What knowledge counts? Insights from an action research project using participatory video with grassroots innovation experiences [1]

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ABSTRACT
This paper presents a contribution on a participatory action-research process using Participatory Video (PV) methodology. Duringsix months, a group of 6 facilitators and 9 members of two grassroots innovation initiatives (Solar Dómada and Fuel Poverty Group) took part of the process and produced two videos during a five-stage PV process, from initial definition and planning to public screening and debate of the videos. We present some insightrs from that research using an original framework developed to analyze PV process: the eParc Cube. This framework examines the interaction between knowledge production, participation and communicative spaces that happen during PV. We conclude reflecting on the social relevance of that kind of research considering the impact among of the co-researchers of both process and products.

INTRODUCTION
How do we know that the knowledge produced through research has a social impact? Which impact are we achieving? Who defines them? All these issues are of particular relevance in this Conference dedicated to explore the peripheries in the production and measurement of scientific knowledge.

Through this research-in-progress we show some insights of a recent action-research process using participatory video (PV) as a tool. This research has been conducted from October 2015 to March 2016. A group of 6 facilitators (co-authors of this paper) and 9 members of two grassroots innovation initiatives (one of them also co-author of this paper) took part in this research and produced two videos during a five-stage PV process, from initial definition and planning to public screening and debate of the videos. The two initiatives pointed at bottom-up, social, alternative and empowering production of energy and of space.

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As the main topic of this conference recalls, the knowledge that has been produced could be considered "peripheral" for political, academic and geographical reasons. Firstly, because it is knowledge produced from social groups, which have in common their activism for a change of the mainstreaming model of development; secondly, because it has been produced through a "peripheral" research methodology in academia, such as action-research; thirdly, because the research has been carried out in Valencia, a city considered on the outskirts of the scientific knowledge production predominant today.

In section 2 we describe the methodology used and the main characteristics of the two organizations involved; in section 3, we explain the analytical framework used (the eParc cube, Boni and Walker, 2016) to collect the evidences; in section 4 we describe some results and we conclude with some insights on the social relevance of this research and how has been captured and measured.

CASE STUDY. A PV PROCESS WITH TWO LOCAL GRASSROOTS INNOVATION INITIATIVES

PV has been largely used as a method and a process with the aim of empowering individuals and communities through sharing stories and making videos depicting their own realities, challenges and aspirations for the future (White, 2003). PV can be considered as one of the many manifestations of the relationship between media and development (Scott, 2014) and also as a tool under the umbrella of participatory action methodologies.

PV is a wide field, which allows a wide range of approaches and perspectives (High et al, 2012): some use it as a method for research (Oliver et al, 2012), while others regard it as a tool and a process to foster awareness for local communities (White, 2003; Plush, 2012). Other authors have explored it as a way to influence policy making (Wheeler, 2012), although, in the same experience, a PV process could aim to achieve more than one of those goals. According to Shaw (2013) there is neither a single nor correct method to approach a PV process and what happens in each experience is very contextual and could lead to very different outcomes.

In our particular case, PV has been used as a research method to try to grasp the contextual knowledge produced and as a way to empower members of local initiatives through different cycles of reflection and action. Also, to produce an output (the two videos[2]) that can be useful for the goals of the different participants, for instance, for the local organisations as a tool to show and disseminate their activities and add new constituencies and for the group of facilitators, as a way to showing a peripheral way of conducting research and discuss the social relevance of it.

[2] Available at https://repensandoelcambioclimatico.wordpress.com/5o-ciclo-proyeccion-publica/

Participants

The two local organizations were Solar Dómada (http://domonomada.blogspot.com.es/) and Fuel Poverty Group (hereafter FPG) of the *"Plataforma por un Nuevo Modelo Energético"* or "Platform for a New Energetic Model" (hereafter Plataform) http://www.nuevomodeloenergetico.org/pgs2/). As we will see in the brief descriptions below, both organizations can be understood as grassroots innovations (GI) which, according to Seyfang and Smith (2007: 585), can be defined as:

> *"networks of activists and organizations generating novel bottom-up solutions for sustainable development; solutions that respond to the local situation and the interests and values of the communities involved".*

The first group is the Solar Dómada, a group of people who are occupying a private plot, highly deteriorated at the time of their occupation (2013), as a way to assert the need for social spaces in the neighbourhood. Solar Dómada also seek to highlight that another kind of coexistence between neighbours is possible; one based on respect and intercultural coexistence. In the centre of the plot is the Garden of Ca Favara, one of the symbols of neighbourhood participation, involving more sustainable practices of food production and consumption.

The second GI is the Fuel Poverty Group, a very new group of volunteers, mainly university students that want to challenge fuel poverty[i] by giving advice on how to reduce fuel consumption. This group is part of a wider network named the Platform for a New Energy Model, which works towards a more democratic and sustainable energy model.

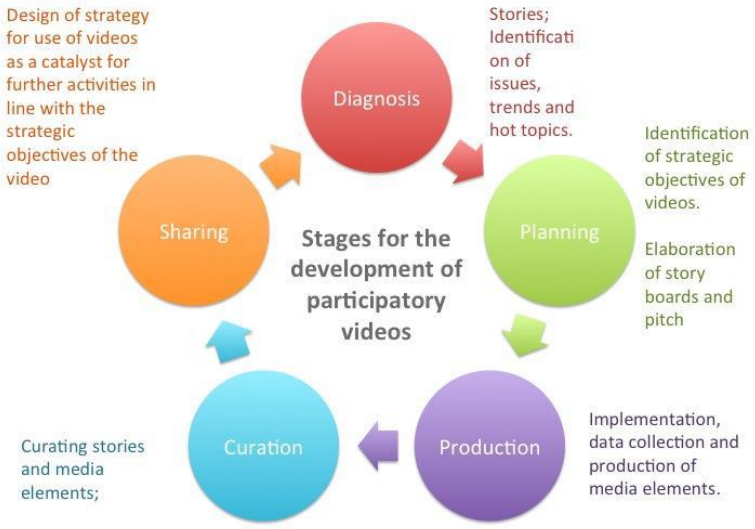
The two groups have a common aim behind their activism in that they both seek a more equitable, democratic and sustainable livelihood. The differences between them lie in: the area in which they are located (energy and production of urban space); the age and characteristics of their members (university students in the case of Fuel Poverty Group and people of different ages, educational levels and careers in the case of Solar Dómada); and their strategies (information and technical advice in the case of Fuel Poverty Group and occupation of urban space in the case of the Solar).

The other participants in the process were the facilitators, all researchers and collaborators at INGENIO, a Spanish institute devoted to knowledge management and innovation (http://www.ingenio.upv.es/en).

PV stages

Figure 1 depicts and explains the five phases of the PV process

Figure 1: Stages of Participatory Video Development.
Source: Millán and Frediani 2014



In the first phase, diagnosis, participants identified the most relevant issues. This phase occurred in two types of communicative spaces: within each of the two groups and between the two groups and with the facilitators. In the case of Solar Dómada, the intra-group space was particularly important as it enabled a reconstruction of the history of the group. In the case of the Fuel Poverty Group, the interaction between this group and the other participants enabled them to think about the narrative of the video, embracing a broader perspective of fuel poverty.

The second phase was planning, where the storyboard was developed. This occurred primarily inside groups and then it was socialized in a communicative space of a collective nature, which was also very much appreciated by the participants, allowing them to reflect on the narratives and contents of the two videos.

The third phase was the video production. In the case of the Fuel Poverty Group, the participants asked people outside the action research about the significance of fuel poverty or how they felt about being labelled "energy poor". As we will discuss in section 4, these interactions were a very important source of learning about rethinking the idea of fuel poverty and the scope of performing energy consultancy as a mechanism to deal with it. In the case of Solar Dómada, the production phase stimulated a variety of communicative spaces between group members and the neighbourhood, providing various perspectives on the plot. The contribution of the facilitators at this stage was to provide technical assistance in recording.

The fourth phase was the publication (curation) of the two videos, which in the case of Solar Dómada was conducted with the help of an external facilitator, while in the case of the Fuel Poverty Group, the task was taken on by the group itself. There was a collective communication space where videos were pre-viewed internally. For the Fuel Poverty Group, this space of collective discussion allowed them to refine the video narrative.

The 8-minute video by Solar Dómada (available at https://www.youtube.com/watch?v=FUUMTSxU6Iw) presents the occupied plot as a place where coexistence between neighbourhoods is promoted and more sustainable lifestyles are demanded, which are respectful of the differences between cultures and between generations. At the heart of the plot there is a small orchard, literally dug into the cement, symbolizing a space of resistance against a model of the unsustainable and individualistic city in a peripheral and difficult urban environment. The second video (6'50"), available at https://www.youtube.com/watch?v=Ke6fQxCrnro , illustrates a recent problem in the Spanish context; that of fuel poverty. The video shows evidence of what is meant by fuel poverty and how conducting a review of the entire energy consumption of a household can lead to improved energy efficiency.

The PV cycle ended with the public presentation of the videos in an emblematic site in the city of Valencia, due to its political character (*Ca Revolta*). After the screening there was an interesting dialogue between group members, facilitators and the audience, composed of activists and academics and neighbours of the Solar Dómada.

THE EPARC CUBE. A FRAMEWORK FOR THE ANALYSIS OF THE PV PROCESS

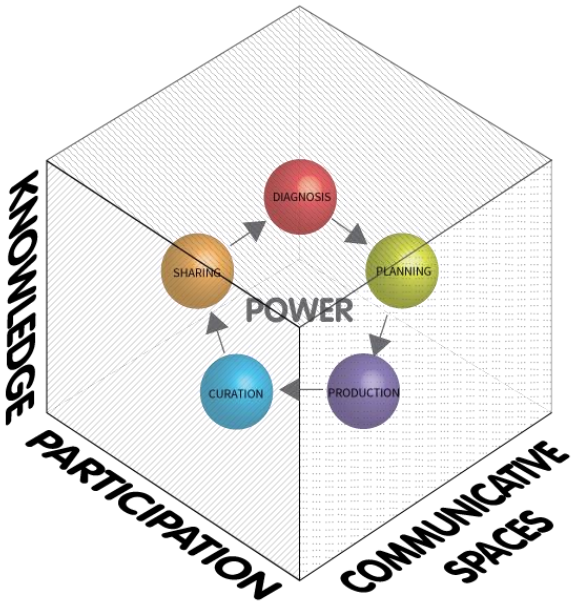
To conduct an analysis of this experience we will use an original framework designed to capture the digital participatory action research process. This framework has been developed by Boni and Millán (2016) and was inspired in previous works by Boni and Walker (2016), Frediani (2015) and Gaventa (2006).

The first category for analysis is the idea of communicative spaces that can be understood as forums in which people join as co-participants in the struggle to remake the practices in which they interact (Kemmis and McTaggart, 2005:563). The same authors define practice as real, material, concrete and particular actions of particular people in specific places and can comprehend what people do, how people interact with the world and with the others, what people mean and what they value, the discourses in which people understand and interpret the world (Kemmis and McTaggart, 2005: 565).

The second category is participation. According with Bradbury (2010: 104), participation can be considered in a broad spectrum: from a minimum involvement of practitioners (for example, in a needed consultation) to having those practitioners as co-researchers and co-designers.

The last category is knowledge; through participation in communicative spaces knowledge is produced, assumed not only as an understanding of the topics addressed, but also practical knowledge (the skills developed) and the values that underpin the knowledge produced (Kemmis and McTaggart, 2005: 565). Each of these three elements – communicative spaces, participation and knowledge – will form the axes of a three-dimensional figure, a cube. The use of the cube aims at visualising complex interactions among dimensions in the analysis of participatory processes. In our case, it aims at representing the intersections that occur between knowledge, power and participation within communicative spaces, taking place during the cycles of reflection and action in the phases of the PV. For our analytical understanding, in Figure 2, we find the figure that represents the PV process (see fig.1), inside the cube. In the interactions between the three axes, issues of power emerge and shape the kind of participation and knowledge produced (Gaventa and Cornwall, 2008).

Figure 2: The ePARC framework (Boni and Millán, 2016)



EVIDENCE

We will base our evidence on participant observation conducted throughout the process along with three groups interviews to members of the two GIs at the end of the PV process. In the case of Solar Dómada, two group interviews were conducted: the first with 3 women participating in the GI and the second with two men. The reason for doing it this way is that, during the PV, a difficult power relation between one of the women and the two men was detected. To enable the interview to flow more naturally, it was decided to separate the two groups. In the case of the Fuel Poverty Group a single group interview was conducted with a woman and a man. All the interviewees give us their informed consent.

We will begin this section by analysing the potential of communicative spaces (both collective and within the groups) to create knowledge and foster participation. Starting with the collective communicative spaces mentioned before, both groups acknowledge that the first collective meeting was highly motivating and exciting. As noted by one of the members of the Solar Dómada:

> *"It was very encouraging to see that your team [INGENIO team] was interested in our initiatives and because the problems we often have is making ourselves understood by our neighbours... I thought it was a good opportunity to become known in the neighbourhood... also to try something new, editing a video is far from what we normally do."*

In terms of the knowledge produced, we can identify the second collective moment that happened at the planning phase as being extremely powerful – when the two organizations shared storyboards. During moments of dialogue, participants were able to contrast their visions on the themes that would be address in the videos. For example, one of the members of the Fuel Poverty Group indicated:

> *"XX told us that energy is not only electricity… there is solar thermal energy in the roofs of the houses... [all of these] are reflections from other points of view that you can get if you talk to people, and especially if you talk to groups that are already committed... [this is] where richness lies"*

In the case of the Fuel Poverty Group, the collective moment helped the group to adopt a less paternalistic perspective of fuel poverty. Their first option was to show one person affected by fuel poverty and how the energy consultancy could help to reduce her energy expenditure. After the ideas exchange during the second collective moment, the group decided to include a more political perspective of fuel poverty, introducing references in the storyboard concerning the energy oligopoly that exists in Spain and which hinders better energy consumption.

Regarding facilitation, members of the two groups expressed that horizontal relations between facilitators and members of the two GIs had a positive and significant impact on communication and exchange of ideas. It was also highlighted in the final meeting that collective spaces had been planned and managed in a very careful way. They were experienced as pleasant and friendly spaces, where people felt comfortable and relaxed, having a positive effect on people's participation. The importance of the emotional aspect in the process has been one of the greatest learning aspects for the facilitation team. Relationships between people are crossed by emotions, and creating communicative spaces where these emotions can be channelled positively is essential in order to generate more knowledge sharing and enhance participation.

With regard to the communicative spaces that have occurred within groups, for Solar Domada's members, the exchanges that happened during the diagnostic and planning phases were very important to reconstruct the history of the organization and the role played by each of its members. As noted by one of the participants:

> *"We remember especially when we were recalling those moments with pictures... they were very emotional moments... I loved it when all of us answered without digressions what we wanted to show in the video... we had never seen such an organized and respectful relationship as the one that occurred that day"*

In the case of the Fuel Poverty Group, one of the most interesting communicative spaces from the perspective of knowledge production took place at the production stage when interviewing a woman affected by fuel poverty. The interviewer noted that the most shocking thing was to realize that the woman wouldn't have considered herself fuel-poor if she had been living on her own but she would reconsider this position if this affected her ability to meet the basic needs of her family.

Another important learning aspect for the members of the GIs was the limitations of their voluntary action as a way to challenge fuel poverty. As one of them indicated:

> *"The difficult part is that we can help reducing the bill but we can't help you to get reconnected to the power supply... it's an economic issue... this where we say: we can only go so far as fuel poverty volunteers…"*

Finally, the act of making the two videos has also contributed to the acquisition of new technical skills. At the beginning of the process, some of the participants believed they were totally incapable of making a video.

A special mention must be made regarding the power relations that occurred throughout the process; on one side, although the PV process puts the team of facilitators in a position of superiority due to their mastery of the audiovisual tool (Millán & Boni, 2016), this was not a hindrance throughout the process. In the case of the Fuel Poverty Group, the group requested technical support when needed, but much of the technical work was done by the group itself. Participants recognized that the video could have had a higher technical quality, but their attitude was that this was a first approach to the tool, which would enable them to make more videos in the future.

On the other hand, in the Sólar Dómada group, power relations played an important role. In fact, one of the external facilitators ended up in charge of technical tasks and coordination of the PV process, precisely as a way to mediate between group members. This was viewed positively by most participants, because it was the way to "save" the process and finalize the video. However, one of the participants said he would have liked to have more control over the process, but the difficult relations inside the group favoured the delegation of coordination and technical tasks to an outsider.

CONCLUDING THOUGHTS

Although the research has not been completed, and we may need to analyse other collective moments such as the public screening and the potential impact of other communicative spaces produced by the dissemination of the two videos, we can point out some preliminary ideas about the social relevance of a research of this kind.

From the evidence collected, it can be said that the action-research process has had a social impact in terms of knowledge production. It has helped participants to reflect and to problematize the way they understand their "practices", in the sense proposed by Kemmis and McTaggart (2005). In the case of the Fuel Poverty Group, it has served to rethink their comprehension of fuel poverty and the scope of volunteering practice. In the case of Solar Dómada, it has helped to reconstruct its history as a group and to reflect on the aims of occupied spaces within their neighbourhood. For the team of facilitators, it has also served to rethink the role of facilitation and the importance of the emotional aspect in these processes. Moreover, the VP process had equipped the participants with new technical skills to produce videos and tell powerful stories that could have a social impact using audio-visual language.

With regard to the outputs of this PV process, the two videos are extremely meaningful for the two organizations, as they constitute another communication tool that could help in the diffusion of their social causes they stand for.

We argue that the evidence presented can also be considered indicators of social relevance. Certainly, this is a small scale research and, from a cost-benefit perspective, this could be considered too expensive and time consuming. But which criteria must prevail in measuring the social impact of a research? Could the creation of a contextual, participatory and transformative knowledge be considered a significant indicator to measure the social relevance of research? All those issues should be discussed and problematized in conferences like this one.

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[i] Fuel poverty can be understood as the difficult situation faced by a household that can't afford to pay for their energy consumption, leading to a lack of normalized access to gas and electricity. This situation brings about a deprivation of the freedom to live a decent life (Pellicer & Lillo, 2014).