

# PERARES: Public Engagement with Research and Research Engagement with Society

Norbert Steinhaus<sup>1, \*</sup> and Dr Henk A.J. Mulder<sup>2</sup>

#### **Abstract**

PERARES is a four-year project funded by the European Community's Seventh Framework Programme which started in 2010. The acronym stands for "Public Engagement with Research and Research Engagement with Society". The project brings together Science Shops, Civil Society Organisations (CSOs) and Universities from 16 European countries. The PERARES project aims to strengthen public engagement in research (PER) by involving researchers and Civil Society Organisations (CSOs) in the formulation of research agendas and research processes, both at the institutional level of research organisations (including Higher Education Institutions), and at regional and transnational/European levels.

**Keywords**: science shops, civil society, CSOs, engagement, higher education institutions, research agenda

#### Introduction

PERARES<sup>1</sup> is the latest of a series of projects which all focused on the establishment of civil society-research interfaces, following the methodology of Science Shops. According to the funding rules of the 7th European Community Framework Programme PERARES as coordination action is not a research project but in certain activities tries to develop research questions based on requests and concerns expressed by CSOs.

Science Shops are not "shops" in the traditional sense of the word. They are small entities that carry out scientific research in a wide range of disciplines – usually free of charge and – on behalf of citizens and local civil societies. The fact that Science Shops respond to civil societies' needs for expertise and knowledge is a key element that distinguishes them from other knowledge transfer mechanisms.

<sup>&</sup>lt;sup>1</sup> Wissenschaftsladen Bonn, Reuterstr. 157, 53113 Bonn, Germany

<sup>&</sup>lt;sup>2</sup> University of Groningen, Science & Society Group, Nijenborgh 4, 9747 AG Groningen, The Netherlands

<sup>&</sup>lt;sup>1</sup> PERARES is coordinated by Dr. Henk Mulder from the Science Shop at Science and Society Group, University of Groningen, the Netherlands. The project received funding from the European Community's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° SiS-CT-2010-244264 (as a Coordination Action in the area of Capacities/Science-in-Society) and runs from 1-5-2010 to 1-5-2014.

<sup>\*</sup> Corresponding author. Email: norbert.steinhaus@wilabonn.de

Science Shops are often, but not always, linked to or based in universities, where research is done by students as part of their curriculum – under the supervision of the Science Shop and other associated (university) staff.

In addition to the demands made on research and development by commerce and industry, 'civil society' organisations have their own research needs. Diffusion of knowledge often focuses on communication from researchers to society, but increasingly there is a demand for communication from society to researchers. This is the concept of 'social demand' for knowledge.

Different types of interfaces exist between researchers and society, one of which are the 'Science Shops', organisations created as mediators between citizen groups (trade unions, pressure groups, non-profit organisations, social groups, environmentalists, consumers, residents association, etc.) and research institutions (universities, independent research facilities). Science Shops are important actors in community-based research (CBR). There are many differences as well as some important parallels in the way Science Shops are organised and operate.

A Science Shop provides independent, participatory research support in response to concerns experienced by civil society. There is not one dominant organisational structure defining a Science Shop. How Science Shops are organised and operate is highly dependent on their context. The term 'science' is used in its broadest sense, incorporating social and human sciences, as well as natural, physical, engineering and technical sciences (Mulder, Auf Der Heyde, Goffer & Teodosiu, 2011).

However, many initiatives not linked to universities, such as community-based research centres, are similar to Science Shops and do the same type of work. Despite their different names and differences in operation and organisation, the basic principles and goals are comparable. What they have in common is their 'demand-driven' and 'bottom-up' approach. They also share an interactive dialogue with the community and community involvement in research (Mulder & De Bok, 2006). Through this type of extension and support activity, Science Shops attempt to create access to science, knowledge and technology for social groupings that would not or could not ordinarily interact with these disciplines.

Over the last few years international interest in the Science Shop model has increased, and similar organisations have been established in many countries.

## **Project Objectives**

PERARES' overall aim is to strengthen public engagement. Activities<sup>2</sup> include an inquiry and the determination of barriers and opportunities for public engagement with research as well as piloting and adapting new forms of engagement to link locally based Science Shop activities with possibilities for international exchange through online debates. But PERARES also supports the establishing of new mechanisms for public engagement and provides learning and mentoring offers for institutions with little or no prior experience of using such mechanisms. This happens through the transnational exchange of experience and mutual learning and cooperation among diverse participants including universities, public and private research organisations, research mediation organisations, outreach or communication organisations, research councils and Civic Society Organisations (CSOs).

The PERARES project has eight main objectives:

• Encourage a continuous "upstream" science-society dialogue by linking the Science Shop work to existing debates and dialogues, to allow these debates to move upstream into research planning at the local/regional level.

<sup>&</sup>lt;sup>2</sup> see also http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2011/11/LK9-May11.pdf

- Set-up a transnational debate, engaging CSOs, researchers and general public in a dialogue on research agenda's (both local/regional and transnational/European) through a web-portal, and pilot this in a dialogue on nano-science and technology, before opening the floor to other topics of concern to CSOs of relevance to European research.
- Increase the number of research bodies that do research with CSOs, by developing local PER (Public Engagement in Research) plans for this in ten specific regions, and by sharing information with interested parties in other regions as well.
- Set-up research agendas in the field of domestic violence and the field of Roma and Traveller's communities' issues, in direct co-operation with CSOs.
- Pilot novel forms of research co-operation with CSOs, such as continuous debates between research labs and CSOs, and analyse these (and the processes of cooperating with the CSOs mentioned above) to learn from them.
- Create a higher awareness of the value of, and practical insights in, the ways that HEI's, research councils and other funders can support research with CSOs as partner, through surveys and experimentation.
- Advance the work of Science Shops and similar organisations by studying and sharing best practices and collaborating to find ways to tackle bottlenecks through evaluating scope, process and impact of our upstream forms of PER.
- Share and discuss our PER activities with the wider community through publicity and two international conferences.

## **Project Activities**

PERARES uses numerous ways to achieve its general objectives. In various formats, PERARES generates dialogues on science (including social science, engineering, and technology) to actively articulate research requests from civil societies and its organisations. These are forwarded to research institutes, and research results are used in the next phase of the dialogue. Thus, these debates move 'upstream' into agenda setting. This means that the dialogues move beyond 'midstream modulation', (discussing on-going research), and participants will see more clearly what happens to the outcomes of these dialogues.

#### New dialogue formats

As one way of achieving this joint agenda setting, partners started a transnational web portal for dialogues leading to the articulation of research questions. This is piloted in the area of nanotechnology, and then every few months a new dialogue starts on a new area. Additionally, partners link existing dialogue formats (such as those used during science festivals, events or on-line ones) with the Science Shop network (already linking civil societies and research institutes). Linking these two previously unconnected activities will create synergy. Furthermore, the partners piloted and assessed a range of forms of agenda-setting dialogues between researchers and CSOs, e.g. regular meetings over a long period of time (piloted in France and UK), and direct co-operation in two important social science fields: domestic violence issues (led from Belgium, UK and Norway) and Roma/Traveller's issues (started from Hungary, Spain and Ireland).

#### Strengthening the network

To strengthen local cooperation in setting research agendas, and to be able to respond to more research requests internationally, it was necessary to enlarge and strengthen the network of research bodies doing research for or with CSOs. Thus, ten new Science Shop-like facilities throughout Europe were established and mentored by experienced partners. Open training workshops were given in Summer Schools.

Science Shop-like work and Community Engagement of Higher Education Institutions were further advanced by partners conducting studies on good practices and policy making, and to add their findings to the available knowledge base. Guidelines to evaluate the engagement activities were developed and tested.

### The role of Higher Education Institutions and Research Funders

The partners also investigated the potential role of higher education institutions and research funders in supporting co-operation with CSOs, by surveying research funders and monitoring an externally funded post-doctoral project. PERARES shares its activities with the wider community through conferences and on-going dissemination, through its website, annual magazines and quarterly newsletters, and by participating in relevant events and contacting relevant media.

Thus, through increased and better structured co-operation, more researchers and CSOs began to engage in incorporating the needs, concerns and knowledge of civil societies in research agendas.

### **Conclusion: Project Results**

Five universities, University of Cambridge (UCAM, UK), University of Groningen (RUG, the Netherlands), Technical University of Denmark (DTU), Dublin City University (DCU, Ireland), and Polytechnic University of Bucharest (UPB, Romania) organised local dialogues with CSOs and the public on nano-technology. To prepare these local activities previous dialogues on nano-technology were studied. This all informed consortium on how to set up an on-line, international nano-dialogue that would lead to the articulation of research questions by the (organised) public. Five cases and concrete issues were chosen and prepared for discussion, and five moderators were appointed for each case. A specific website for this dialogue was developed<sup>3</sup>.

Regionally, the Polytechnic University of Bucharest (UPB) has created the website 'Science for all in questions and answers'<sup>4</sup>, and an essay competition for young people on nanomaterials. Foundation Sciences Citoyennes (FSC, France) successfully engaged CSOs and researchers in three scenario workshops; one each on sustainable cities, and on health education and promotion. These will be continued and FSC adapts and further develops the methodology of scenario workshops.

Another PERARES team connected CSOs with research institutes, focusing on Domestic Violence and Pregnancy. Experiences and information were shared among Belgium, UK and Norway, and framed into a shared need for 'tools to overcome the barrier that health care providers face in identifying and responding to the needs of pregnant woman experiencing domestic violence. A secondary focus was set on immigrant women within that group'. The resulting comparative study will provide a basis for European research agenda-setting.

<sup>&</sup>lt;sup>3</sup> http://www.livingknowledge.org/discussion/debate/

<sup>4</sup> http://www.intermediu.pub.ro/

The partners Environmental Social Science Research Group kft (ESSRG, Hungary), Universitat Rovira I Virgili (URV, Spain), and University College Cork (UCC, Ireland) gathered information on how CSOs currently use research in their daily practice and on their experiences with researchers and institutes. Pilot projects with Irish Traveller's as well as Roma communities were performed, aiming at the strong involvement of them in both problem definitions and implementation of studies together with students (Balász, 2012).

To enlarge the network of research bodies and strengthen local cooperation on setting research agendas PERARES partners are setting up and advancing Science Shops in Cambridge (UK), Dublin (Ireland), Lyon (France), Grenoble (France), Crete (Greece), Stavanger (Norway), Sassari, Sardinia (Italy), Cyprus, Estonia, and Israel. All have done feasibility studies, and set up a provisional structure and an advisory board including CSO members. Pilot projects involving students and CSOs have started. The new Science Shops are mentored by staff from established Science Shops. Two public Summer Schools for 'beginners' were organised, and presentations about the Science Shop methodology and the PERARES aims were made at other public events.

In addition, a report with a survey of the state of the art of Higher Education Institute's (HEI) engagement with CSOs in different European countries, a manual to advise universities on how to go about community engagement (including working with CSOs), and policies to support HEI engagement with CSOs across different areas, including teaching, research and outreach were produced (Martin, Mc Kenna, & Treasure, 2011).

A PERARES working group also reviewed evaluation methods, and practices among PERARES partners and the Science Shop movement. Templates were prepared for self-evaluation at the early, mid-point, end-point and post-project stages of PERARES actions and of Science Shop projects, to assist quality improvement. Wageningen University (WU, the Netherlands) has in addition developed a framework for the economic evaluation of Science Shops (Boere & Heimann, 2011).

A survey amongst research councils in Europe to see if and how they were funding research cooperation with CSOs, was realised and had a similar discussion during the Engage Conference (London 2010)<sup>5</sup> with research councils also beyond Europe. Evidence was found on a huge variety of support (or non-support) of Public Engagement with Research in Europe but only a few examples of funding strategies for a research cooperation with CSOs could be identified. Interest in this area amongst research funders was identified and further investigation is in process.

FSC has started to monitor a post-doc project in France, that was set up in co-operation with a CSO with a fellowship from a private foundation. This project will be monitored to inform research funders about the dynamics of these kinds of collaborative projects. In Romania, UPB managed to identify topics of CSO interest to bring to the attention of the national Research Councils.

All project activities and results are widely disseminated through the Living Knowledge website <sup>6</sup> and quarterly Living Knowledge newsletter and the annual Living Knowledge magazine<sup>7</sup>.

http://www.livingknowledge.org/livingknowledge/science-shops/lk-media-newsletter-magazine/newsletter-and-magazine-archive

\_

<sup>&</sup>lt;sup>5</sup> http://www.publicengagement.ac.uk/news-and-events/events/nccpe-engagement-conference-2010

<sup>&</sup>lt;sup>6</sup> http://www.livingknowledge.org/livingknowledge/

### **Analysing and Discussing Potential and Impact**

Towards the aim of establishing an improved transnational cooperation between research bodies, in the domain of public engagement in research PERARES has succeeded in bringing together a group of research bodies and CSOs with different backgrounds, who are learning together. They are engaged in joint studies to improve PER in social sciences, and have jointly set-up a transnational knowledge debate in the physical sciences.

During PERARES, the number of researchers involved in PER and engaging with civil society in their practices is growing, both by involving them in various debates and by the setting up of more Science Shops or other means of doing research with CSOs.

The accomplished parallel studies show how more researchers can become active in engagement activities. Dissemination activities and conferences, including the open workshops, made PERARES and Living Knowledge Network resources and knowledge of good practices available to non-PERARES partners, thereby making it easier for scientists all over Europe and beyond to engage with civil society.

One of the main achievements of the PERARES project is an increased participation of civil society actors in research activities and an enhanced incorporation of the needs and concerns of civil society in research strategies. First of all, the number of interactions between CSOs and research institutes increased. This happened not only directly in the social sciences studies on traveller's issues and domestic violence, in which CSOs participated in the research process, and in the dialogues but also in a number of pilot projects that were performed during the start-up periods of the ten new Science Shop structures.

PERARES has already an impact on the definition of new cooperative research agendas involving researchers and civil society actors and the combining of their respective knowledge and experiences. This is visible at local level where individual dialogues led to research requests and to the establishment of local Science Shops which conducted pilot projects.

But new cooperative research can also be identified on the transnational level, especially through two specific areas of the social sciences which focused on domestic violence and travellers'/Roma issues.

All information about the PERARES project, it's activities, aims, results, deliverables and specific reports can be on downloaded from the Living Knowledge website.<sup>8</sup>

## **Acknowledgements**

We would also like to thank all of those who took the time to share with us their experiences with regard to Public Engagement in Research which includes the requirements, needs and interests of civil society groups in various European countries. In particular we would like to thank all our colleagues from PERARES for their support and comments.

#### References

Balász, B. (Eds.). (2012). Forgotten Citizens of Europe - Participatory Action Research for Local Human Rights, PERARES Multi-Annual PER Action Plan. Retrieved from www.livingknowledge.org/livingknowledge/wp-content/uploads/2012/10/D06-1-perares-Multi-annual-PER-action-plan\_244264.pdf

Boere, E., & Heimann, W. (2011). The Social Value of Science Shops: A Cost-Benefit Analysis. Living Knowledge, International Journal of Community Based Research, 9.

<sup>&</sup>lt;sup>8</sup> http://www.livingknowledge.org/livingknowledge/perares

- Martin, E., Mc Kenna, E., & Treasure, K. (2011). *Embedding Community and Public Engagement Within Regional and National Policy and Higher Education Institutions*, PERARES Milestone Report. Retrieved from www.livingknowledge.org/ livingknowledge/wp-content/uploads/2012/09/WP7-PERARES-Milestone-7-2-rpt-Final-Dublin.pdf
- Mulder, H., Auf Der Heyde, T., Goffer, R., & Teodosiu, C. (2001). Success and Failure in Starting Science Shops, SCIPAS Report No. 2, Utrecht University. Retrieved from http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2012/02/wp2-so.pdf
- Mulder, H. & De Bok, C. (2006). Science Shops as university-community interfaces: An interactive approach in science communication. In D. Cheng, J. Metcalfe & B. Schiele (Eds.), *At the human scale: International practices in science communication.* Beijing: Science Press.
- Mulder, H., Jørgensen, M. S., Pricope, L., Steinhaus, N., & Valentin, A. (2006). Science Shops as Science Society Interfaces. In A. G. Pereira, S. Guedes Vaz & S. Tognetti (Eds.), *Interfaces between Science and Society*. Sheffield, UK: Greenleaf Publishing.