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Empowering Local Communities Through Collective Grassroots Actions: the Case of "No al Progetto Eleonora" in the Arborea District (OR, Sardinia)

Abstract

This article explores both how local social committees may contribute towards generating collective actions, leading local communities to empower their environment, and how new ICTs may alter the collective action. It focuses on a case study, represented by the "No al Progetto Eleonora" local committee which operates in the Arborea district of Oristano, in Sardinia, Italy. Here, the community has become progressively cohesive in the face of an external environmental threat represented by the proposal for a drilling project. In this context, the role played by the Internet has been marginal in promoting community cohesion, even if it has indirectly enhanced it. In other words, the Internet played a marginal role in promoting the protest and reinforcing community cohesion, but it played a primary role in attracting external solidarity and support, thus indirectly reinforcing the sense of community against an external threat.

Introduction

Social movements have been described and interpreted in many different ways. One of the most common and accepted definitions of social movement has been provided by Diani, who describes social movements as "networks of informal interaction between a plurality of

individuals, groups and/or organisations, engaged in a political or cultural conflict on the basis of a shared collective identity" (1992, p. 13).

A large part of social movement theory focuses on what makes an idea persuasive in a social movement according to the "frame theory" (see, e.g., Snow and Benford, 1998; Snow et al., 1986), which "denotes an active, processual phenomenon that implies agency and contention at the level of reality construction" (Benford and Snow, 2000). This means that those frames, within which social movements operate, both affect and are influenced by collective actions. Social movements have also been classified in relation to their scale of action (Almeida and Stearns, 1998). Here, the question is related to how social movements are able to involve and activate people's reaction and what role communication plays in both promoting and contributing towards organising them (Freeman, 1999). There are a variety of ways through which a social movement can reach potential new members: mass media, e-mail and mail, connections with diverse organisations, friendship, word of mouth, etc. More recently, the attention of many scholars has focused on the role played by information communication technologies (ICTs) and, more specifically, on the Internet. The Internet has become a cornerstone of environmental communications, due to its low cost, speed, usability and freedom of expression and information (Frantzich, 1999; Leizerov, 2000; Elin, 2003). This assumption is valid not only for the mass movement protest, but also, as in the case analysed in this paper, for small grassroots movements. In fact, even small community-based social movements express collective voices through communicating via the Internet within and outside local boundaries. The Internet gives them the possibility to network with other similar groups and bigger organisations, recruit new followers and activists, directly interact with institutions, facilitate the flow of information and overcome local boundaries (Kutner, 2008). This paper attempts to shed light on the communicative dynamics within and between a specific community-based social movement. Moreover, it aims to understand whether ICTs were relevant for organising and coordinating protests and if these contributed towards reinforcing the community internal cohesion.

In order to discuss these issues, we refer to a specific rural case study, the Arborea district (province of Oristano, central Sardinia, Italy), in which a local committee (called "No al Progetto Eleonora") has been progressively able to involve the wider local community in a collective action against a drilling project proposed by an Italian petroleum-refining corporation (Saras Corporation) for searching for hydrocarbons. The Arborea case study represents an example of a community dealing with environmental risk. In this rural context, the "No al Progetto Eleonora" (NPE) movement arose as a local grassroots movement, which

fights a specific instance represented by an environmental threat (Freudenberg and Steinspar, 1991). The questions that this paper aims to answer are the following: how have the "No al Progetto Eleonora" activists been able to mobilise and raise awareness of the local community towards the Saras project? How did they frame the event in a way that pushed people to mobilise (Merry, 2006)? What role has the Internet played in making their efforts successful within and outside the community? Overall, this paper assumes that environmental communication strategies include multimedia platforms for reaching as many people as possible, sharing information, connecting, coordinating and attracting solidarity. However, their role should not be overestimated. In fact, as we will see throughout the paper, ICTs, in our specific case study, have been useful in attracting external solidarity and informing "external" citizens, but have only been marginally useful in organising and coordinating the protest and reinforcing the internal cohesion. The paper is organised as follows: the first section refers to a brief review of the main approaches and research in the field of social activism and new media; the second introduces and describes the methodology adopted; the third analyses the NPE movement and its activities. The fourth section refers to the results obtained by interviewing a group of students (external to the Arborea context), who were asked to analyse the movements' activities by only retrieving information from the Internet. Finally, before drawing conclusions, the role played by ICTs (mainly social media) will be highlighted as marginal in "directly" promoting community cohesion, even though it has indirectly enhanced it.

Theoretical background

A large part of the literature focuses on the concept of environmental justice in approaching the "environmental question" (for a literature review of the concept see, e.g., Walker, 2012). Some authors highlight that the exposure to environmental hazards results from the interest of powerful bodies in taking advantage of vulnerable communities, which have limited resources, contacts and tools to defend both themselves and their territory in a proactive way (Foster, 1998; Pais, Crowder, and Downey, 2014). By contrast, others argue that shared discriminatory conditions may become the basis to develop collective action (Bullard, 1993; Westra and Wenz, 2001). Findings obtained by Ireland and Thomalla (2011) show the relevance of local government, interest groups and private and public actors in supporting or hampering collective action. The role played by these bodies might positively or negatively influence the effectiveness of local community action. In the same vein, Almeida and Stearns

(1998) found that external ties, together with political instability, play a very important role in influencing tactical choices and outcomes of collective actions.

More specifically, we are interested in the role played by ICTs in helping social movements to reach their goals. An increasing number of studies have been carried out on this topic. Van de Donk et al. (2004) and Bob (2005), amongst others, underline how the Mexican Zapatista movement in the 1990s represents one of the first cases in which ICTs played a key role in both attracting global solidarity and building transnational alliances. Indigenous peasants of diverse Mayan origin, based in the southern state of Chiapas (Mexico), made their appearance in the international media on 1st January 1994, progressively gaining support from countries across the globe. The dynamics of this uprising have shown how ICTs might be extremely useful in order to mobilise, coordinate and attract international solidarity. Since then, the number of cases in which social movements have been supported by ICTs has increased dramatically.

ICTs have been seen as a crucial tool in the change of political regimes, such as Ukraine (Goldstein, 2007) and the Philippines (Castells et al., 2006). In the latter case, scholars, such as Shirky (2011), analysed the central role of mobile phones in coordinating protests to oust President Estrada in 2001. In the same vein, some scholars and commentators underline the key role played by social media in the "Twitter Revolutions" in Moldova and Iran in 2009, as well as the so-called Arab Spring uprisings of 2011 (Mungiu-Pippidi and Munteanu, 2009; Stepanova, 2011). Finally, some scholars emphasise, more broadly, the crucial role played by ICTs in the anti-globalisation protests (Hardt and Negri, 2010; Castells, 1996; Rheingold, 1995). More specifically, Castells underlines how mass protest movements, such as in Tunisia and Egypt, shifted from cyberspace to urban space (2012). ICTs and, more specifically, the Internet, allowed online movements to work in a "rizhomatic way", beyond centralised and hierarchical command structures. Even leaders may operate with higher freedom within movements, asking for cooperation, participating in online discussion and adding legitimacy to their leadership. Furthermore, it might be argued that ICTs are contributing towards changing the concept of activism. Indeed, it seems that the difference between political action and political communication is blurring, since the process of communication itself becomes activism, also known as micro-contributions (Garrett, 2006), micro-activism (Marichal, 2013), or sub-activism (Bakardjieva, 2009).

However, as some authors recognise, the power of the mass media in activating people, in particular in the context of high risk/cost activism, is limited (Klandermans and Oegema, 1987; McAdam, 1986). A similar idea has been applied to the new media, which, according to

the techno-critics, play a partial and limited role both in organising and coordinating the protest and in reinforcing the internal cohesion of the group. Indeed, according to van Laer and van Aelst (2010), Gladwell (2010), Fenton and Barassi (2011) and Morozov (2011), the role played by ICTs has been overestimated by the "techno-evangelists". This technological determinist position tends, according to the techno-sceptics, to both miscalculate and overemphasise the benefits of communication technologies in terms of organising and promoting the protest. Not only have some authors underlined the limited power of ICTs in social protest, but ICTs might themselves contribute towards damaging it. In this direction, according to Withe (2010), Morozov (2011) and Gladwell (2010), the risk is that this virtual activism or micro-activism might become a simple "clickactivism", by asking participants to merely click or share information, without any grounds or physical activism. In this sense, communication cannot be seen as a form of activism (Gladwell, 2010; Morozov, 2011; Schulman, 2009), but both the information and action phases should still be considered as diverse and separate activities.

Going beyond this dispute between techno-evangelists and techno-sceptics, we will focus on the role played by ICTs in both helping and supporting an environmental protest carried out by a community-based social movement. As we have already underlined, ICTs can enable efficient communication and deliberation within social movements (Bimber, Flanagin, and Stohl, 2005), even at a small community level. In fact, ICTs facilitate the preservation of geographically disseminated face-to-face networks (Elin, 2003). According to Norris (2004), members involved in "online communities" feel that their "online experience" tends to reinforce existing social networks. However, in a community-based movement, face-to-face interaction sounds more relevant than in a larger movement. Finally, it is still unclear whether new ICTs play a key role in reinforcing the "sense of community" in a community-based movement. This topic seems to be largely absent from the literature, which is why the present article attempts to fill this gap.

Methods

The present paper results from a study of the three and a half years of activities of the NPE local committee, which operates in the Arborea district against the "Eleonora Project", a drilling proposal delivered by an Italian petroleum corporation for the search for hydrocarbons in the Arborea district. This study involved members of the movement (formally and informally interviewed) and participation in both local public meetings and in Arborea's local life. It is based on an innovative approach, which considers on the one hand

the effects produced by the NPE at the local level, by considering the point of view of both activists and the local community, and, on the other, the effects produced outside the local boundaries by considering the objective point of view of people who, for the first time, have approached the movement through Internet technologies. In order to better understand the role played by ICTs both in informing on the nature of the problems in the Arborea context and in generating opinions outside the local ambit, a group of 11 students (from the Department of Natural Sciences – specialisation in Territory and Environment management, University of Sassari) was asked to analyse the movement's activities by only retrieving information from the Internet. This group was selected for their specialised competences in territory and environment management. For this reason, they were considered both sensitive to the environment management theme (as students) and "ICT users" (as digital natives). They were asked to collect information on the social movement from the Internet and to express their opinion on its work. From November 2014 to January 2015, six meetings were organised in order to discuss the information retrieved from the Internet and what they felt was missing in the NPE strategy of communication. This process aimed to investigate how the NPE used ICTs to influence the public opinion. In particular, the involvement of natural science students aimed to capture the influence of the NPE strategy of communication on people who are particularly sensitive to environment-related issues. It is important to underline that, before starting this experience, only a few students had any awareness of what was happening in the Arborea district. In order to capture how students interpreted the context as presented by the Internet platforms, they were divided into four groups and asked to draw rich pictures (Avison, Golder and Shah, 1992). This activity aimed to identify how much their opinion was influenced by the communication strategy of the NPE committee in interpreting the sequence of events.

The "No al Progetto Eleonora" Local Commitment in the Arborea district
The NPE committee arose in 2011 against the "Eleonora Project", delivered by the Saras SPA to the regional government for the search for hydrocarbons in the Arborea district. The committee consists of local people who are opposed to the project for three reasons: i) defence of environment, ii) health and iii) economic reasons. First, they claim that the main risk related to drilling projects is the contamination of groundwater and soil, since the drilling project is supposed to be located in a "natural protected area" (S'Ena Arrubia pond). Second, they identify the main health risk as a possible hydrogen sulphide leak and the emission of other dangerous substances. Moreover, some houses are located close to the potential drilling

project. Third, the environmental degradation might damage the local economy, which is mainly based on agriculture and farming (Comitato Civico "No Al Progetto Eleonora", 2011). In fact, Arborea is an area of intensive dairy cattle farming and the per capita milk productivity is one of the highest in Europe. Furthermore, various other activities take place in the area, such as tourism, agriculture, fishing, etc. However, dairy farming represents the predominant economic activity. The relevance of dairy production is also highlighted by the adoption of a milk brand, "Arborea", named after the community. The local economy is mainly based on a cooperative system, which consists of four organisations: the 3A and the Produttori Cooperatives (livestock farm and farm activities); the Fishermen Cooperative (fishing activities); and the Bank Cooperative.

In 2005 the Arborea district was also identified as a unique Nitrate Vulnerable Zone in Sardinia, in relation to the water nitrate pollution of groundwater, derived mainly from agricultural and livestock activities. This environmental "instability" has contributed towards increasing the environmental awareness of the local community.

The Saras proposal was rejected in September 2014 by the Regional Agency for Environmental Sustainability, Impact Assessment and Environmental Information System (SAVI), because it was considered out of line with the local planning strategy. However, the controversy may not be completely resolved, because the Saras Corporation filed new objections to this decision, invoking national government intervention.

The NPE is a group of volunteers who are not formalised as an association. By contrast, this is spontaneous civil committee without any specific legal form. It involves various actors who have competencies in a variety of disciplines, such as environmental engineering, geology, medicine, biology, communication, etc. They have been progressively able to involve the Arborea local community, which in turn supported the mission of the movement by both becoming an integral part of the movement and sometimes financing activities. In fact, the local committee decided to communicate and finance activities by selling gadgets (such as a T-shirt with the slogan "No al Progetto Eleonora") and self-financing all the actions. The increasingly positive response of both local people and cooperatives has been unexpected by the original NPE group. The whole community and the cooperatives turned out to be very active in promoting collective approaches for managing natural resources. Their engagement is mostly related to the potential economic damages to the image of the "Arborea brand". In fact, as underlined above, the main economic activities in the area are represented by dairy cattle farming and other farming activities.

It is possible to identify at least seven phases along the process of involvement of both the wider community and the local/regional institutions participating in the movement (see Table 1). Each phase refers to the involvement of a specific entity: i) local community, ii) local municipality, iii) regional government, iv) local economic bodies (local cooperatives of fishermen, farmers and dairy cattle farmers), v) University, vi) other social movements and vii) external audience. A founder member (who has been both the facilitator of the dialogue between the committee and the local authority and the coordinator of communication and dissemination activities aimed at engaging local community and economic bodies, other associations and movements) stated that the Internet and social media (such as Facebook, Twitter and YouTube) were used to reach the local, regional and national public. At the same time, they were not employed for dialogue with local and regional authorities and other institutions such as economic bodies and the university. The original group believes that the integration of face-to-face (mainly public meetings and demonstrations) with online interaction produced important effects in terms of both informing and recruiting people in the short run at the local, regional and national scale. The Internet was also a very useful tool for both identifying other similar cases and contacting their coordinators. The online interaction was combined with face-to-face meetings (in particular with other movements from Emilia Romagna and Basilicata). This activity was relevant to understand how other groups operate in the face of drilling threats.

Actor	Engagement tools	Phase	Role of new media
Local community	Public meetings, Facebook, Twitter and blog	Screening (October 2011 – 18th April 2012) and performing (15th March 2013 – present)	Effective for disseminating information about the goals of the movement, reporting the discussions carried out at political level and organising in loco activities
Municipality	Public and private meetings with major, civil servants	Screening (October 2011 – 18th April 2012) and	Not measurable

		performing (15th March 2013 – present)	
Regional government	Private meetings with regional ministers	Screening (October 2011 – 18th April 2012) and performing (15th March 2013 – present)	Not measurable
Cooperatives	Public and private meetings with members and managers	Screening (October 2011 – 18th April 2012) and performing (15th March 2013 – present)	Effective for both disseminating information about the goals of the movement and reporting the discussions carried out at political level
University	Public and private meetings aimed at other purposes	Dissemination	Not measurable, but useful as a platform for sharing knowledge and giving more scientific support to the project
Other social movements	Meetings and demonstrations	Screening (October 2011 – 18th April 2012) and performing (15th March 2013 – present)	Useful to create a "network of networks"
Regional and national community	Regional and national demonstrations, Facebook, Twitter, blog, newspapers	Screening (October 2011 – 18th April 2012) and performing (15th March 2013 – present)	Effective for disseminating information about the goals of the movement, reporting the discussions carried out at political

			level and giving visibility to the movement

Table 1. Actors and role players in the process

Furthermore, the group was able to create new spaces for dialogue within the local community. In fact, a member of the original group highlighted that public meetings were also useful to discuss problems of a different nature (local needs, requirements by population and workers, etc.). Thanks to the connections also created outside, the movement organised a number of cultural events and activities (photography exhibitions, conferences on the history of Arborea, census of the bird species that live around the local ponds). The increasing resonance of the movement also brought support from artists and local prominent personalities, who actively participated in some activities.

Watching the "No al Progetto Eleonora" local commitment from the "outside"

The natural science students who were interviewed agreed on the potential of the use of the Internet and social media by the movement, such as the wider and quicker broadcast of information, in particular addressed to young people. This interpretation is also confirmed by Facebook statistics, which show that the majority of followers (66%) belong to the 18-44 age group.

Some elements were identified by students as successful in clarifying and persuading people on the main points claimed by the movement, such as the use of a simple and understandable language, the use of images, videos and examples concerning daily life, the usability of the website (blog), the quick update of information on the blog, the discussion of clichés about drilling projects, the presence of useful digital informative documents and a list of the potential disadvantages of the drilling project. The protest reasons were recognised as clear, referring in particular to the uncertainty as to the real presence of underground gas; the availability of gas (limited to a short period); the contamination of the environment and the need to protect local environmental heritage; and the threat to local economic activities. At the same time, the students perceived that the communication strategy was mainly oriented towards the local community, which, however, was also effective, thanks to the activities organised in loco. In fact, they stated that some limits might be identified in the capacity to reach the external public (at regional and national level). In this vein, a student highlighted the

risk that the movement might appear to be only focused on a specific problem in relation to a limited geographical context. By contrast, the same student underlined the need to reach a wider public due to the importance of the issue, which also concerns external contexts and communities.

The Facebook page registered around 5,700 "likes", the Twitter profile 563 followers and the YouTube channel 85 subscriptions (with around 14,600 views of 30 videos published) (March, 2015). Considering that the Arborea community has around 4,000 inhabitants and the wider Oristanese district has around 166,000 inhabitants, an external observer is inclined to believe that the majority of followers are from the area. However, 96% of the Facebook followers are from Italy, but there is a small percentage of people who follow the page from the UK (1.6%), Spain (0.6%), Germany (0.6%), the USA (0.3%), France (0.3%), Australia (0.2%) and Switzerland (0.2%). Among the followers in Italy, only 18% of followers are from Arborea and 41% of "likes" are from the Oristanese province. Although the majority of followers (out of the Oristanese area) are from Sardinia (mainly from Cagliari), 12% of people are from other Italian regions (Milan and Rome).

Finally, the students interviewed believe that concrete local actions, such as dissemination in schools, demonstrations, dissemination through informative materials and cultural events, are much more effective than the Internet. They assume that the Internet started to be used as a tool for facilitating the organisation of events and demonstrations and exchanging information after the local committee had already created a local network. At the same time, the Internet is used to show outsiders the activities taking place and the reasons why the Arborea community rejects the project. Three students stated that the potential positive effects of online communication are undermined by the lack of an integrated multimedia communication, in particular through the national TV channels and newspapers.

In order to capture how students interpreted the context as presented by the Internet platforms, they were divided into four groups and asked to draw rich pictures (Avison, Golder and Shah, 1992). This activity aimed to identify how much their opinion was influenced by the communication strategy of the NPE committee (see Fig. 1). They stated that they only perceived negative impacts caused by the drilling project. The main local concerns are related to the potential damage to the ecosystem, the environmental pollution and the human health consequences. These are, in turn, strongly connected to potential damage to the Arborea's production activities, which are mainly based on agriculture, dairy cattle farming and fishing activities. One group identified windmills as an alternative energy production system, although the group also underlined negative aspects in relation to this system (in particular

related to land degradation). Another group created two kinds of pictures: one related to the current situation, the other to a future scenario in which the drilling project is approved. They stated that, even if the current situation does not change, Arborea's social-economic and environmental status might nevertheless be negatively affected by the intensive dairy cattle production. Hence, even though it is quite difficult to estimate the "environmental impacts" of the current activities (related to the intensive dairy production) in addition to the use of fertilisers in agriculture activities, these practices might in the same way influence the sustainability of the system. The group identified two main consequences related to the two possible future scenarios: in the case of the realisation of a drilling project, this might drastically modify the local social economic framework (in positive, but especially in negative terms), causing a possible loss of traditional habits; in the case of maintaining the current situation, this might cause a "paralysis" of the social-cultural-economic system (with negative consequences as well), because of the limited introduction of innovation.

Figure 1. Rich pictures drawn by students on the possible impacts of a drilling project in the Arborea context

Discussion

Referring to those features identified by Benford and Snow (2000) as constant variable components of collective action frames, it is possible to describe the NPE committee in relation to the following issues: problem identification and direction/locus of attribution; flexibility and rigidity, inclusivity and exclusivity; interpretive scope and influence; and degree of resonance. The NPE social committee identified a very specific issue that is related to the drilling threat in the Arborea district. This problem also enhanced the development of a larger network thanks to the connections with other local social movements, which operate in Sardinia and in Italy against a variety of threats (such as militarisation of some areas, land consumption, health threats, etc.). However, defining the Arborea movement as an example of "decentralised communitarianism" (Harvey, 1999) might be misleading. In fact, the "decentralised communitarianism" refers to a self-sufficient community based on egalitarianism, participation of all members and non-hierarchical decision-making. This only partially happens in the Arborea district: even though the community is entirely involved in defending the local environment against the "drilling threat", this does not necessarily mean that the local intensive dairy cattle production is free of long-term environmental and

economic impacts. In fact, there are a number of drawbacks that might threaten the sustainability of the system, such as, for example, the excessive production of nitrate and phosphorus deriving from the input of organic matter into the fields, GHG emissions, livestock-water interaction, hyper-specialisation of the economic system and European Directives (e.g., European Nitrate Directive, 1991). By contrast, the work of the NPE committee might be described as goal-oriented "action" aimed at fighting a specific threat to the local economy. In fact, the movement focused on a specific issue that might represent a common threat to the equilibrium of the system. At the same time, they have only partially considered other possible drawbacks deriving from the current situation, which might cause a "paralysis" of the social-economic system.

Some of the most important features to be considered here concern the degree of resonance and the capacity of the movement to be inclusive. The NPE may be described as a flexible and inclusive group. This is because it aimed to create the largest group possible by involving local people while trying to attract external attention at regional and national levels. Even though the NPE movement has been able to create a large network of relationships, the scope of its collective action frame is limited to the interests of the Arborea community and against a very specific threat. In this sense, some limits of the Internet communication strategy can be highlighted, such as the limited resonance given to possible advantages produced by a potential drilling project in the area, the limited communication with the counterpart (Saras) and the scarce visibility given to the connections (which they created) with other similar contexts, movements and environmental issues relating to the problem faced. To put it another way, thanks to ICTs they attracted the solidarity of other social movements, but they did not use all the potentialities of the ICTs to communicate this solidarity outside the movement network. In so doing, while having a strong support from other movements, they appear a little isolated. Both the original members of the movement and the students agree on these limits in the communication and information strategy of the local Committee, in particular related to the limited attention given to the counterpart (Saras). In fact, the communication focused on the cons of the project, while often ignoring potential pros. Even when the Saras corporation was invited to meet the local population and discuss with the local committee (30 May 2013), a very hostile attitude was recorded and the Saras representatives found it very difficult to describe and explain the project and the reasons upon which it was based (https://www.youtube.com/watch?v=QCncwPtCynE).

These "limits" might be seen by an external observer as elements of "closure". In fact, contrary to what really happened, the Internet-based communication might show that the

Arborea community worked alone by only referring to internal specific forces, without collaborating with external actors and entities. By contrast, the big resonance obtained by the movement, at least at the local and regional scale, might be explained in relation to a number of reasons: they operated in a very cohesive community, which is the only one in Sardinia characterised by an efficient cooperative system. The majority of the population depends on agricultural and livestock activities and belongs to at least one of the cooperatives that operate in the area. The NPE members stated that, at the beginning of their work, the greatest difficulties were represented by the scarce information about drilling projects among local people. They have been able to inform and "persuade" the local community about potential damages to the local economy, environment and health. The local community support has been reached through a very long process, during which the activists visited their neighbours home by home in order to illustrate the possible negative impacts of the "Eleonora Project". This has been a successful formula, which led the population to become cohesive against a common threat. The local community support has also been incisive in persuading the local municipality (initially in favour of the project) to change its position on the project. However, one of the most important examples of support might be identified in the local cooperatives' participation in the movement's initiatives. Their intervention is connected to the potential consequences of the drilling project on both their economic activities and brands (in particular the "Arborea" milk brand). For this reason especially, they actively supported the NPE.

The ability of the local committee to persuade local people and cooperatives brought it increased attention, not only at the local level (by influencing the local municipality position on the project), but also at the regional level. In this vein, it is possible to state that the work of the movement in loco (through word of mouth, home by home visits, demonstrations, local public events and activities) has contributed towards reinforcing the bonding social capital of the Arborea community, by increasing the community cohesiveness against a common threat. Moreover, the increasing number of people who became part of the protest has produced a higher resonance, at least at the regional level. In other words, the NPE work created favourable conditions for reinforcing those internal ties already existing within the community. In fact, the NPE members are strongly persuaded that, even though they were not able to influence the final decision of the SAVI, they showed the regional governors the cohesiveness of the community in rejecting any kind of extractive activities in their territory.

While the activities organised in loco contribute towards reinforcing the internal ties of the Arborea community, the Internet has played a significant role in enlarging the resonance of the protest and consequently increasing the number of external ties. The Internet is considered

by activists as a useful additional communication medium. In fact, even though the local community was mainly involved in face-to-face meetings and activities, the Internet was used to organise activities, giving them visibility outside. Moreover, the Internet did not play a crucial role in interacting with regional institutions: the dialogue between the movement and the regional government took place in private/public meetings. However, the Internet was used as a platform for dialogue with the outside, which contributed towards creating relationships with other movements and the wider public (at national, but in particular regional level).

Finally, while the role played by the Internet was marginal in reinforcing the local "sense of community", it indirectly enhanced cohesion. In other words, the Internet played a marginal role in promoting the protest and reinforcing the community cohesion, but was useful in attracting external solidarity and support, thus indirectly reinforcing the sense of community against an external threat. At the same time, the scarce communication through traditional media, such as national TV and newspapers, limited the local committee resonance by contributing towards restricting its space of action at the local scale.

Conclusions

The case study illustrates at least four contributions for enhancing local community empowerment.

First, even though the use of ICTs may facilitate the communication strategies of environmental grassroots movements, these represent only an element of a more articulated strategy of dissemination and recruitment. In this, the Internet and new social media, in addition to traditional media, might help to reach a larger number of people. The case study shows how the lack of use of traditional media (in particular, national TV and newspapers) limits the resonance of the protest. Hence, one the one hand it is clear that ICTs have limited the influence of traditional media over the formation of the public agenda (Brosius, & Weimann 1996); on the other hand, ICTs might help, but cannot substitute traditional media.

Second, when a problem is geographically restricted (as, for example, happened in Sardinia), local grassroots movements need to be supported by a collective voice at a wider scale (at least national). This may enhance the possibility to be received and heard by political representatives. By contrast, dialogue with political governments is not always easy to be achieved through the Internet. In this sense, an on-site protest and consequently a direct dialogue with governors and powerful stakeholders increases the probability of success.

Third, in small local communities in which the social cohesion is already high, people primarily communicate face-to-face. In fact, the Internet represents a very useful tool, in particular to engage new followers from the outside, but concrete local action seems to produce outcomes that are more effective and successful. At the same time, ICTs represent useful tools, in particular in organisational terms, for organising internal strategies and networking with groups that work on the same issues. Furthermore, several researches have outlined how the role of opinion leader, first analysed by Katz (Katz 1957; Katz, 1994, Katz, & Lazarsfeld, 1955), is changed with the advent of ICTs (Nisbet, 2005; Nisbet, & Myers, 2007). It has been rightly underlined (Stromer-Galley, 2014: 15) how "the principle of two-step flow was mostly lost to campaigns in the mass media era but has returned in the age of the Internet". This is particularly intriguing and opens up a fruitful discussion over the re-birth of a "classic" fluctuation in media theories. However, what we have noticed is that in small local communities, the role of opinion leaders is mainly related to interpersonal communication skills and social status, rather than to social media skills.

Fourth, the case study shows the importance of local economic bodies (such as cooperatives) in supporting collective action. When communities are characterised by solid and integrated economic systems, thanks to the presence of powerful organisations (such as, for example, cooperatives), which collaborate each other and support a common instance, the resonance of the protest increases.

Finally, it is difficult to measure how much the intervention of the local committee through local actions and Internet-based communication influenced the final decision of the SAVI in rejecting the Saras proposal. In fact, the Saras proposal was rejected for "technical reasons". At the same time, the local community, thanks to the internal cohesion and a collaborative system, was able to reach the regional government in order to explain its reasons for rejecting the project. This might become significant in relation to the objections filed by Saras to both the regional and national governments.

Thus, the Internet and social media may be defined as very important supportive tools for implementing effective grassroots interventions, but local actions, face-to-face communication and social cohesion appear to be the stars around which small grassroots movements revolve.

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