contemporary diversity of European life.

Taking political and institutional leadership

The final challenge I want to suggest is to *political and institutional leadership* in these demanding times. Despite the apparent changes in the European culture of scientific governance, there is still a tendency for decision makers to reduce debates to a battle between scientific enlightenment and the cautious citizenry, between risk takers and the risk averse – the facts and the emotions. Instead, we are faced with multiple futures where, as I have already suggested, surprises may occur and the 'facts' simply cannot be known. At the same time, older categorisations of society as divided into the state, industry, experts, NGOs and the wider population have decreasing validity – not least because we live in a more heterogeneous, fragmented and networked world. Meanwhile, governments struggle to deal with profound uncertainty whilst simultaneously engaging with a more sceptical and less trusting society. Moving purposefully forward without resorting to old talk of unambiguous progress and public irrationality will be difficult indeed. One of the most interesting tests of the coming period will be whether European institutions are capable of responding to this challenge in a positive and proactive fashion. My own view is that a richer culture of debate and engagement can also provide a more sustainable foundation for social and economic development and for appropriate scientific innovation. As the British BSE debacle suggests, cultures of denial which seek to insulate institutions from uncertainty and external scrutiny may appear robust in the short term but are ultimately brittle. In that sense, any failure of scientific democracy will unavoidably also represent a failure of current institutions. However, this does not let the rest of us off the hook. Instead, the suggestion is that we should move beyond simple criticism of struggling institutions towards greater reflection on the constraints that currently exist and the possibilities for moving forward. In practice, this means a willingness to engage with government, industry and other parties and to recognise that no group has a monopoly on truth – least of all academics who often combine a blissful sense of their superior insight with a relative absence of practical experience. Of course, I cannot deny my own guilt here.

As we consider the progress that has been made across Europe over recent years, the greatest challenge of all is to face up to these issues and address the constructive possibilities for moving forward. This paper is just one contribution to that larger process.<

Information

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Conference

Science Shops met at the European Social Forum

As part of the World Social Forum that has existed since 2001 (with conferences 2002-2003 in Porto Alegre in Brazil, 2004 in Mumbai in India), the second European Social Forum took place in Paris in November 2003. During three days, around 50 000 people from all over Europe discussed such themes as sustainable agriculture and food sovereignty, cultural diversity, immigration and dignity, democratic citizens' rights, deregulation of public services and numerous others. The programme part on science and research: for a control of scientific development by citizens; against the merchandising of science; for scientific solidarity between North and South that ensures equality of access to knowledge and technology; against the patenting of the living was "our one".

ISSNET - the International Network of Science Shops, and INTERACTS - an European research project on the impact of Science Shops co-organised two workshops: „Towards a citizens' science in Europe: new forms of cooperation between NGOs, citizens and researchers" and „The Science Shop: A University Research Unit. How does it work."
For us, this was a moment to share the results of the impact evaluation of Science Shops and the policy recommendations coming out of INTERACTS. We met new people from Turkey, who wanted to know a lot of details about running a Science Shops because they intend to establish Science Shops at their universities. And we benefited from the opportunity to participate at other interesting seminars and workshops and shared the unique atmosphere of this meeting.
The next European Social Forum will take place in London in November this year: let's meet there!

Claudia Neubauer-Lenzner

Conference

Interfaces

An international workshop on interfaces between science & society was held end of November 2003 in Milan, Italy, organised by the Joint Research Centre (JRC) from Ispra. Exploring the variety of interfaces in several plenary and break-out sessions the workshop covered themes such as "Communicating among plural Perspectives" or "Managing Uncertainty" and gave a good overview of experiences and best practice in the covered themes. One special session dealt with "Community Based Research" and allowed the review of relevant worldwide experiences. Another session, organised by Henk Mulder from the Chemistry Shop in Groningen (NL) explored the role of Science Shops as interfaces between science & society, giving a general introduction on the Science Shop model(s) and introducing first results from the *interacts* project which explored interactions between NGOs and universities through Science Shops. Another focus in this session was on the first Science Shops in Romania and the non-university based Science Shops in Germany.

Norbert Steinhaus

Abstracts and reports can be downloaded from http://alba.jrc.it/interfaces/

Conference

Celebrating Partnerships

An International one-day conference 'The Reality of Partnership: Celebrating Community and University Working Together' was recently held in Liverpool, UK. The conference was a celebration of over twelve years successful partnership between community and voluntary organisations and the three higher education institutions on Merseyside. The event was organised by Interchange, the Liverpool Science Shop, and hosted by Aintree Hospital Volunteer Scheme. The day's activities included a variety of lively and informative presentations, and a 'Graffiti Wall' interactive session, this proved to be a useful tool, engaging participants in small group discussions, and providing them the opportunity to express solutions and answers to pre-arranged questions around research knowledge transfer. In response to 'What's the most important thing community groups need knowledge / research on?' one of the key emerging themes included a need for research training such as 'how to use / understand research', 'monitoring and evaluation', and also highlighted was that such training would 'empower groups to conduct their own research'. Taking this idea forward, Interchange is organising a half - day community forum which will take place in May 2004, this will be an opportunity to explore further with community groups their research training needs, in order that we can conduct research training workshops in the summer which would be tailored for people working within the community sector.

Sharon Lockley

Letters to the editor

Useful Publicity

Just to let you know that we circulated the LK magazine at our event last night. There was great enthusiasm for it, and in fact our Pro-Vice-Chancellor was so keen on it that he intends to circulate it at the highest level in the University. Our student winner was also delighted that her project was mentioned in it. And we both think that it was really useful as a way of doing some early publicity for the conference. So many thanks again for this, we will let you know how it goes as we distribute it to others.

Dr. Emma McKenna, Assistant Co-ordinator, The Science Shop, Queen's University Belfast

Good focus

The journal is interesting to read. It seems to me that the focus on 'Community Based Research' is a good idea although you may loose part of the relevant groups.

Loet Leydesdorff, Amsterdam School of Communication Research

Science Shop Brochure

In March 2004, an international brochure on Science Shops has been released.

This brochure was produced by the European Commission in close co-operation with the International Science Shop Network. In the brochure information can be found on activities and impact of science shops. The examples in the brochure give an outstanding overview of the different contexts in which science shops operate and the networking of science shops. The brochure is of special interest for people who want to adopt the concept of Science Shops or are involved in science and society issues (on a practical, political and management level). The brochure is available in English, German and French. Brochures can be ordered for free at the European Commission, Science and Society Directorate.

For ordering the brochure please contact Jette Gents, jette.gents@cec.eu.int, tel. +.32.2.29.99909

Euroscience Open Forum

Highlighting Science, Technology & Innovation in Europe, Stockholm, Sweden, 25-28 August 2004

The Euroscience Open Forum (ESOF2004) is the first pan-European scientific meeting ever staged to provide an interdisciplinary forum for open dialogue, debate and discussion on science and technology in society. Its objective is to bring scientists from all fields, and people interested in science and technology, from all over Europe to one meeting.

http://www.esof2004.org/

Community Campus Partnerships

International Conference, Stavanger, Norway, 4-7 August 2004

The conference will focus on the question "How can universities and local communities collaborate to improve welfare for citizens and build partnerships for better practice, research and education?" Invited are practitioners, academics and researchers who are interested in improving welfare for citizens through mutual dialogue and collaboration. The conference will be organised in plenary sessions with keynote speakers, parallel sessions with paper presentations and poster presentations.

The complete programme is available at www.his.no (follow „International" and „Conferences")

Please Contribute

Making a magazine requires participation.

Living Knowledge - International Journal of Community Based Research is published every four months. The next issue will be published in July 2004. The general topic will be "Policy Recommendations". The deadline for submitting contributions is 28th May. The magazine welcomes contributions such as reports, articles, news stories, press releases and clippings, letters, contribution to discussions, job offers, internships, etc. Reports and detailed articles should follow the editorial guidelines. Information about the magazine and the editorial guidelines can be found at the homepage of the Science Shop Network (www.scienceshops.org). Please feel free to contact the editors for questions and assistance.

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What is a Science Shop?

A „science shop" provides independent, participatory research support in response to concerns experienced by civil society. Science shops use the term „science" in its broadest sense, incorporating the social and human sciences, as well as natural, physical, engineering and technological sciences.

There are forums for all parties interested and involved in science shops and other forms for community based research. They can give input to but also get information from the Living Knowledge discussion list, the bimonthly newsletter or this magazine. A website with a database which is a free, publicy-accessible resource for science shops, community-based organisations, universities and funders world-wide was established. It might be called an interactive "information warehouse", providing users with resources and tools related to community-based research.

Living Knowledge Website:
www.scienceshops.org
International Science Shop Office
isso@bio.uu.nl

If you want subscribe or unsubscribe to the magazine or the newsletter please send a message to C.F.M.deBok@bio.uu.nl or visit our website at http://www.scienceshop.org and select 'Discussion list and Newsletter'

Advancing Science & Society Interactions

Learning from community based approaches to research, 2nd Living Knowledge Conference, Seville, Spain, 3-5 February 2005

The conference aims to share information on community based research and on research done by civil society actors in Europe. It will be of interest both to people already active in and people interested in community based and participatory research. The conference will focus on

- Building equitable and supportive research partnerships with civil society organisations
- Developing concepts and tools for civil society research.
- Facilitating trans-national community based research themes by developing concepts and procedures for trans-national community based research co-operation.
- Developing strategies and concepts which will impact on Science & Technology policy

The conference organisers assert that a science for all must be built with all.

For more information see www.scienceshops.org

A Short Guide to Environmental Institutions in Germany

A new booklet published by the Federal Environmental Agency (UBA)

This booklet offers concise and accountable information about the duties and the make up of public authorities in Germany. It accommodates to the wishes of all foreign inquirers and visitors who have an interest in German environmental policy. It is published in English. There is a special regard to the set up of the Federation, the Federal States, and counties. A particular value is set upon the display of cooperation and coordination between the individual institutions. The most important public authorities are exemplified. Next to the configuration of the public authorities you are given an overview of the central administrative process in environmental protection. The booklet is supplemented by a list of the most important internet links.

The 48-page booklet "A Short Guide to Environmental Institutions" is available free of charge at UBA, Dept. ZAD, PO Box 33 00 22, 14191 Berlin, Germany (post card), Fax ++49-30/89 03-2912, e-Mail: uba@stk.de.