

SOCIOLOGIA URBANA E RURALE

Socio-natural disaster, resilience and vulnerability: The territorial perspective in italian current debate

Disastri socio-naturali, resilienza e vulnerabilità: La prospettiva territorialista nel dibattito italiano attuale

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SOCIO-NATURAL DISASTER, RESILIENCE AND VULNERABILITY

"VULNERABLE ITALY": BETWEEN ACADEMIC DEBATE AND A MOLTITUDE OF SOCIAL AND POLITICAL ACTORS

by Alfredo Mela, Silvia Mugnano, Davide Olori*

The purpose of this special of *Sociologia Urbana e Rurale* (Urban and Rural Sociology) is to introduce a significant overview of Italian sociologists' reflections on the topic of disasters. The use of English language aims at facilitating the circulation of such articles within today's multidisciplinary, international scientific community. In fact, although Italian sociological literature on the topics of risk, emergencies and short- and long-term consequences of disasters has remarkably grown over the last four decades, most of the texts are in Italian language, which undoubtedly limits their impact on a worldwide scale.

Though Italian sociologists do not exclusively deal with calamities affecting their own country, the latter has been the main focus of their studies. On the other hand, as is known, Italy is -at least in Europe- one of the most risk-exposed countries in terms both of natural disasters (the peninsula is largely seismic) and in terms of its particular building heritage and weak prevention policies. The articles included in this issue focus on the catastrophes affecting the country from the '60s to date - from the Vajont disaster (1963), to the earthquakes in Belice (1968), Friuli (1976), Irpinia (1980), Abruzzo (2009) and Emilia (2012) - decades in which sociological disciplines have progressively grown hand in hand with the attention to social, economic, political and cultural implications of environmental problems.

In order to better frame the contents of this issue within the wider debate on the subject of disasters, we deemed appropriate to start this introduction article with a brief reconstruction of the sociological reflection on the topic, putting it in relation to the changes that took place in intervention strategies

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in the event of a calamity. Later in this article, it will be stressed how a territory-oriented approach, whose importance and actuality are undeniable, could highlight both the specific character of each context affected by catastrophes and the peculiar composition of the different forms of capital on it. In doing so, the latest seismic events that hit Italy will be included in the analysis.

1. A short overview on Italian literature on sociology of disaster

The earliest literature on disasters in Italy appeared in the same period when the public debate on the topic arose in the country. Contrary to what happened in the United States, where the momentum came from the requests and the money of the military environment, in Italy the strong political, social and institutional debate was the driving factor for such a change.

In 1966, volunteer groups freed Florence from mud after the Arno river flood and stood out as one of the first examples of spontaneous youth mobilization in Italy; in 1968, a strong earthquake hit the Belice Valley, in Sicily, causing 370 casualties and over 70,000 displaced persons, and highlighting the deep gap between Southern Italy and the rest of the country. The massive volunteer mobilizations, the disaster scenes, the lack of humanitarian aids and the reconstruction scandals were broadcasted countrywide on TV for the first time¹. As a result, the disaster started taking the shape of a *social problem* (Stalling, 1991). At the dawn of mass communication era, factors such as the deep emotion of the event and the pressure from the public opinion as well as from certain political sectors contributed to set the "post-emergency" phase as a priority and to overcome the fatalistic approach towards the interpretation of disasters.

In addition, it has to be underlined the concern of the military and institutional Establishment with regards to social movements, whose initiative and potential in terms of mobilization and organization were making them ever more influential, also² in emergencies. The flow of volunteers, often

¹ Not less important were the disastrous events occurred during the Italian postwar period: the flood of Salerno in 1954 (318 casualties and 250 injured, 5.500 homeless), the landslides and floods in autumn 1951 (70 deaths in Southern Italy, 100 deaths in the Po river area), the Valanidi flood in Reggio Calabria (51 casualties, 100 missing), the Ariano Irpino earthquake in 1962 (6500 displaced persons, 80% of the heritage damaged) etc. are less renowned but not less remarkable.

² At that time, Italy was going through a particular political situation: following the Yalta Treaty (1945), which divided Europe along the Iron Curtain, Italy was swallowed up by

organized in basic political units, was seen as a risk in the delicate postdisaster period; the clashes between the population and/or the volunteers and the police were quite relevant (Londero, 2008). It was within this scenario, that the legislative proposal on the creation of the National Civil Protection was put forward. Although such proposal had repeatedly failed to pass in the past³, it represented a new development in the Italian public debate. The last legislative proposal on the subject of disasters and humanitarian aids to population had been submitted in 1950: the bill, whose first signatory was the Minister of Interiors Mario Scelba⁴, was anyway part of an emergency body of law. That was a time of political instability therefore an instrument like the "Civil Defense" -an operating machine centralized in the hands of the Government whose main task is to play the role of the "inner front" in the event of a war- was the sparkle for a harsh debate between majority and opposition parties. Although the bill was not finally passed, there were no real consequences as the Department of Civil Defense was de facto already operating after it was founded in 1951 through a discretionary decision; according to historian Nicola Tranfaglia, Scelba «employed officials who, in the Fascist era, had already gained experience with the Secret Service and with a political police absolutely unknown -at least officiallyto the people».

As already mentioned, the legislative push towards the creation of a civil protection body resumed only at the end of the 1960s, though the bill remained stuck in Parliament due to a decision impasse. As Ada Cavazzani writes: «After the last major earthquake in 1980, it became clear that Italy did not have a Civil Protection system and that the only law approved for

the NATO Bloc, while the Italian Communist Party became the largest Communist party in the Western Bloc. The tense post-war climate (the debate over "protected democracy", the ferment among European extra-parliamentary sectors, etc.) raised concerns among military top brass, who feared emergencies could be a trigger to uprisings.

³ The embryonic idea of civil protection appeared in law No. 2248/1865, which included a description of the relevant administrative procedures and the definition of the *extra ordinem* powers bestowed on prefects and mayors. Only in 1908 (in the aftermath of the Messina earthquake), a turning point took place when law No. 208 of 8th April 1909 provided for the introduction of the State of Siege and the appointment of a Special Commissioner. The debate over the creation of a Force able to take action in the event of a natural disaster was spurred by the discussions which followed the 1920 earthquake in Garfagnana. In 1928, prefects were empowered to take action, though the matter was officially regulated in 1931 when emergency aids were included in the public safety laws; Civil Protection became part of the so-called Public Order, thus stemming the confusion of roles between prefects and other bodies and asserting the inherently political nature of disasters in a dictatorial regime.

⁴ Leading figure of the Christian Democratic right party. On the strategic political use of the Ministry of the Interior in the Scelba era, see G.C. Marino, 1995; R. Canosa, 1976.

this purpose in 1970, after the Belice earthquake, was still inoperative due to the non-approval of the regulation by the Parliament» (Cavazzani, 1981).

In those years the political, theoretical and scientific debate on the emergency was becoming stronger in the country. On the one hand, critical interpretations of society were strengthened and their field of analysis was widened in order to include also disasters. On the other hand, a double dynamics was going on in the academic field: the autonomous role of the Disaster Research was arising in international academic circles, and social sciences were establishing themselves on the Italian scientific scene. All these factors contributed in different ways to the occasional appearance of the first studies on disasters in Italy.

In the early '70s, the first critical articles by G. Mottura, "Terremoto capitalistico e pratica sociale" (1971) and by A. Cavazzani, "Potere e Calamità Naturali: il terremoto di Ancona" (1972) are published in the newspaper L'Inchiesta; the long research called "Longarone 1963-1973, Sociologia del disastro e della ricostruzione", edited by Capraro and published in 1975, is more extensive.

Only after the tragedy of Vajont (1963) and the earthquakes that devastated Friuli Region in 1976 and extensive areas of the Regions Campania and Basilicata in 1980, the government implemented the law on Civil Protection. Despite being far from the concept of "Civil Defense" that was more connected to an authoritarian idea of the emergency management, this law was strongly influenced by the political situation of the time.

«The description of the planned operations does not seem to refer to a programming control, but rather to a principle of preventive control to be put into effects in order to ensure especially the maintenance of public order. [...]». As the sociologist A. Cavazzani goes on to say, «To confirm this orientation, also the volunteer participation in the operations of rescue and assistance to affected populations is planned to be regulated in a bureaucratic and inflexible manner, according to a logic of 'militarization' and control of 'specialized corps', which directly report to the Ministry of Interior and the prefectures».

The Civil Protection model that is explicitly taken as a reference is the Command and Control, typical of advanced Western countries such as the US and Japan, based on the principle of *violent break* and on the decrease of populations' response capacity (still today the operations center in emergency situations is called Di.Coma.C. - Department of Command and Control).

Despite the above mentioned examples of scientific production developed in the '70s, social sciences' work on the Italian disasters remains oc-

casional and random. In the presentation of the first volume in Italian on the topic of disasters, Emilio Quarantelli states that when American researchers came to Italy to study the 1963 Vajont disaster, the 1966 flood in Florence, the 1968 earthquake of Belice, they found no Italian counterpart. It would be superficial to underestimate many Italian works, such as F. Cagnoni's work on Belice "Valle del Belice: terremoto di Stato" (1976), A. Musacchio's "Stato e Società nel Belice" (1981), G. Cerruti's works on the case ICMESA (1976), M. Conti's work about Seveso (1977) or M. Conti's and D. Serrani's works on the earthquake in the Marche Region (1977), as well as the aforementioned Cavazzani A. and G. Mottura's works. Nevertheless, what the Dean of the Delaware University meant is that a structured and coordinated research, which the international centers could be related to, was missing.

In the same years, the most important research center on disasters based at the Delaware University, the Disaster Research Center (DRC), was implementing a strategy of internationalization aimed at broadening the disaster analytical field. It began to encourage comparative research (over 650 fieldworks just for the DRC) and established a network of contacts with European researchers from France, Germany, England and Italy, through workshops and academic networks. Also thanks to this incentive, the number of studies on disasters and of centers that identify them as a priority multiplied in Europe: in West Germany, for example, where SIFKU (The Institute of Social Sciences for Research on Catastrophes and Accidents) was already working; in France, where CEPSP (Centre of Psychological Studies of Disasters and their Prevention) was active especially on the subject of psycho-sociology; in Sweden, but also in Italy, where two centers were increasingly growing: CESCAN (Centre for the Study of Natural Disasters) of the University of Calabria and the Department of Sociology of Disasters of ISIG (Institute of International Sociology of Gorizia). Although it is possible to date the first research in the field of environmental sociology in the early Seventies, we have to wait till the 1976 earthquake in Friuli to find more structured studies (De Marchi, Pellizzoni, Ungaro 2001). As Cattarinussi writes, «The greatest number of studies and researches were done by social researchers, both Italian and foreign, about the consequences of the earthquake in Friuli [...] ». It is important to mention, among them, the hard work done by the Department of Geography of the University of Edinburgh (SJ Hogg, 1980) and especially of the Institute of Geography of the "Technical University of Munich". Also Confindustria (the General Confederation of Italian Industry) and the Institute of Geography of the University of Udine cooperated with ISIG, whose work is collected in three

volumes (A. Strassoldo, B. Cattarinussi, 1978; B. Cattarinussi, C. Pelanda, 1981; C. Pelanda, A. Moretti, 1981) and which collaborated closely with the DRC led by Quarantelli. The research used qualitative and quantitative techniques, examined the themes of displacement, labor, migration, reconstruction, organization and emergency and focused both on short-term and on the medium-long term post-event period. The research center of the University of Calabria funded by CNR, instead, dealt with the Irpinia earthquake that hit also Naples (1980). Nevertheless, it was more focused on urban issues and social control; these topics will also be the subjects of non-academic theoretical and political production (C.N.R., 1981). In this context, it is important to highlight the influence of the territorialist perspective shown both by the presence of geographers and city planners investigating the post-disaster phase and by the issues related to the reconstruction, the displacement etc. This trend emerged in the 1st Italian Congress of Sociology, "Consent and conflict in contemporary society", held in Rome in 1981. Here, in the section "Urban and Rural Society in Italy" we can find B. Cattarinussi's (ISIG) and A. Cavazzani's (CESCAN) articles. As Avallone writes, studies promoted in the field of the sociology of disasters can be seen as an "important opening to environmental issues" (Avallone, 2010: 225). With a dynamics similar to that of the US, where the two close disciplines of mass emergency and ecology had established an osmotic relationship that made the Disaster Research go beyond the emergency phase, also in Italy the sociology of environment and territory made a major contribution to the increase of the studies on disasters. While the work at CESCAN ended after the CNR funding program, the ISIG "Mass Emergencies" program continued its research thanks to the work done, among others, by De Marchi and Pellizzoni during the '90s, which broadened the research in the issues of risk and emergencies. Meanwhile, especially after the disaster in Seveso, the focus gradually shifted on the environmental disasters and on issues related to the risk, which then merged with social science debates about climate change. The experience in Friuli will always be a symbolic moment when the social sciences were involved in a social process triggered by a disaster, from supervision to participation, in a relational dynamics with the stakeholders and with unprecedented effective outcomes in the Italian scenario, which would not find the same success in the future. At the same time, also the debate on the institutional architecture of the civil protection developed, until, in 1992, the National Service of Civil Protection was created. In 1999, there will be an attempt to reform it, in order to transform it into an autonomous and independent agency, only "monitored by the Interior Ministry". This attempt of empow-

erment was stopped when G. Bertolaso took office in 2001, "reaffirming the Department's full powers", through a constitutional law (3/2001) that transformed the "Directorate General of Fire Services and Civil Protection" into Department of Fire brigade, of public rescue and civil defense. Once more, also through the symbolic return to Civil "defense", the idea of a centralized "military" Civil Protection emerged. This became a direct function and application of the Executive power⁵, not only in relation to emergency situations.

This is how the Civil Protection led by Bertolaso faced the earthquake in L'Aquila (2009), showing critical issues in all post-event phases: during the emergency (A. Ciccozzi, 2010), in camps and aids management (Bonaccorsi, 2009), in urban planning (Frisch, 2009), in the reconstruction (Bazzucchi, 2010), in the post-disaster recovery (Alexander, 2013) etc.

Again, while a lively public debate was going on, the production of social sciences related to the analysis of the disaster resumed strongly (Carnelli *et al.* infra). This production is often random and carried out by young researchers or small academic groups who struggled to consolidate a systematic work, but whose productions will echo in national conferences, publications, Summer Schools etc. The only structured reality will be partly represented by the Department of Urban and Regional Studies of the Gran Sasso Science Institute, which started right after the earthquake in Aquila thanks to the Ministry of Economy and Finance and the Organization for Economic Cooperation and Development (OECD). These institutions, having recognized the exceptional moment for the Apennine town, fostered the creation of a university center for teaching and research in the capital of the Abruzzo Region, which would include a department focused on the socioterritorial issue of the post-earthquake phase.

2. The actuality of the issue: the Central Italy earthquake (2016)

At the time this special issue was being set up, in 2015, much attention was still drawn - both in the scientific debate as well as in the political and media one - to the last decades' two serious seismic events (Abruzzo and Emilia) and to the respective reconstruction programs, whose trajectories, after all, proved to be very different. Unfortunately, during the drawing up

⁵ «It is necessary to eliminate any dangerous power and institution fragmentation, giving back a central role to the Prime Minister, in order to recreate a unitary body including all the interests of the sector». Report accompanying the decree on the Department of Civil Protection in 2001.

of this issue another earthquake -similar in magnitude to L'Aquila's- occurred in Central Italy within an area comprising Marche, Umbria, Abruzzo and Lazio. This new seismic event, started on 24th August 2016 with a 6.0 magnitude shock and which caused 299 casualties, was followed by several other events, the most remarkable ones being those of 26th October and above all of 30th October (6.5 magnitude). After August's quake, the most damaged towns were Amatrice, Accumoli and the villages within the upper valley of the Tronto river; the shock of 30th October, instead, strongly hit the town of Norcia. As we write, the emergency phase is still ongoing and it is impossible to predict when the earthquake swarm will come to an end.

This new disaster proves once again the importance of the mobilization of scientific knowledge, whatever its form, to face the complex situations arising from a catastrophe and to contribute to prevention and risk mitigation. In this sense, sociological reflection over more or less recent calamities, like the ones proposed in this article, is part of this knowledge. They highlight, indeed, two aspects of post-disaster dynamics which are only apparently contrasting. On the one hand, in fact, thanks to an accurate study of the short- and long-term consequences on the territories affected by a natural disaster, it is possible to learn important lessons on the role played by different factors in strengthening or weakening the community's resilience as well as on the strong and weak points of the relationship between local people and administration bodies and between local and external actors. Therefore, it is possible to collect knowledge also in the sociological field - just like it happens in many other sectors - and obtain useful information for the future.

On the other hand, however, from this analysis on the current or past processes it is possible to learn another important lesson: each event has its own peculiarity, which is not only connected to the nature of the phenomenon that triggers the disaster, but also (at least as far as sociology is concerned) to the special features of each area as well as to the peculiar interaction between social systems and both natural and built environment. Interpreting such particular local interactions represents a specific contribution offered by environmental and territory sociology, which is different from what any other sociological discipline may offer. It would be, however, a mistake to think the collection of knowledge from past events would end up devalued; if anything, it stresses the need to look at knowledge consolidation as an open path and the need to not learn from strict action outlines (in emergency or reconstruction stages). One should rather constantly adapt these outlines to various contexts and social dynamics originating from each situation. However difficult it is to provide reliable assessment

on an ongoing event, as is the seismic swarm in Central Italy, the above proposed considerations seem applicable to this case too. In fact, despite the spatial proximity of the currently affected area to the one hit by the Abruzzo earthquake and the temporal proximity to the Emilia earthquake, the new event appears different from both of them. It initially affected a limited area, mostly mountain areas, and a population scattered among small, hardly accessible villages. Part of the building heritage consisted of second houses and the high number of casualties was also due to the fact house owners and tourists were crowding the area in August. The following shocks, most probably connected to the activation of new fault segments further north, across the border between Umbria and Marche, hit historically and artistically - yet not strongly urbanized- valuable areas (see the town center of Norcia). Some villages were completely destroyed and providing aid has become more and more difficult; nevertheless, a significant part of the residents opposed the proposal of evacuating the area and moving to the coastal area. In this sense, an essential character of the local community's resilience is emerging: the strong bond to the homeland as well as the sense of identity, which originates from the relationship with the landscape and the cultural heritage. This character increases the fear that moving away from the area -albeit temporarily- may not only produce an uprooting effect and serious problems in the reconstruction of social bonds; it may also lead to the irreversible decay of the affected areas or to their radical transformation, which could threaten the continuity of local identity.

3. The territory as a puzzle of different capitals

In other words, it seems that the Italian context is showing that each natural disaster is following its own peculiar trajectory both in the emergency and recovery phase. And as the international literature has strongly argued, there is an important relationship between natural elements and the cultural, social and economic organizations of the affected society. Indeed, the probability of a disaster having more devastating effects in one place than another depends on the local vulnerability of the place (Cutter, 2003). And therefore, there is a correlation between the potential risk and resistance and reliance of a specific place (Kasperson, Kasperson, Turner, 1995; Cutter, Mitchell, Scott, 2000).

Looking in this perspective, a natural disaster cannot be only evaluated, ranked and studied in physical terms, such as number of buildings destroyed and number of victims, but also in terms of the political, economic

and social impact that the hazard has had on the territory. So, how the social, economic and political capitals of the area are put under stress, transformed and reshaped when a disaster occurs? The sociological literature on disasters offers a rather rich debate on the ability of a social system to respond to and recover from disasters as well as on the topic of social capital. On the other hand, it is still quite limited as far as the subjects of political and economic capitals are concerned. While the concept of local vulnerability looks at features of the social systems for a potential harm, the idea of resilience includes those inherent conditions that allow the system to absorb impacts and cope with an event, as well as post-event, adaptive processes that facilitate the ability of the social system to re-organize, change, and learn in response to a threat (Dynes, 2006).

In practice, immediately after a natural disaster, volunteers actively take part in first aid operations. Local knowledge might play an important role in directing some stages of rescue operations, for example by suggesting the best site to carry out excavation works. It could be wrongly argued that - especially in an emergency - a "new social capital" might develop; instead, that is the existing social capital, which is transformed and reshaped by the event. In this line, Dynes (2006) underlines that a distress in the social order could lead to the creation of a new and distinctive ordering of priorities, to the expansion of citizens' role and to a reinforcement of social networks and family ties.

However, the debate is missing out on different aspects. First of all, the intensity and the ability to maintain the social capital is the combination of the counter-effect of the disaster and the pre-existing social conditions of the area hit by the disaster. Existing formal and informal norms, traditions, and values relevant to the local context, therefore, interact with the tragic event by transforming, empowering and expanding the response and shaping the aid and the recovery agenda. Secondly, social capital means the network of relations among the actors of a specific territorial entity, which can be located in an urban neighborhood or a rural community. Taking into account social capital with respect to its role in disasters is necessary also to highlight the importance of the spatial structure of such relations. In fact, the link between internal and external relationships within the relevant entity is important in preventing disasters as well as in facing emergencies. It is likewise important the trend towards strengthening the existing networks or creating new ones.

To use Putnam's words (2000), it is important to understand to what extent local societies, while facing a catastrophe, are either inclined to strengthen their internal, face to face bonds (*bonding*) or able to seize the

opportunities for effectively interacting with external, mutually heterogeneous actors (*bridging*). The ability of a local community to bounce back from a disaster often depends on its ability to maintain solid internal relationships -by defending its own identity- as well as on the capability to actively and equally negotiate with the "outside world" (rescuers, higher-level institutions, both national and international) to obtain an adequate support not only in terms of practical needs but also in terms of social and cultural support, without falling into dependence on external aids.

The recent events have indeed shown that other dimensions should also be taken into account when dealing with disasters. Bringing a community back to normal means also promoting sustainable recovery plans. Indeed, the economic impact of a natural disaster could also jeopardize the community's existence. The collapse of the local economy, the shutting down of local industries as well as of any other economic engine means forced migration, social exclusion and deprivation. The economic drivers of a territory need to be deeply explored and taken into further consideration when studying disasters. The Emilia earthquake is known as the first "industrial" earthquake. The area accounted, and fortunately still accounts, for 2% of the Italian GDP, with the bio-medical sector being the major economic driver and a leader in Europe. The bio-medical production requires high technology machinery, high qualified workers and -last but not least- needs to be continuous and constant over time. Due to the earthquake, most of the factories were severely damaged and this could have irreparably knocked down the local economy, thus forcing international buyers to explore new markets. Most of the victims of the second earthquake (on 29th May 2012 at 9:00 a.m. - 5,8 magnitude) were workers and employees who died because they went back to work earlier than planned. The combination of a clear, well-defined political strategy (securing warehouses had been one of the first priorities set by local mayors), the strong collaboration between the local economic actors (e.g., machinery or warehouse sharing) and the high loyalty of international actors (some foreign buyers doubled or tripled orders to help increase the profit and allow local producers to pay for their damages) made it possible to re-start local economy and to prevent local workforce migration.

The economic features of an area are a key aspect in any phase of a disaster, and the most recent event has also shown the vulnerability of tourist destinations. International literature has partially explored the issue by stressing that flourishing tourist destinations might become much more vulnerable than other places if badly affected by a disaster. The economic organisation of the tourist industry is often characterised by small and me-

dium size local business or international investors (Ciocco, Michael, 2007), temporary and seasonal workers (Faulkner, 2001) which, in itself, is not an indicator of vulnerability but, in practices, are risk factors in case of a disaster. International investors might no longer find economic benefits to invest in a devastated area, small business are more likely to not survive, seasonal workers are more likely to be more vulnerable than residents in the emergency phase because it is more difficult for them to have access to information and to local knowledge regarding safer places and so on (Mugnano, Carnelli, 2016). The Amatrice earthquake (2016) has also highlighted that even this debate needs to be re-thought. The different types of tourism segments require indeed deeper attention in relation to the issue. One of the symbols of this disaster is "Hotel Roma", 100 years old, which was accommodating nearly 70 guests: the hotel collapsed and the majority of the guests died also because they couldn't find the way out. The economic drivers of an area have to be taken into account also in the recovery phase. The Amatrice area is characterised by a peculiar tourism segment: the second/holiday homes. In this case, neither the debate on tourist destinations nor the one on residential areas is applicable. However, the specificity of the housing sector cannot be undervalued in the recovery phase. The Government reassured that all houses will be rebuilt (giving priority to residents). However, it might be questionable that the recovery model should follow the previous path: rebuilding the same house on the same site. First, it would be more important to understand how many second house owners in the area will be willing to spend their holidays on a seismic area again, what is their sense of place belonging and how they want to reinterpret the relationship with this devastated place.

The previous section has also highlighted that different areas respond to natural disasters in different ways due to the role played by institutions. The political capital, in terms of degree of *civicness* (Putman, 2000; Almond, Verba, 1963), is indeed a very important aspect in the disaster cycle and Italy has a very interesting specificity. In the event of a disaster, as in other international contexts, the complex structure of the Italian political system (City Councils, Provinces, Regions and State) has to work harmoniously. Besides, Italy has a long tradition of voluntary activity, which takes a large variety of forms: professionals trained to first aid (such as *psicologia dell'emergenza*), national active groups (such as the boy scouts and the volunteers of the Civil Protection structured by Regions) and local associations. Finally, an aspect that distinguishes the Italian context from others, is the active and pro-active role of the Civil Protection (*Protezione Civile*). As previously underlined, it was founded as a voluntary body and has increas-

ingly become a professionalized body with a powerful role in emergency phases (see also the so-called Metodo Augustus, the reference emergency plan used by the Civil Protection). The history of natural disasters in Italy can be therefore divided into three major phases related to the role interplayed by three actors. A pre-Civil Protection phase, until the 1976 Friuli earthquake, where State and local government were the major actors. In the following phase, this voluntary body has increasingly become formalised, professionalised and gained an important role in the emergency management. This phase ended with the tragic and negative experience of the 2009 L'Aquila earthquake. In the third phase (Emilia earthquake, 2013) active local or national citizenship started gaining importance. Here, we refer particularly as for the emergency phase - to the interesting experience of the informal tent camps organised by the citizens in Emilia to contrast with the Protectione Civile's tent city. The construction of informal tent camp responded to the need of the homeless to be closed to their damaged house and able them protect the house from looting and also create the conditions to run their family business.

Last but not least, among the different forms of capitals it is worth mentioning the idea of "territorial capital" (Ocse, 2001: Camagni, 2009), which focuses on the relationship between material and immaterial assets and can be considered as the summary of the different forms of "capital". In the Italian context, there is a high presence of historical "iconic" attractions which are part of a remarkable heritage and the symbol of local identity. The latest tragic event has hit the core of the Italian -and probably Westernmedieval heritage. Certainly, although the collapse of part of Norcia is a serious artistic loss, the damages suffered by the entire area have been equally severe and extensive. The latest earthquake crater includes microrealities rich in territorial capital. 60% of buildings in Castelsantagelo sul Nera, only 70,67 sq km and 280 residents, were damaged. This small town is home to an unbelievable historical heritage: 22 churches (one in every 12 inhabitants) dated between 1200 and 1300 a.d. Besides, the richness of this territory is priceless in terms of immaterial capital. The Amatrice earthquake occurred on the 24th August, just a few days before the traditional yearly food festival started. The disaster involved also Castelluccio, a small village in whose area a very famous variety of lentil is produced and then exported worldwide.

In conclusion, it seems clear that in the disaster studies the role of the territory is becoming more relevant and central. This special issue has been thought and realized bearing in mind this goal. The contributions selected have in common the idea that the multidimensional aspects that compose

the territory are put all under stress when a natural disaster occurs and that the responses might vary depending on the context. Italy is an interesting case for a twofold reason: it is a country that has unfortunately experienced a high number of natural disasters in a rather short time and at the same time it is a cohesive - though fragmented and diversified country - in which micro, meso and macro dynamics can play different roles in responding to a disaster.

References

Almond G., Verba S. (1963) The Civic culture. Sage Publication

- Alexander D.E. (2013). An evaluation of the medium-term recovery process after the 6 April 2009 earthquake in L'Aquila, central Italy. *Environmental Hazards: Human and Policy Dimensions*, 12 (1), 60-73. doi: 10.1080/17477891.2012.689250
- Avallone G. (2010). La sociologia urbana e rurale. Origini e sviluppi in Italia. Napoli: Liguori.
- Bazzucchi (2012). I costi della città dispersa: alcune prime evidenze. In Minardi E., Salvatore R. (a cura di). O.R.Es.Te. Osservare, comprendere e progettare per ricostruire a partire dal terremoto dell'Aquila. Faenza: Homeless Book.
- Bonaccorsi M. (2009). Potere assoluto. La protezione civile al tempo di Bertolaso. Roma: Alegre.
- Cagnoni F. (1976). Valle del Belice: terremoto di Stato. Milano: Moizzi.
- Camagni R. (2009). Territorial capital and regional development. In Capello R., Nijkamp P. (eds). Handbook in regional growth and development theories. Cheltenham: Edward Elgar.
- Canosa R. (1976). Il braccio armato dello Stato: il periodo scelbiano fra storia e memoria. In Venturoli C. (a cura di). *La polizia in Italia dal 1945 a oggi*. Bologna: il Mulino.
- Cattarinussi B., Pelanda C. (1981). Disastro e azione umana. Milano: FrancoAngeli.
- Cattarinussi B., Pelanda C., Moretti A. (1981). Il disastro: effetti di lungo termine. Indagine psicosociologica nelle aree colpite dal terremoto del Friuli. Udine: Grillo.
- Cavazzani A. (1972). Potere e calamità naturali: il terremoto di Ancona, Report, 7.
- Cavazzani A. (1981). Modelli di difesa sociale dai terremoti: problemi di controllo sociale e partecipazione. In Elia G.F., Martinelli F. (a cura di). La società urbana e rurale in Italia. Atti della sezione urbano rurale del 1° Congegno italiano di sociologia 'Consenso e Conflitto nella società contemporanea' Roma, 15-18 ottobre 1981. Milano: FrancoAngeli.
- Cerruti G., Zedda S., Conti L., Cederna C., Bettini V., Risè C., Tabacco E., Capanna E., Fumagalli M., Pecorella G. (1976). *ICMESA*. Una rapina di salute, di lavoro e di territorio. Milano: Mazzotti.
- Cioccio L., Michael E.J. (2007). Hazard or disaster: Tourism management for the inevitable in Northeast Victoria. *Tourism Management*, 28(1): 1-11. doi: 10.1016/j.tourman.2005.07.015
- Conti L. (1977). Visto da Seveso. L'evento straordinario e l'ordinaria amministrazione. Milano: Feltrinelli.
- Conti M., Serrani D. (1977). Il terremoto nelle Marche del 1972 e l'opera di ricostruzione. Udine.

- Ciccozzi A. (2013). Parola di scienza. Il terremoto dell'Aquila e la Commissione Grandi Rischi: un'analisi antropologica. Rome: DeriveApprodi.
- Cutter S.L., Boruff B.J., Shirley W.L. (2003). Social Vulnerability to Environmental Hazards, *Social Science Quarterly*, 84, 2: 242-261. doi: 10.1111/1540-6237.8402002
- Cutter S.L., Mitchell J.T., Scott M.S. (2000). Revealing the Vulnerability of People and Places: A Case Study of Georgetown County, South Carolina. *Annals of the Association of American Geographers*, 90, 713-737. doi: 10.1111/0004-5608.00219
- De Marchi B., Pellizzoni L., Ungaro D. (2001), Il rischio ambientale. Bologna: il Mulino.
- Dynes R.R. (2006) Social Capital: Dealing with Community Emergencies. *Homeland security affairs*, XII, 2016
- Dynes R.R. (2002). *The Importance of Social Capital in Disaster Response*. Newark: University of Delaware, Disaster Research Centre, Preliminary Paper No.
- Faulkner B. (2001). Towards a framework for tourism disaster management. *Tourism Management*, 22(2): 135-147. doi: 10.1016/s0261-5177(00)00048-0
- Frisch G. (2009). L'Aquila. Non si uccide così anche una città? Naples: Clean.
- Kasperson R.E., Kasperson J.X., Turner B.L. (1999) II. "Risk and Criticality: Trajectories of Regional Environmental Degradation." *Ambio* 28, 6: 562-568.
- Londero I. (2008). Pa sopravivence, no pa l'anarchie, Forme di autogestione nel Friuli terremotato: l'esperienza della tendopoli di Godo. Udine: Forum.
- Marino G.C. (1995). La Repubblica della forza. Mario Scelba e le passioni del suo tempo. Milano: FrancoAngeli.
- Mottura G. (1971). Terremoto capitalistico e pratica sociale, Inchiesta, Report, 1.
- Mugnano S., Carnelli F. (2016). A new normality for residents and tourists: how can a disaster become a tourism resource? In (a cura di). Bellini N., Pasquinelli C. *Tourism in the City. Towards an Integrative Agenda on Urban Tourism*. Springer
- Musacchio A., Mannocchi A., Mariani L., Orioli F., Saba L., (1981). Stato e Società nel Belice. La gestione del terremoto: 1968-1976. Milano: FrancoAngeli/Isvet.
- Putnam R.D. (2000). Bowling Alone. The Collapse and Revival of American Community. New York: Simon & Schuster.
- Rivera F.I., Settembrino M.R. (2013). Sociological insights on the role of social capital in disaster resilience. In Kapucu N., Hawkins C.V., Rivera F.I. (eds). *Disaster resiliency: interdisciplinary perspectives*. New York: Routledge.
- Stallings R.A. (1991). Disasters as social problems? A dissenting view. *International Journal of Mass Emergencies and Disasters*, 9.

Strassoldo R., Cattarinussi B. (1978). Friuli: la prova del terremoto. Milano: FrancoAngeli.

Tranfaglia N. (2001). L'Italia repubblicana e l'eredità del fascismo. Alessandria: Edizioni dell'Orso.

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