Empowering civil society through participatory investigation? European Round Table Workshop

Lucile Ottolini, Evelyne Lhoste, Claudia Göbel, Pierre Benoit Joly, Søgaard Jørgensen

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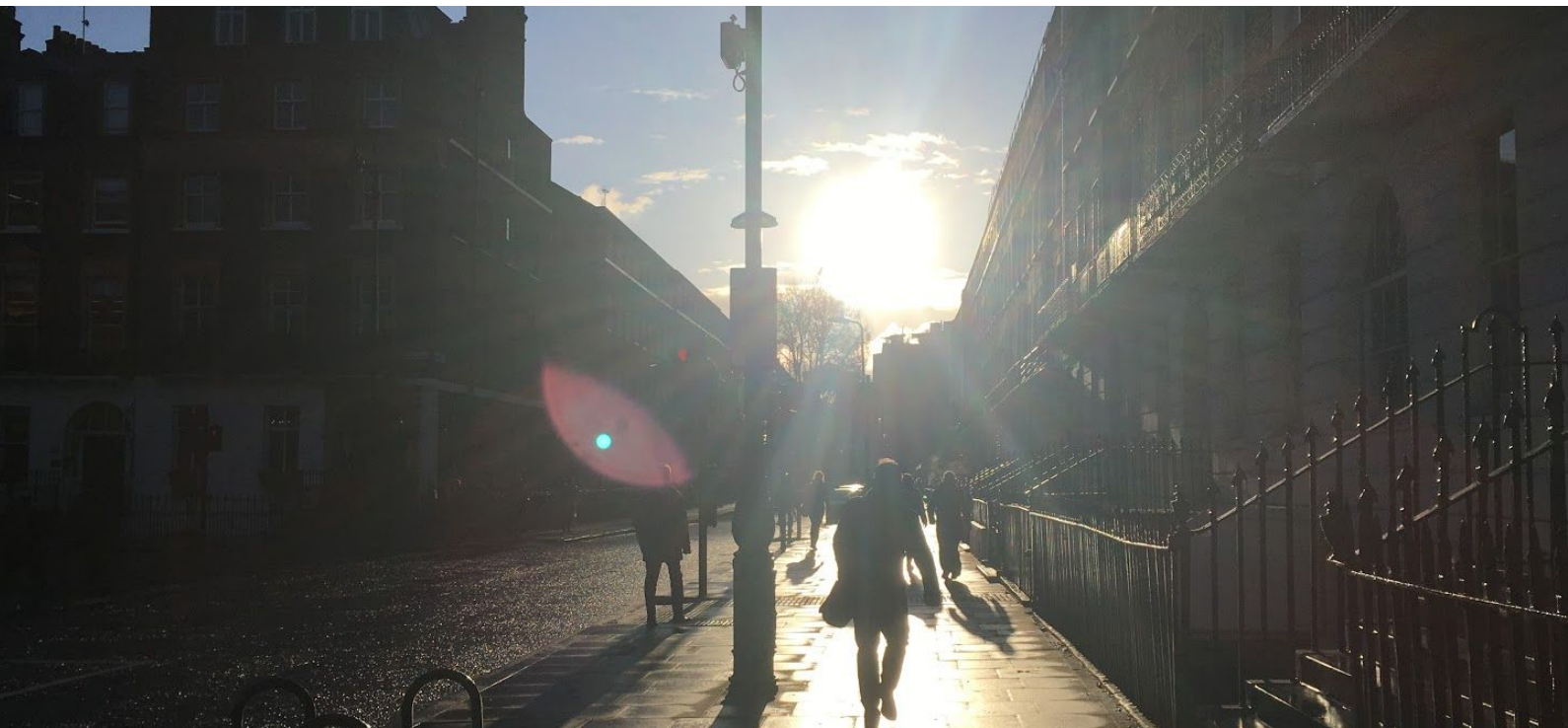
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Workshop Report

Empowering civil society through participatory investigation?

European Round Table Workshop

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1 Opening a conversation across paradigms

The workshop "Empowering civil society through participatory investigation?" was dedicated to exploring new types of interactions between science and society, which we called participatory investigation, and how such interactions can contribute to the empowerment of civil society. We wanted to discuss such interactions from the perspective of civil society organisations (NGOs), a point of view that has so far been largely neglected. The workshop was organised in collaboration by European Citizen Science Association (ECSA), especially the H2020 project Doing it Together Science (DITOs), Pour une alliance sciences en société (ALLISS), Institut francilien recherche, innovation, société (IFRIS), Laboratoire Interdisciplinaire Sciences Innovations Sociétés (LISIS) and the Living Knowledge Network (LKN).

Our joint workshop was seeking to bring together practitioners, researchers and interested people from different fields, who are concerned with doing and studying participatory investigation. These include, but are not limited to, Citizen Science, Community-based research, and Sciences Participatives. As workshop organisers, who situate themselves in these three fields and their overlaps, it was our aim to stimulate exchanges across boundaries, whether disciplinary, national or between research and practice. 34 workshop attendees — from 12 countries and fields as diverse as human rights education, nature conservation, risk governance, participatory health and business education — contributed their perspectives and experiences working on interfaces of sciences with society.

As a starting point of this cooperation the organisers Claudia Göbel, Lucile Ottolini, Evelyne Lhoste, Michael Søgaard Jørgensen & Pierre-Benoît Joly set out to clarify our various understandings of the central terms we are using and questions that came up in our discussions. This collection served as a reservoir of working definitions for the workshop from which we hoped to build a common understanding of the topics that concern us, and potentially also joint

action. With the help of our engaged colleagues during the two days in Marne-la-Vallée we have been able to add more nuances, whole branches of questions, surely more confusion and here and there also some clearing up and inspiration for future work. We present here a synthesis of the main conversations. It continues to be work in progress and you are warmly invited to add to it through getting in touch with any of the host organisations.

1.1 Finding common ground: participatory investigation

Citizen Science (CS) is an umbrella concept that recently got much attention in EU research policy as well as in several countries across Europe, the US and Australia. It refers to various forms of participatory or independent civil society research practices that come from many different contexts, such as amateur naturalism, participatory mapping and GIS, community-based ecological monitoring and research, participatory health research, and more (see also Kullenberg & Kasperowski, 2016). Due to the novelty of the construction of CS as an overarching field of research and practice, there are many definitions of CS in use and not one has become dominant. Eitzel and colleagues review some of the most popular definitions and find a common denominator that can function as a working definition. It defines CS as "inclusion of members of the public in some aspect of scientific research" (Eitzel et al., 2017). Beyond that, activities in potentially all scientific disciplines and of various so-called governance models identify as CS, e.g. along the continuum between contractual, contributory, collaborative, co-created and collegial CS (Shirk et al., 2012) or crowdsourcing, distributed intelligence, participatory science, and DIY science (Haklay, 2015). The practice of situating CS as such an umbrella concept encompassing other forms of participatory investigation is up for debate.

The definition of **Sciences Participatives** proposed in the "Rapport sur les sciences participatives" (Houllier, 2016) adds a voluntary dimension to the participation of individuals or groups legitimized as "non-professional scientists" "des formes de production de connaissances scientifiques auxquelles des acteurs non-scientifiques-professionnels — qu'il s'agisse d'individus ou de groupes — participent de façon active et délibérée." (Houllier, 2016)**.** In the English summary of the report, Sciences Participatives is referred to as "Citizen Science" because, according to the authors, this term is the most common one in English. However, this expression does not feel appropriate when translated to the French context. For this reason we stick to the French notion.

Community-based research can be defined as a "research approach that involves active participation of stakeholders, those whose lives are affected by the issue being studied, in all phases of research for the purpose of producing useful results to make positive changes" (Nelson et al., 1998). Community-based research might be carried out as action research, where the research cooperation between researchers and civil society aims at developing and implementing changes towards better social conditions, more democracy, better environmental protection, etc.

For this workshop, we will refer to these three notions and also use the analytical term "**participatory investigation**" as a general concept that abstracts from these three traditions and highlights commonalities.

1.2 When does research start? Using the term investigation broadly

When confronting these definitions with the practical experiences collected by ECSA, ALLISS, and the Living Knowledge Network, we had to wrestle a bit with the term "research" - what does it mean to be engaged in research, i.e. where or when does research start? There is an experience from ALLISS that some member organisations from civil society do not want to be part of "carrying out research, i.e. collecting data or doing experiments", but they want to be part in the discussions "beforehand" - they want the research question to be addressed to be their question. The same can be said of how members of the Living Knowledge Network, science shops, typically facilitate that university researchers and students do research on questions brought up by members of civil society. The level of participation in the research process itself varies from science shop project to science shop project. In contrast, for many forms of CS it is precisely the point that the research activities themselves are conducted by people, who are not employed as scientists in the respective disciplines. However, following the broad definition above, there are also other forms of Citizen Science where a community might, for instance, contract a researcher to conduct a study on the question they have formulated. This would be similar to the cases found in ALLISS and LKN. Moreover, in texts on Citizen Science "defining the research question" is frequently understood as the first step in a research cycle (see Eitzel et al., 2017). Since we are looking forward to bringing together examples from various research, engagement and activism traditions, we decided not to define research too narrowly and to be as open as possible to capture activities, challenges and good examples. For this reason we opt to use the term "participatory investigation". So spaces of integration in research production are multiple and need to be considered as plural, in issues and networks.

Another difference between the definitions of Citizen Science and Sciences Participatives is that Citizen Science seems to focus mainly on scientific outputs, while Sciences Participatives pays greater attention to processes of research and co-creation and also recognises a broader

spectrum of outputs (Houllier, 2016). We agree that we are not only interested in scientific knowledge production, although this remains a central anchor point for our discussions. We should also consider other outputs from participatory investigation activities beyond data, e.g. experiential knowledge, maps, programming code, designs, lab experiments, institutions, education, skills, etc. (for CS see Goebel et al., 2017). Relevant results from Sciences Participatives that are often neglected include legitimacy gain (eg. institutional credibility, access to mandates in public representation), individual and collective abilities, connecting networks, access to information and all kinds of knowledge produced, and transformative action. These points also resonate with views on Community-based research as practiced in science shops. What is more, this third strand of participatory investigation emphasizes the need to put the impacts of research under more scrutiny. A central concern is how the cooperation between research institutions and civil society can empower civil society, their concerns and visions (e.g. Avelino et al., 2017).

1.3 What do you mean by empowerment?

Paulo Freire (1974) defines empowerment as the ability to "understand social, political and economic contradictions and ability to act against the oppressing elements of reality". Empowerment should be seen as a critical paradigm linked to social mobilization, collective action, and social transformation, which strengthens civil society and civil society organisations. The focus on empowerment has grown in the last decades as a strategy to address and counter growing individualization, neoliberalism, and market orientation of public institutions and services.

Cooperation between research institutions and civil society can empower civil society and its concerns and needs in different ways. For example, civil society can be **directly empowered** through cooperation which develops:

- documentation of problems which members of civil society experience but have not been able to get governments and businesses to address,
- knowledge about emerging concepts, strategies etc. and their possible societal impacts,
- alternative strategies and systems addressing civil society needs (Jørgensen, 2018).

Besides this, civil society can be **indirectly empowered**, for instance if universities develop new research and education areas based on concerns and ideas expressed by civil society. Examples of this are the development of impact of medicine on pregnant women as new research area at a Dutch university and the development of organic food production and consumption as a research and education area based on cooperation with civil society initiatives (ibid.). Besides empowerment of civil society, the development of new research and education areas can also be seen as part of research institutions' development and innovation strategy (Hende & Jørgensen, 2001). It is here where we connect back to formal research organisations.

The previous section has given examples of how **empowerment** can be achieved through concrete outputs of cooperations between members of civil society and research institutions. Moreover, one needs to take into account the structures and processes in which we act, and address the inequalities that shape the lives of people, their possibilities to participate and capacities to understand and act, as well as the legitimation of their practical knowledge

(experiential knowledge) in relation to scientific knowledge. In this respect we might refer to patients willing to be considered as subject in the research process, not as object of research. **Equity and inclusiveness** are two notions that can help to bring out questions of power in Citizen Science and Sciences Participatives. Soleri et al. (2016) illustrate this for CS: "Professional science has a participation problem that is part of a larger equity problem in society. Inequity in science has negative consequences including a failure to address the needs and goals arising from diverse human and social experiences, for example, lack of attention to issues such as environmental contamination that disproportionately impact underrepresented populations, and a failure to recognize the pervasive effects of structural racism. Defined broadly, Citizen Science can challenge and change this inequity and mistrust, but only if it reflects the diversity of publics, and if it doesn't reinforce existing inequities in science and society." Members of the LKN pointed out that one important way of addressing such inequities is through long-term commitments to collaboration of academic institutions and civil society organisations. This puts additional emphasis on the question of "sustainability" of Citizen Science initiatives that are usually more short-term and finish when institutional funding runs out, and has only started to be addressed by practitioners. In addition, **intersubjectivity** between scientists, organisations and citizens (patients, inhabitants, farmers, etc. …) has emerged as important aspect of successful cooperations and empowerment between academic research institutions and civil society members. This is where ALLISS anchor their activities to change the research system through a long term process by developing training: 1. collecting and generalising cases from different topic areas, e.g. agriculture, health and education and 2. experiencing new ways of knowledge co-production (plural orientation of research).

1.4 Workshop concept

We wanted to **collect and discuss examples of empowerment of civil society** in the workshop and were particularly looking for case examples and experiences that have a certain maturity and can point out some impacts. One could call this systemic transformations, for instance, when a new research area has been created at a university or a new funding line for civil society-driven projects has been established. Regardless, we also wanted to encourage contributions from new projects that are just at the beginning to explore these questions or initiatives that have more intangible results. The aim was to facilitate a meaningful exchange between people who care for this topic.

To both share experiences and construct a common vision of how participatory investigation can contribute to empowering civil society and what we need to strengthen this, we had identified four leading questions that will structure our report:[1]

- What experiences of empowering civil society do we find among different networks concerned with participatory investigation?
- What are ways for empowerment of civil society along with their potentials and challenges?

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[1] Initially, we had 6 questions. The ones: How can we change university curricula to be able to integrate cooperation between civil society and students? and How can we involve members of civil society directly in research? have been taken up in the workshop but will not be used to present the results here.

- How can we organise spaces for cooperation between civil society and higher education & research institutions?
- How can we create new research topics and research approaches based on cooperation between civil society and researchers based at an academic institution?

We addressed these questions through three keynote presentations, a panel and a fishbowl discussion that sought to provide inputs to participants and give space for discussion. In three parallel workshops that ran along we focussed on participants experiences and went deeper.

Fixing the aims of our workshop, we discussed the **role of good practices**, i.e. in how far is it possible to abstract from the concrete experiences made in single projects and adapt such "recipes" elsewhere? There were different views on this question. Members of the ECSA working group have repeatedly expressed interest in creating, and even more so using, collections of good practices to make participatory investigation activities more participatory, emancipatory and co-created. People from ALLISS take a much more cautious stance here. They would be more interested in making collaborations between practitioners happen than in promoting good practices, which they understand as inherently normative. ALLISS would promote general good practices (sharing knowledge production methodologies and outputs, decision making processes, governance…) but not at the community level, e.g. on how to do "good" Sciences Participatives. This position is based on the argument that all practices (including the value judgements of what makes good practices good) are temporally and spatially situated and therefore their transfer from one situation to the other is limited. Good practices or needed practices emerge in action, when working together and solving the problems. Following this argument and assuming that the usefulness of good practices is limited in such way, what could be a worthwhile focus for our exchange between practitioners?

We tried it out… Opening up our conversation into many directions, offering bits to think, provocative examples and many interesting people, new connections to be built and hopefully enough irritation and confusion to keep (y)our minds busy for some time!

2 What experiences of empowering civil society do we find among different networks concerned with participatory investigation?

In this section we summarise the three keynote presentations.

2.1 Long-term collaboration of NGOs and government agencies for environmental health, Régine Boutrais & Élisabeth Ruffinengo

Élisabeth Ruffinengo is advocacy and project manager at Women Engaged for a Common Future (WECF) France. WECF is an international network of women and organizations involved on the questions of gender, water, sanitation, energy and chemical risks. The French office is specialized on advocacy activities and provides training for midwives. An example of action are consumer guides on healthy products WECF produces for parents-to-be or parents of young kids by collating results from many scientific studies, putting them into context and in relation to each other thus giving an overview over scientific and legal discussions in non-technical language. A workshop participant suggested to classify this work as **knowledge aggregation**, in comparison to knowledge production, and highlighted that it is highly important for the ability of members of civil society to form their own opinion and choose action options. The work of WECF benefit from strong partnerships with government institutions, such as ANSES.

Régine Boutrais was trained as a sociologist and is now responsible of the development of partnerships with NGOs and unions at the French Agency for Food, Environmental and Occupational Health and Safety (ANSES). For ten years, ANSES has a process to involve NGOs and unions in its governance and in collaborative work with their experts. By doing so, the agency aims to reduce the gap in the ability to participate in knowledge production as well to favor the equity of access to information produced by the agency. Understanding and recognizing the diversity of opinions and actions led by NGOs in the areas of work of the agency is a key factor to do so.

In this context the **long-term collaboration** between WECF and ANSES consisted in several recurring interactions through participation of WECF in the agency's work in producing reports on health-related questions relevant, for instance, for the population and the governance of such issues. Traditionally, the experts consulted for such advice reports work in academic institutions (universities, public research organisations…). In the case of ANSES, the agency opened its consultation processes also to involve NGOs. For example, interviews of NGOs were organized by ANSES experts groups to collect inputs and even to frame the scope of the reports. WECF was involved in such work about endocrine disruptors in toys for kids throughout most of the participatory process designed by the agency. While for WECF such a long-term partnership represents a gain of legitimacy of their work in the public debate, it could also be seen as a limit of over-requesting NGOs already involved and thus limiting the inclusion other civil society perspectives. The speakers identified other limits of the collaboration they experienced: the degree of uncertainty about knowledge produced by the agency (e.g. about

classification of dangers of chemical substances), as well as difficulties to translate expressions and recommendation from expert reports into practical advice (e.g. for parents).

In the discussion, a singularity of the collaboration emerged: in some consultation processes for producing expert reports, **the agency pays NGO representatives to take part in the groups, similarly to academic experts**. This is a concrete solution to the problem of underfunding of NGOs as well as the recognition of their legitimacy as experts.

2.2 Plural Configurations of Participatory Investigation: The experience of ATD Quart Monde France, Cyril Fiorini

Cyril Fiorini is a researcher at HT2S, CNAM, IFRIS examining co-production of knowledge for his PhD. He focussed on the case of the international movement [ATD Fourth World](#) (All Together in Dignity to Overcome Poverty) that originated as an association in France (ATD Quart Monde). ATD Fourth World is a movement and organisation of the catholic church that works for human rights, peace and dignity with a focus on overcoming poverty. The term "fourth world" was established by the association to refer to people living in poverty and social exclusion. The work of the movement is based on the **recognition of experiential knowledge and skills held by people experiencing poverty**. ATD argues that in order to overcome poverty, the complexity of mechanisms of this social phenomenon needs to be understood and there is a lack of scientific knowledge on it. Therefore researchers shall involve people who are experiencing poverty throughout the research process to make science relevant to overcome poverty.

With the aim to improve work on poverty, ATD has created various links with the scientific community and developed a method for knowledge integration. In the 1960s, for instance, two international symposia were held at UNESCO and since the 1970s the ATD People's University provides a forum for people in poverty to share their insights and knowledge with people from other backgrounds. One recent and notable activity in this regard is the so-called **Fourth World University Program** of action research training. Participants of this 2-year program are activists with experience of living in poverty, scientists from different disciplines and ATD volunteers. The aims are to do research together and eventually include problems and topics identified by people with experience of poverty into scientific research and teaching. This is accomplished by the **technique of "merging of knowledge" ("croisement des savoirs")**, which integrates three types of knowledge – experiential knowledge, action knowledge and scientific knowledge – through a joint research process. Five thematic groups worked in parallel on topics of family, work, history, knowledge, citizenship. They all followed the general methodology, which involved gathering data through interviews, study of scientific literature, data analysis, planning and writing a [thematic book](#). Throughout the two years, participants gathered regularly for face-to-face meetings to work together, share progress and questions. An important feature for the functioning of this co-production process is that activists also worked in **peer groups** among themselves (across thematic strands) to avoid isolation and more comfortably interacting with scientists.

In his research, Cyril is studying impacts of the work of the movement, which is a challenge. There were several follow-up projects blending knowledges with other groups, for instance professionals working in spheres related to poverty, or developing alternative measures of

poverty. The movement has also developed institutional partnerships with French public research organisations and a recent symposium gave much visibility to this kind of participatory research. However the work of ATD Fourth World did not eradicate poverty – the original and continuous goal. What is achieved, rather, could be phrased as the successful establishment of participatory research on poverty via the methodology of merging of knowledge as well as the particular insights that have been gained in this way. The question Cyril is addressing now is if and how this work has contributed to shift current science-society relations in France.
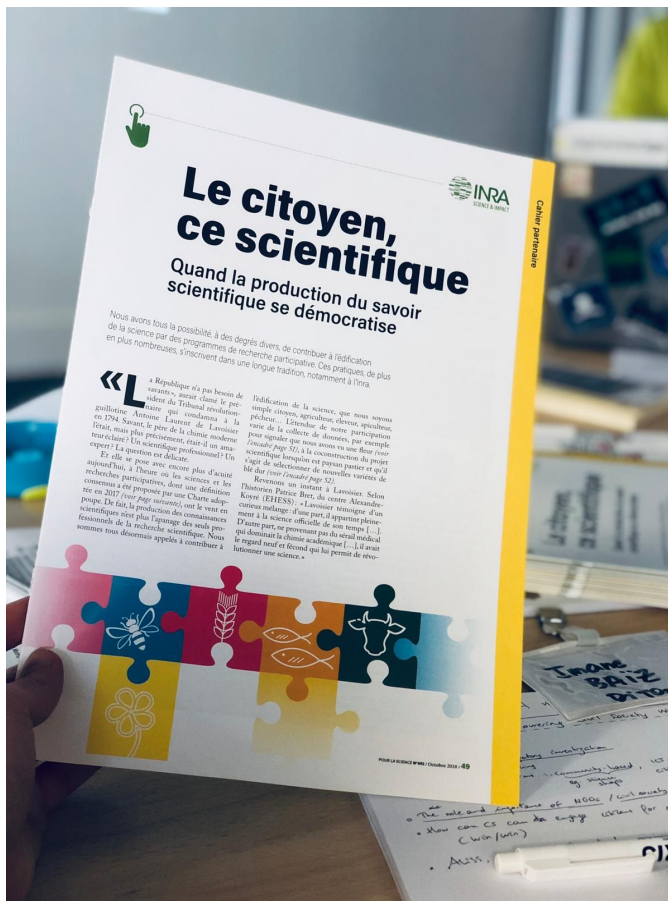
2.3 Empowerment through research partnerships, Andrea Vargiu

Andrea Vargiu is Professor of Sociology and Methodology at Sassari University, Sardinia. He directs the FOIST Laboratory for Social Policies and Formative Processes. He starts his presentation by pointing out a disappointing experience of participation and research: the decision on the location of the International Thermonuclear Experimental Reactor (ITER) in Cadarache, Southern France. The local community of residents and authorities had been mobilised to deliberate on whether to build the research reactor in Cadarache or not. The answer from these processes was no. Then, they did not get more funding for public engagement and ITER was built. This is only one example of many deliberative processes in which public participation lacks formal power and was (often still is) rather meant to give legitimacy to research infrastructure projects, like ITER, or research policy programmes, like working on genetically modified organisms, instead of being open-ended.

In contrast to such undesirable examples, Andrea proposes to focus on **continuity and sustainability in funding and relationships**. On this basis, one can build a **shared vision and equitable partnership** in order to go beyond the lifespan of any third party funded project and propel social change. He calls this **permanent partnership instruments** and presents two examples of such instruments from their work in Sassari:

(1) The FOIST **laboratory** itself. It is a university lab undertaking structural cooperation with civil society organisations (CSOs). The lab gives enhanced flexibility for such co-operations and acts in a multiplication role. To do so, it brings together three components: engagement (based on the chart of Sassari for a community-university alliance), teaching (BA, MA, and PhD students in social work, social policies and social sciences) and research (on social policies, migration, third sector, etc.).

(2) Activities in Santa Maria de Pisa. People from FOIST lab started working with residents in this neighbourhood of popular housing. They did community walks, developed community maps, scenario conducted workshops and asset based analysis of the neighbourhood. Based on these activities, they went on to develop a "participated platform for social innovation and integration through active citizenship". The **platform** hosts several project, e.g. on health and wellbeing, work, environment and circular economy, that are under a shared vision, which helps to give flesh to the sustainability impact criteria of the small projects. This work is not a one shot. Now, they are co-developing the programs with residents. This involves deciding together on what the money is for and where it goes. This can also be seen as empowerment. People start building capacity to ask where do we want the money to go?

Challenges of this work include: the research system not valuing this type of work, managing co-ownership in an environment that is structurally dependent on the outside, fragility of public engagement organisations because of close connection to charismatic persons. As **learnings** Andrea highlights two points: For making a change "in the field", working together with civil society actors and staying agile in these processes is important. But such work seldom changes overall structures of power and money flows. In order to work on this end, one needs to align agendas strategically. Networking is important in this context.

3 What are ways for empowerment of civil society along with their potentials and challenges?

In this section we summarise panel and fishbowl discussions and one of the parallel workshops.

3.1 How to finance participatory investigation collaborations, especially involvement of civil society? Alexandra Albert & Rémi Barré

Rémi Barré is a prospectivist, expert in the field of research policies since the early 1990"s. His presentation was built by looking at the French experience of fundings programs for participatory investigation over the last ten years. These are the main points of his talk:

The closer you get to the core of the research system, the less propensity you see to finance participatory investigation. It emphasizes a paradoxical attitude of the research

institution: its discourse for the public/political arena highlights its societal involvement while its discourse for its internal arena (the researchers) amounts to a solid status quo attitude. Against this background, there are two possible strategies to work towards increasing funding for participatory investigation. The 1st possible strategy is **incremental** - keep on trying to convince the research establishment for funding participatory investigation programs. This should be continued despite it will probably stay modest in volume and will not allow the scaling up of participatory investigation. The 2nd possible strategy is **innovative** and includes having the variety of social actors to fund participatory investigation in view of its anticipated and achieved societal impacts. It implies a twofold scheme:

- To build the relevant institutional and financial environment for the societal research actors to develop **symmetry between industrial and social actors regarding the research ecosystem**. In practice, every funding type and policy instrument settled for industry in the last 50 years should be duplicated and adapted to social actors.
- To **build a market for the common goods and services** produced by participatory investigation. Processes produced by participatory investigation are **central to the ecological and energy transitions** and thus bear high social and environmental value. The point here is both to measure and value such goods and services. These issues are addressed through the recent developments of the theory and methodology of environmental services and amenities.

The innovative strategy should be urgently deepened and its modules experimented. This supposes action and interactions on three fronts:

- help the participatory investigation actors (civil society and public research) be organised to increase their socio-political force,
- adapt the public policies to build relevant institutional and financial environment,
- create the financial vehicle and organisation able to mediate between supply and demand for common values produced through participatory investigation.

These are the goals of the ALLISS collective, working in close relationship with IFRIS.

Alexandra Albert is a researcher at UCL London. She talked about the different types of funding and operational models in CS, as drawn from a [report called "Making Citizen Science Work"](#) on innovation management in CS, written as part of the EU funded Horizon 2020 project Doing It Together Science (DITOS). Within the report the authors argued that Citizen Science can benefit from many of the developments in the field of social innovation, and the broader innovation management landscape. Such practices can help to strengthen and increase the development of innovative applications for participatory science. However, the authors also argued that the Citizen Science landscape is more complex than the social innovation landscape and thus requires special attention.

She drew attention to the **five categorisations of business models in CS**, that were developed in the report to reflect on and to start an initial conversation about the wide variety of operational models, and funding in Citizen Science. These were the following:

Motivated individual: these projects are the result of a committed researcher with a strong interest in a topic. These projects would not have come about without the impetus and motivation of that individual (or small group of individuals). These are commonly small- scale projects, often with little to no funding, apart from funding that the leaders of the project secure through their entrepreneurial activities inside their organisation, or the environment within which they operate.

Small Crowdsourcing (SCS): these types of projects are task specific, or one-off, though in some instances the intention is that the communities generated around such projects will be ongoing. These projects tend to be funded through a crowdsourcing model, or small amounts of funding from different resources. They are of a limited scale in time and place, but many of them hold the potential for replication and expansion.

Outreach (Outreach): these projects are primarily concerned with engaging participants on as broad a scale as possible. Outreach might mean that the organisers of the activity are doing it in order to encourage people to learn and engage with an issue, as well as being involved in a scientific project and creating information that can be used for research and monitoring. Other outreach projects are aimed at reaching out to audiences that usually do not engage with science. The extent of funding of such projects might vary considerably, but the scale of operation tends to be larger than other CS projects.

Research and Innovation (R&I): these projects take their name from the classification in the Horizon 2020 framework. These projects are aimed at creating new scientific or technical knowledge. A key characteristic of this type of project is that it is run by a university or consortium of organisations including a university. These are potentially large scale, well-funded projects, which are time limited - from a few months to five years. While they operate within the traditional framework of innovation management, in the case of CS, they require different support and development beyond the end of the funding.

Long Term NGO (LT NGO): These projects tend to be quite well established, having been in existence for over five years, and in some cases, many decades. A key characteristic is that they are run by an NGO whose predominant mission is very well aligned with the project. Since these

projects are more long term, they may have experimented with different funding sources, before arriving at their current funding source.

Alexandra concluded the presentation by suggesting that whilst CS can learn and adopt approaches from the field of social innovation, the unique characteristics of these projects need to take into account, such as the need to release the data under open science principles.
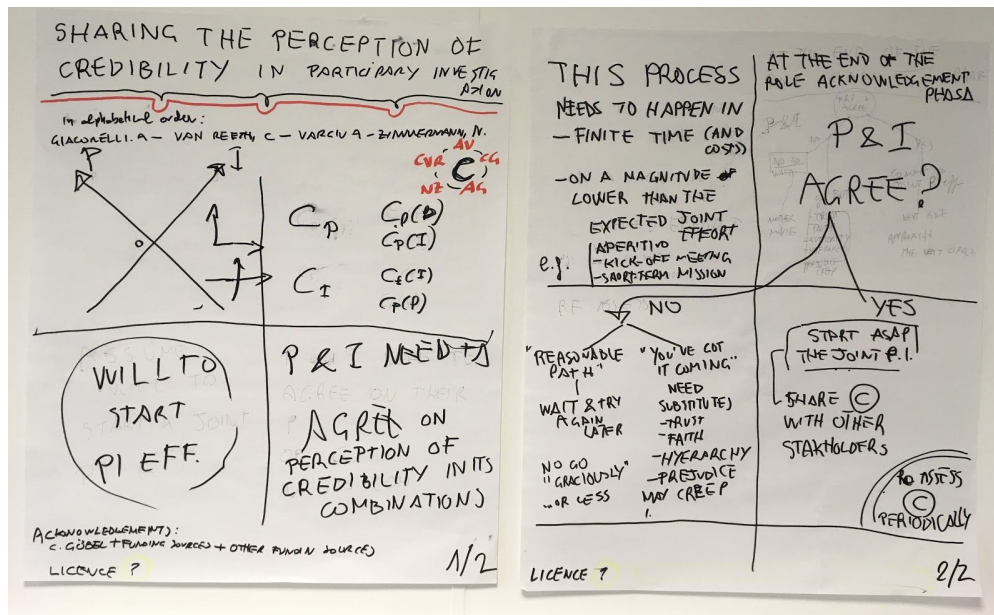
This fishbowl discussion involved members of the three networks presented below.

European Citizen Science Association (ECSA) is an umbrella organisation connecting practitioners of Citizen Science across Europe. It works with a network of universities, research institutes, NGOs, museums, Citizen Science initiatives and individual members from across the EU to advance and promote Citizen Science in a Europe where citizens are valued as key agents advancing knowledge about the sustainable development of our world. Together with members of the Living Knowledge Network we have created a working group to investigate and support empowerment, inclusiveness and equity based on an exchange between the approaches of Citizen Science and Community-based research. Links to the work of ECSA are emerging especially with the working group on "Empowerment, inclusiveness and equity" that ECSA has launched in mid 2018. The aim of the working group is to support a discussion on these three topics in the Citizen Science community in Europe and collect experiences. For this reason we explore connections between the approaches of Citizen Science and Community-based research and work with the Living Knowledge network to do joint method development.
https://ecsa.citizen-science.net/
ECSA working group on Empowerment, Inclusiveness and Equity:
https://ecsa.citizen-science.net/empowerment-inclusiveness-equity

Pour une alliance sciences sociétés (ALLISS) is an association promoting cooperation between civil society and research and education institutions. ALLISS was co-founded in 2015 by IFRIS and a community education NGO through a national program (PIA = Programme d'investissement d'avenir). The network counts around 100 member organisations. Alliss is funded by their memberships. ALLISS published a white book (Prendre au sérieux la société de la connaissance, 2017) acknowledging the diverse and numerous forms of collaboration between sciences and society and produced recommendations to structure the field of cooperation and interaction between academic institutions and civil society organizations. The aim is to change the national research and innovation system and institutionalize the participation of NGO/CSO as legitimate partners of public research. To achieve this long term goal, Alliss facilitates experience sharing among its members and lobbies to transform public policies. ALLISS started a working group on chronic risks to figure out how to experiment with plural orientations of research, i.e. incorporating various aims and knowledges. The group is dedicated to formulating questions about "environmental degradation" and "health" through participatory research. Also, the working group on "intermediations between sciences and society", aims at equipping the actors for successful interactions. So far, they have shared experiences of intermediations in the fields of agronomy, health, education, public engagement in sciences and digital communities.
http://www.alliss.org/
http://reseau.alliss.org

Living Knowledge Network (LKN) is the international network of science shops and Community-based research. The Network is composed of persons active in or supportive of Science Shops and Community Based Research. Living Knowledge aims to foster public engagement with, and participation in, all levels of the research and innovation process. Links to the LKN exist in relation to empowerment of civil society through cooperation with university researchers and students, and the shaping of such initiatives and their impact in interaction with the socio-material context.
https://www.livingknowledge.org/

The workshop was facilitated by Claudia Göbel & Lucile Ottolini. It aimed at reconstructing short descriptions of participatory investigation activities and how they evolved over time in order to better understand common elements of these trajectories. Such elements could be, for instance, conditions of success of collaborations between civil society and higher education institutions, networks involved, material and economic conditions, etc. Based on exposing these trajectories, we hoped to create fertile discussions on common questions regarding conditions, challenges and important moments of participatory investigation initiatives and empowerment. Some ideas that came out:

Challenges in the trajectories experienced by participants:
- Finding appropriate measures to build up credibility despite non-scientific identity and maintaining credibility of data (those produced by scientists as well as by civil society actors),
- Maintaining engagement of the collaborating institutions, where spaces for collaboration can be build,
- Maintaining the ability to reclaim the project vision, data, resources on the side of civic society organizations involved,
- High costs in terms of time, money and motivation to continue cooperations.

Way to adapt to challenges:
- Finding the people who will keep the fire alive (and how to do that…). Such role were named as knowledge brokers in academic literature,
- Organising foundational meetings to present and hear stories of each organisation and institutions involved helped to start cooperations because they served as ''non-dangerous'' spaces of discussion and getting to know each other. Such original settings were then turned into public engagement spaces once trust was established between core coordination partners.

Key moments of the trajectories experienced:
- Incubation: time needed to understand each other, to let ideas emerge and to build trust.
- Gathering information: producing documents to synthesize views and ideas of collaboration in the cooperation/consortium.

These points can be used as a methodological tools for analyzing trajectories of participatory collaborations of different characteristics and at different stages in time.

4 How can we organise spaces for cooperation between civil society and higher education & research institutions?

In this section we summarise the second parallel workshop "Governance of spaces and places?" facilitated by Evelyne Lhoste.

The workshop aimed at clarifying the governance of spaces and places such as digital platforms and open labs (living labs, makerspaces etc.) where NGO and other civil society organisations hybridize with public organisations and private firms to produce and circulate knowledge. Governance stands for the processes of governing the community and the ruling of the space involved in participatory investigation (decision-making processes). It relies to the way rules, norms and actions are structured, regulated and held accountable.

Most workshop participants had very little experience of governance processes. Those who participated in research projects led by research institutions were not involved in governance. Nevertheless they were very interested by the questions raised. However the relationship between spaces and governance was not clear to them. The facilitator explained that, based on her observations, the governance materializes in spaces and places and may materialize or perform power asymmetry and (in)dependency among the stakeholders involved in a participatory project. It may therefore favor the reproduction of pre-existing rules, social norms and institutions or transition to others. One participant was a member of a public organisation providing citizens with kits to measure air pollution, mostly to raise awareness, therefore not aiming at involving them in governance of the research programs. Another one was involved in "La coop des communs" and presented the large experience of this organisation in training members to governance issues.

In conclusion, this workshop highlighted the diversity of the audience, from citizen eager to help research projects (crowdsourcing) to those engaged in knowledge production to solve problems of daily life (epistemic communities of patients, inhabitants, naturalists...).

5 How can we create new research topics and research approaches based on cooperation between civil society and researchers based at an academic institution?

In this section we summarise the third parallel workshop "Empowerment of civil society through research cooperation" facilitated by Michael Søgaard Jørgensen.

Cooperation between research institutions and civil society can empower civil society and its concerns and needs in different ways. Civil society can be directly empowered through cooperation which develops documentation of problems civil society experiences but have not been able to get government and business to address, knowledge about emerging concepts, strategies etc. and their possible societal impacts alternative strategies and systems addressing civil society needs. Besides this, civil society can be indirectly empowered, if universities develop new research and education areas based on concerns and ideas expressed by civil society through research cooperation. The aim of the workshop was to exchange our experiences with such mechanisms of empowerment of civil society.

The workshop included discussions of experiences of the participants through three questions:
- How was empowerment of civil society possible?
- What can others learn from these different experiences?

- How can the experiences "travel" from one context to another: How to de-contextualise the experiences and afterwards re-contextualise them in a new place?

A few key ideas that came out:
- Citizens seems to be relatively happy and comfortable engaging in data collection, but they are not necessarily comfortable getting more involved in the process. They have little understanding of how, there is little evidence of 'pathways' to engage in this way and there isn't more space created within the scientific process for them to add their own skills and experiences.
- How do we create space within the scientific process for citizens to not only feel like they can participate, but also feel like they can contribute their own skills and experiences?
- Scientific literacy is an outcome of CS engagement and a tool of empowerment.
- How long does empowerment last? In the case of Lotta Tomensen's work, school students through collecting evidence of CO2 levels in the classroom were empowered to speak to their headteacher about tackling the problem. Does this empowerment spill into other areas of their lives? And how long does it last for a couple of weeks, a couple of months, the rest of their lives?
- In the framework of Citizen Science we talk about the resultant knowledge being empowering to the citizens, but this is the empirical knowledge that is empowering. Other forms of knowledge are not valued in the same way by society, so how empowering are they?
- Challenges of data privacy and data sharing for example in Petra's work.

6 Empowerment, civil society and participatory investigation

We hope the materials, resources and contacts collected in this document will help to continue this big conversation and stimulate joint action. We found that there are many questions related to the trias of empowerment, civil society and participatory investigation. Instead of giving an even more eclectic summary then assembled in this report, we close with the reflection shared by our host Pierre-Benoit Joly.

Citizen participation in science and technology was already high on the agenda in 2004. What has changed since then? First, at least in France we can observe many institutional initiatives, which produce many things, among them, lots of failures. Therefore, institutions have a much more accurate view on participation today, regarding the difficulties of doing it as well as its broader fallacies – for instance, manipulation of participation was a big topic here in France. Second, related to the fashion of Citizen Science - understood as crowdsourcing & use of digital platforms – we can observe a renewal of interest in participation. This produces more ambiguity in the field and made some institutions, which were reluctant to open towards participatory investigation, jump into the game. One example are research universities - now participation is natural in this context, which opens phases of experimentation. Third, earlier, participation was mainly about governance – opening the governance of science and technology. Now it is also about "doing something different" in different ways in new places, such as hackerspaces, makerspaces and third places. Fourth, a group of people like the one here today – in terms of diversity, range of competences, etc. – would not have been imaginable then. This makes a difference.

Possibilities of empowerment for civil society through participatory investigation, then, can be found in the learning from these past experiences and mistakes, in the new spaces opening up and in the hands of these diverse groups of people invested in participatory investigation.

7 References

ALLISS. 2017. Livre Blanc. Prendre au sérieux la société de la connaissance, accessible via: http://www.alliss.org/

Avelino, F, Wittmayer, J, Pel, B, Weaver, P, Dumitru, A, Haxeltine, A, Kemp, R, Jørgensen, MS, Bauler, T, Ruijsink, S & O'Riordan, T 2017, 'Transformative social innovation and (dis)empowerment' Technological Forecasting and Social Change. DOI: 10.1016/j.techfore.2017.05.002

Eitzel, M. et al. (2017). Citizen Science Terminology Matters: Exploring Key Terms. Citizen Science: Theory and Practice, 2(1), p.1. http://doi.org/10.5334/cstp.96

Freire, P. 1974. Pedagogy of the oppressed. Seabury Press

Haklay, M., UCL London: Figure on forms of participation in Citizen Science projects, from presentation at Uni Zurich, 2015; https://povesham.wordpress.com/2015/11/17/standards-and-recommendations-for-citizen-science-university-of-zurich/

Hende, M & Jørgensen, M.S. 2001. The impact of science shops on university curricula and research. Working report for the SCIPAS project, SCIPAS and Department of Manufacturing Engineering and Management, 2001, SCIPAS Report No. 6

Houllier, F. 2016. Les sciences participatives en France. État des lieux, bonnes pratiques & recommandations. http://www.sciences-participatives.com/Rapport

Jørgensen, M. S. 2018. Reflections on connecting higher education institutions and civil society through Science Shops. Presentation at COST Workshop

Kullenberg, C., Kasperowski, D., 2016. What is citizen science? A scientometric meta-analysis. PLOS One 11/1: e0147152.

Nelson, G., Ochocka, J., Griffin, K. & Lord, J. 1998. Nothing about me without me: Participatory action research with self-help/mutual aid organizations for psychiatric consumer/survivors. *American Community Psychology Journal*, 26, 881-912.

Shirk, Jennifer, Heidi Ballard, Candie Wilderman, Tina Phillips, Andrea Wiggins, Rebecca Jordan, Ellen McCallie et al. "Public participation in scientific research: a framework for deliberate design." Ecology and Society 17, no. 2 (2012).

Soleri, D., Long, J.W., Ramirez-Andreotta, M.D., Eitemiller, R. and Pandya, R., 2016. Finding Pathways to More Equitable and Meaningful Public-Scientist Partnerships. Citizen Science: Theory and Practice, 1(1), p.9. DOI: http://doi.org/10.5334/cstp.46