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#### Research article

# Beyond the volcanic risk. To defuse the announced disaster of Vesuvius

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**Abstract:** The anthropology of risks and disasters has been characterized in recent years by a strong focus on aspects of contemporary life, also developing a lively interdisciplinary vocation. The subject of these studies is multifaceted and complex, because during an emergency, or its future planning, there are political and legal discussions that can involve a multitude of actors, including lawyers, consultants, groups formed to represent victims or residents, social movements, businessmen, politicians, public officials and journalists. These figures contribute to the social construction of disaster, or risk, so anthropology can help to untangle these relationships.

Similar dynamics are observable even before a disaster, as in the case of my contribution: Vesuvius has not erupted in 75 years and volcanologists say that it will remain dormant for a long time, however since 1995 a planning of the future volcanic eruption has been initiated that has changed the relationship of residents with the territory, as well as with time. On the one hand, in the same year, the creation of the Vesuvius National Park, within a layout concentric to the red zone, further regulated the use and attendance of the territory; on the other hand, with the emergency planning, the future catastrophe has been transformed: it is no longer a hypothetical eventuality but, in a sense, it is officially announced. In other words, the scenarios of the future have begun to influence the present time: they produce norms, establish behaviors, determine relationships, and become reality. The Vesuvius Emergency Plan and the Evacuation Plan are "governmental devices", or "non-human social actors" that, in addition to producing a regulated space and time, determine the daily practices of the residents and their conception of the situation in which they live.

This has helped to model various social elaborations of risk, which I discuss in my contribution, underlining how there are associations and communities that do not ignore the risk, nor have a fatalistic attitude, but are active to rebuild a more equitable and sustainable relationship between

humans and the ecosystem. Through the ethnographic approach, the need emerged to overcome the emergency logic and to induce public institutions to work also on risk mitigation, i.e. by fostering democratic participation, requalifying cities, taking action to eliminate social vulnerability; in other words, the inhabitants of the Vesuvian area are not indifferent to the threat of the volcano, but they have a different and differentiated approach that questions some simplifications on the "prevention society", the "risk culture" and a certain way of understanding "development".

**Keywords**: Vesuvius; "natural" disaster; environment; risk; post-development; mitigation; emergency

#### 1. Introduction: the most dangerous volcano on Earth

In southern Italy, near the city of Naples, the volcano Vesuvius has been quiescent since March 1944, when the population of the villages at its feet amounted to about 350 thousand residents. Since then, along with a constant urbanization of the area, the number of inhabitants has grown to the current 700,000. The Emergency Plan, drawn up in 1995 by volcanologists and civil protection workers, is based on the scenario of a sub-Plinian eruption similar of that in 1631. There is no lack of discordant voices among scientists who point out the possibility of an even more catastrophic eruption but the main criticisms to the Plan come from a part of the population that considers as "punitive" the current strategy to protect the territory and its inhabitants as, by blocking above all the construction sector, it would penalize the local economy. In fact, over the years the discourse on "Vesuvius risk" has gone on amidst more or less effective laws against illegal construction and in favor of demographic decompression, scientific disputes, sparse exercises, television broadcasts, alarms, alarmism and some real seismic shock.

Hardly, however, has it been attempted to develop in a practical action the desired "coexistence with the volcano" that many hoped for when, the Vesuvius National Park was established in 1995 together with the Vesuvian Emergency Plan. Even socio-cultural responses to risk have been largely ignored, crushed by rather abused stereotypes: politicians and technicians frequently describe the inhabitants as "irrational and irresponsible", "superstitious and fatalistic", and "insensitive to risk" (Franco Gabrielli, former head of Civil Protection, quoted in [1]). These value judgments reveal the partial and implicitly ethnocentric view [2] of those who express them and show a clear misunderstanding of the complex local socio-cultural reality. From the systematic study of behaviors that seem to be "absurd", however, it emerges that the attitude of the inhabitants reflects "other" forms of reasonableness; at a local level there isn't just one logic, but multiple rationalities, basically aimed at controlling the eventuality of a "territorial anguish". This mechanism does not derive from the ignorance of physical phenomena or from an inadequate scholastic preparation, but rather from a real "block of meaning", a social and individual inability to believe in a "definitive" destruction. How, then, can we set up a credible speech on risk that can become a proposal and an action?

Through field surveys carried out regularly since 2010 and combining traditional ethnographic methods (namely individual observations, accompanied by ethnographic notes), in-depth interviews with both local actors and legal experts, and work on archives and documentation, this contribution focuses on social elaborations of the Vesuvian risk, in order to dismantle the commonplaces on the

fatalism of the residents and, above all, to provide critical elements useful for the elaboration of more complete and effective institutional responses.

# 2. Materials and methods: beyond emergential logic

With the "National Emergency Plan" of 1995, the Italian Civil Protection divided the area around the volcano into danger zones (red, yellow and blue), thus "certifying" the territory as "at risk", and changing the relationship between residents and the ecosystem, but also with time. In the following twenty years, the Emergency Plan was updated twice. In 2001 the margin of time needed to predict an eruption was reduced from two to one week, while in 2013, the perimeter of the area of greatest risk was redefined, with the consequence of a reformulation of the twinning among the 24 municipalities of the area and the other regions of Italy.

Eventually, in 2016, the Campania Region and Civil Protection presented the Evacuation Plan, namely a set of practical procedures for moving the 700 thousand residents from the red zone to the other Italian regions. Two phases are identified: a first one where spontaneous evacuation takes place (during the *pre-alert* level) and a second one where evacuation is mandatory (during the *alert* level). The document describes how to evacuate the *red zone* according to a three-step plan: *removal* (where citizens are taken from the private home to the "waiting areas" indicated in the Civil Protection Plan of each municipality, and then to the "meeting areas" outside the area of greatest risk; this operation is done by the Campania Region), *transfer* (from "meeting areas" to "first reception points", according to the modalities prepared by the individual host regions); *reception* (from "first reception points" to "reception facilities").

To date, escape is the only option put in place by public authorities to deal with the threat of Vesuvius. Both Plans (Emergency and Evacuation) are the subject of three main criticisms [3]. These concern, respectively, the underlying scientific assumptions, as the Vesuvian emergency planning was entirely based on a single eruptive scenario (the explosion of 1631) while nothing has been arranged for any stronger or more modest eruption, urban planning and early warning issues, as very few reflections have been made regarding the actual reality of the "Vesuvian city" [4] which often takes on the features of an immense periphery that "piled up in ways and forms that are incredible, because it is difficult to understand what logic has presided over planning choices that seem designed to create difficulties for the life of a normal person" [5] and, eventually, the logic itself of the Emergency and Evacuation Plans, that give nothing more than "the illusion of security through its promoters who simply spread the news that everything is kept 'under control'" [6].

The evacuation must be, of course, organized in an optimal way; however, if the aim is, more ambitiously, to contribute to the mitigation of geological risk in the Neapolitan area (where, in addition to Vesuvius, there are two other volcanoes: the Phlegraean Fields and the island of Ischia), then the discussion should be moved to the model of development that led to the current condition of vulnerability. The unbridled development, driven by the capitalist system, made up of quantitative growth as an end in it, has been discussed for a long time, at least since the late 1960s, with the

<sup>&</sup>lt;sup>1</sup> The Vesuvius plan: the planning of the removal and transfer of the population of Vesuvian red zone is available on the website of the Campania Region: http://www.regione.campania.it/assets/documents/regioni-ppaa-tavolo-transferimento-12-10-2016-rev-3.pdf (accessed on June 4, 2018).

theoretical contributions of Ivan Illich, André Gorz, François Partant, Cornelius Castoriadis and Nicholas Georgescu-Roegen. More recently, the criticism of development is mainly supported by Serge Latouche, according to whom:

Infinite growth is incompatible with a finite planet. If the first law of thermodynamics teaches that nothing is destroyed and nothing is created, the extraordinary process of spontaneous regeneration of the biosphere, even if assisted by man, is not able to sustain present frantic rhythms and can in no case fully restore the totality of resources degraded by the industrial activity [7].

More precisely, with regard to the theme dealt here, in the early 1980s Manlio Rossi-Doria wrote:

Southern Italy urban development represents [in Italy] (if not entirely, for the most part) a pathological phenomenon, perhaps the most serious symptom of the negative effects of the lack of modern economic development of southern society [8].

As Antonio Di Gennaro points out, between 1960 and 2000 in Campania, face to a demographic growth of around 20%, urban areas have increased of 500%:

From 20,000 hectares of cities to 100,000, almost all on the plain and around volcanoes, i.e. in the most fertile and most dangerous areas [9].

It is a bulimia of the centralized urban model that devours space and marks a break with the environment in which we live. To cope with this "topophagy of the cosmopolis" [7] a process of "re-territorialization" is needed, by means of which, explains Alberto Magnaghi, bring back to the territory its "dimension of a highly complex living subject":

It is a complex and long process (fifty, one hundred years?) that concerns the construction of a new geography based on the revitalization of environmental systems and on the requalification of high-quality living spaces as generators of new settlement models capable of revitalizing the territory from hypotrophy of the megalopolis. This process cannot take place in technocratic forms; it requires new forms of democracy that develop the self-government of the settled communities, since rehabilitating and re-establishing the places means that those who live them must take care of them daily, with new environmental, technical and governmental knowledge (Magnaghi quoted in [7]).

In other words, it is a matter of elaborating reflections and practices for a de-urbanization of the Vesuvian area that is, making it interested in identifying the elements of an alternative project for a post-development policy. Vesuvius, in fact, even before interrogating us about safety and prevention, asks epochal questions about our economic model, our relationship with the territory, the environment and the ecosystem, on our way of building and living cities, on our institutions, on representation and participation [10].

As Alessandro Coppola writes [11], urban archeology in the United States can become an opportunity (it is possible to "destroy with love, care and minuteness", and even to transform deconstruction into "a real industry"), so the "Vesuvian city" instead of a problem, can represent an opportunity to invent new models of sociality and cohabitation with the territory, a laboratory of shrinkage cultures, or rather of hypotheses for a virtuous, serene, convivial and sustainable decrease, which would generate "powerful counter-tendencies against the strategies of Western modernization, showing a dynamism based on fusion, mixing and opposition" [12]. This radical change of perspective can be achieved through local projects that, inspired by the ambitious program of the "eight R" of Latouche (re-evaluate, reconceptualize, restructure, relocate, redistribute, reduce, reuse,

recycle), start a virtuous circle of reconversion, redefinition, reorganization, whose "good end", observes Guido Viale [13], is guaranteed by the maintenance, intended as the attention to the condition of a given object, a piece of equipment, a building or a natural resource, to their functionality, their external appearance, their hygiene or their cleanliness.

# 3. Results: the multiple vesuvian rationality

The mass media frequently underline the danger of Vesuvius, as for an example in 2011, when the prestigious international scientific journal «Nature» defined the Neapolitan volcano "Europe's ticking time bomb" [14]. By shifting the focus to the population, they generally highlight the lack of a "culture of risk" and of an appropriate preparation to the possibility of an eruption. Sometimes they refer more or less explicitly to an alleged "indifference" to the problem, since "only a few stop to think about the huge tank of molten rock that boils under their feet" [15], while the most "look at the volcano, sigh, touch a talisman and shrug" [16]. In reality, the media coverage of the subject keeps the locals, as-a-matter-of-fact, in one way or another informed about the risk linked to the volcano and constantly remind them this risk. Therefore, the question to be asked should be why people reaction is not (or does not appear to be) the one expected by the experts.

In addition, it should also be asked what precautions, exactly, the population could take in the absence of institutional intervention. As the psychology of emergencies [17] and the social sciences [18] show, the apathetic and fatalistic image of the people living around Vesuvius is often a stereotype: rationality, in fact, has a strongly social nature, in the sense that human groups select the risks to be feared of and, above all, decide how safe is safe enough for them (at a given time), based on their knowledge and beliefs [19]. Politically and mediatically, however, those who have the power to determine that "enough" also have the ability to define "ignorant", or even illogical, anyone who does not align with their opinion. The social processing of risk is the product of the encounter between different perspectives and sensitivities. Risk assessment does not take place independently of the social context, but takes shape within the public confrontation. Although it complex to be investigated and difficult to be operated, in order to understand "what kinds of risks are acceptable for which types of people" [20], the social scientist must take into account the politicization of risk, the collective behavior, the morality and its relationship with politics, the knowledge (including science) and its ambiguity, the way people make decisions, those who are held responsible and why, the social exclusion and victimization, so as roles within collectivity and probability theories.

From the ethnographic research I carried out [21] in one of the municipalities of the Vesuvius red zone mostly affected by the 1944 eruption and still showing signs of it on its urban territory, it emerged that a local debate about the risk does not emerge only when stimulated by interaction with an external interlocutor, but also spontaneously and recurrently. This is contrary to any (pre)judgment on the supposed "immobility" of those who live around the volcano. Around the Vesuvius, the public discourse on risk is constant and undoubtedly much more frequent than it could be imagined from the outside, but it is also wide and heterogeneous: in this sense, it contributes to a large and implicit collective process of risk selection, essentially between geological, ecological and social concerns.

In particular, at least four types of risk processing have been identified, which in turn can be traced back to different kinds of relations between subjects and places. As underlined by the "psychology of the emergency in times of peace" [22], these are neither rigid nor permanently

defined definitions, but rather a jumble of feelings, needs, interests, ideal impulses whose configurations are articulated along multiple and variable guidelines, and, above all, based on the balance of power between the different subjects. In particular:

(1) First of all, there are those who reject the topic or avoid to face up to its full implications (organizing simulations and adjusting escape routes, for example) as they are afraid (as sometimes they explicitly declare) of spreading the panic among the population and, as a consequence, causing a "collapse" of the real estate market and damaging the already fragile local economy; it is the prevailing position among the local administrators and it carries with it the suspicion that this behavior also depends on the fear of a hypothetical erosion of the electoral consent. The President of the City Council of San-Sebastiano-al-Vesuvio in 2011, told me:

There are concrete problems to consider: if the Administration faced the Vesuvius risk with what should be a natural policy of prevention, immediately the housing market would suffer a blow; to face the Vesuvius risk means to intervening in the people's pockets. (March 14, 2011).

(2) Secondly, there are those who consider the hypothesis of a Vesuvian eruption to be substantially non-existent or, in any case, very remote, and that, therefore, ask for a redefinition of the red zone and a loosening of building restrictions; it is the idea of those who become the spokesperson of the malaise caused by a local economy and a stagnant working condition and that propose construction as the solution to any crisis, sometimes clearing it as an infrastructure enhancement to facilitate the escape of residents in case of eruption. In an interview, the head of the Vesuvian Association of Entrepreneurs, told me:

We must work on the territory, for example by widening the narrow escape routes; but the Vesuvius National Park has blocked the economy in this area, with repression and force. "Don't bring in new residents, all right, but give me the opportunity to build hotels, to build tourist facilities, which are only temporary, non-residential". (March 15, 2011).

(3) There is, moreover, the position of those who see the Vesuvian risk as very urgent and concrete and that, consequently, considers it imperative to fine-tune the Emergency Plan, to organize evacuation tests, to disseminate information on behaviors to keep in case of alarm, the definition of roles and procedures during rescue operations and so on; it is the approach of those who, while living in the area, consider its dangerousness and vulnerability, tending to a material and operational point of view. The head of the Municipal Civil Protection, told me:

Unfortunately there is no security mentality, here: in the past few years I have had many meetings with the inhabitants of all the neighborhoods of the town, I have invited everyone, to explain what are the meeting points in case of alarm, how they should behave in an emergency, for example in case of an earthquake... Well, only 3 of 150 families have come. In the north [of Italy] they are prepared, people work together, but here they do not cooperate. (April 4, 2011).

(4) Finally, there are those who believe that the relationship of danger between humans and volcano is inverse, because the Vesuvius is "under siege" by its inhabitants, through a long-lasting "cement aggression" and through the increasing pollution, two devastating phenomena for the environment and for health. This situation is cause of concern for those who consider the threats to nature and to the landscape as the most incumbent ones, and, therefore, see the institutions as set up to protect them (the National Park, for example) and as garrisons of legality and guarantees of

livability. During a walking-interview, an environmental activist with whom I was walking along a Vesuvian path, explained to me that:

When I go to the volcano and I see the countryside and nature, but even when I look at the old farmshouses that I find along the way, I feel like I want to stay here. But when I see the havoc, the "monnezza" (the garbage), the incivility... I get discouraged and I would run away. Personally, I don't feel the Vesuvius risk: I don't feel the danger that comes from the volcano, but I feel it from the Vesuvian, from the man of Vesuvius! That's what scares me the most. (14 January 2011).

The ethnographic experience, therefore, has allowed detecting a social environment full of resources, with various examples of liveliness, activism and initiative, and a series of small communities gathering around a common purpose. This context makes a new approach to risk possible and enables a different way to return taking care of places and those who live them. Despite their radical differences, all the four interpretations of the risk previously exposed show the social and individual incapacity to believe in "definitive" destruction. It is a process of scotomization that is a mechanism that allows for distancing oneself from an anxiogenic element [21]. According to Alan Bass, it means "the creation of a blind spot" [23], whose function is "to avert from oneself [the thought of] one's own death" [24]; see also [25]. It is a coping strategy, that is a defense mechanism that, through automatic or involuntary concealment, aims to "not see" a possible distressing factor [21,26]. Although in contrast to technical evaluations, this is a form of social rationality that has its own acceptable logic in daily life, and this because, as Mary Douglas notes, "people are not knaves and fools; they believe and act upon their belief" [19].

My fieldwork has allowed me to come into contact with many communities that are not "unconscious", but that, rather, seem to want to express themselves so as to take part and contribute to the planning of the emergency, but also, and most of all, of the territory. This is the case of numerous associations that go beyond their specific statutory purpose (for example, environmental protection or archeology) and embrace a wide panel of local risks: tackling one risk (for example the ecological one), indeed, means also dealing with the others (that is: crime, economic crisis, overpopulation, seismic and volcanic threat), in a vision of risk that is therefore eclectic and comprehensive, instead of partial and sectorial. In recent years, also due to the dramatic events related to the waste crisis, we have assisted to the creation of multiple associations that have gained more and more space and credibility, such as "Mamme Vulcaniche" ("Volcanic Mothers", against landfills), "Rete dei Comitati Vesuviani" ("Network of Vesuvian Committees", focused mainly on health aspects) and "Cittadini per il Parco" ("Citizens for the Park", between ecology, agriculture and cultural heritage).

#### 4. Discussion: defusing the future emergency

Generally, the emergency action is considered to be caused by a sudden and unpredictable event that requires an urgent intervention [27], in order to guarantee a response in conformity with a common sense of humanity. It goes beyond the bases of law, realizing a form of arbitrary sovereignty, without any mediation, i.e. based on the power to suspend the validity of the law and creating a "state of exception" [28] justified by the principle that "necessity does not know law". Thus, the emergency becomes "a laboratory for the management of bodies to be cured, to be saved, to be cataloged in the global market of compassion" [29], passive bodies considered to be fearful,

lost, powerless. This entails an "emergency paternalism" [30] that induces the disaster victims to indulge in an exemption to individual freedoms and, at the same time, to accept a welfare system managed only by outsiders which deprives them of critical thinking and self-determination [31]. The emergency, therefore, is seen as a real "anti-political machine" [32] through which the conduct is standardized and the potential for local innovation is neutralized, but above all with which politics is dismissed as an collective subject [33].

Inspired by an emergency logic that takes its cue from the seismic and bradyseismic crises of the seventies and eighties, the planning in 1995 of a future Vesuvian eruption has established an absolute prohibition to build in the red zone, thus changing the relationship of residents with the territory, as well as with time [3]. On the one hand, in the same year, the creation of the National Park of Vesuvius, within a layout concentric to the red zone, further regulated the use and frequentation of the territory; on the other hand, with the emergency planning future catastrophe has been transformed: it is no longer a hypothetical eventuality but, to a certain sense, it is officially announced. In other words, the scenarios of the future have started influencing the present time: they produce norms, they establish behaviors, they determine relationships, and they become reality. The Vesuvius Emergency Plan and the Evacuation Plan are "government devices" [34], i.e. "non-human social actors" [35] that, in addition to producing a normed space and time, determine the residents' daily practices and their conception of the situation they live.

In addition to the essentially technical level of these tools, risk prevention institutions frequently repeat the need to "build resilience" [36]. This concept is the one most used in recent years to indicate the (social, institutional, technical) response to the disaster. Even this notion is complex [37], if not controversial [38], and its meaning has passed from that of mere "natural" condition to a "historical" result. If the first declination of resilience refers to an *a priori*, that is to the idea of an innate quality/capacity and, therefore, to an essentialisation of communities, of their vulnerability and of their ability to cope with it, the second option represents an *a posteriori*, because it considers resilience as a process, therefore as a synergy of several elements that influence each other [39].

In such a various and changing context, the anthropological contribution can be manifold, depending on the scale of reference, on the timing and on the objectives. Defusing the future emergency does not mean pursuing an illusory "zero risk" [40]. It rather implies tending to a mitigation of the threat through the recovery of a more equitable and forward-looking relationship between the community and its environment and, at the same time, via a systematic listening of the population, its needs and perspectives, as well as its perception of risk and memory management. Anthropology is, thus, called to study the deep causes of risk exposure and their impact on vulnerability, intended as something that develops well before the emergence of a disruptive external force. The disaster is not just a sudden collapse of the social order, from which arise disruptive or re-aggregating reactions, but the result of causes to be sought within the community instead that outside it: this is the essential prerequisite for an incisive redefinition, in more supportive and shared direction, of the methods of management and mitigation used to prevent disasters [41].

Therefore, disengaging the future emergency means eradicating the emergency logic. This, of course, does not mean denying the importance and the need for an effective organization of evacuation in case of alarm, but—on the contrary—wants to emphasize the necessity of not being engulfed by an approach that inevitably leads to discuss the "risk culture", overshadowing the development of different methods and alternative points of view. It is the task of anthropology to go beyond the myth of security and focus, instead, on a general re-framing of the risk topic, by

explaining its political value. In the case of Vesuvius, this means realizing a reconciliation with the ecosystem, a shared management of the territory, a dialogue between institutions and population that fosters exchange, experiences, involvement [42]. In this sense, a "Vesuvian public anthropology" must be ambivalent and ubiquitous. It must be able to work on different fronts: it has to feed a new elaboration of planning and prevention via a participatory, dynamic and radical approach; to analyze the regulatory and technical-operational instruments at the institutional level; to act as a flywheel for social change "from below and below", by giving voice to the needs and demands of the residents, but also by translating the "reasons" of the volcano and its ecosystem.

Considering the Vesuvian risk as a process, therefore taking into account the historical, social and political factors that are at its origin, it is possible to realize that the Neapolitan volcano does not challenge the inhabitants and institutions to a race of speed, but poses much deeper and more precise questions on the relationship with the territory, including its economic, urban, ecological and cultural aspects. Vesuvius requires a redefinition of the democratic instruments of representation and participation, requiring greater collective involvement and a general ecological conversion that can no longer be postponed.

In the current historical phase of volcanic quiescence, potentially still long, the anthropological contribution, free from the excitement of the urgency that occurs during the emergency, can devote its effort to large-scale projects that aspire to affect the territory and the social fabric. In particular, at least three points should be considered, all to be addressed now, i.e. in "peace time" [22].

Firstly, a reflection should be launched on what Escobar [43], Sachs [44], Latouche [7] and others have called "post-development", a sort of critical tool for rethinking and relocating. The suggestion is to consider development as a historical phenomenon emerging after World War II as an expression of modernity and capitalism, therefore with its excesses and hazards. To this, it must be added a reflection on language that, together with the practices used by development specialists, influences the way in which development itself is realized, with the unwanted consequences it promotes [32].

Secondly, it should build a channel of communication with the population, above all the residents (but not only), which is active in a daily and continuous way, also thanks to contemporary technology. In other words, a meeting point must be set, in which the various components of a complex, heterogeneous and multivocal reality [45] can confront each other, so as to foster a constant process of mutual listening. It is a new form of democracy that aims at networking the stakeholders—planners, administrators, and inhabitants-, their experiences and their stories [46], in order to empower and strengthen, to restore trust and transform conflicts in learning opportunities.

Finally, it would be appropriate to start territorial governance that promotes participation and subsidiarity [47]: the associative reality and the third sector in the Neapolitan province are quite varied, widespread and active, and many associations already take care of the territory. However, this happens outside the institutions, in small communities that represent enormous resources of active citizenship, whole pieces of society that, therefore, must be involved through organs that could be called "territorial consultants". These are places open to the participation of citizens, associations and trade unions that want to make public attention focus on citizen quality of life and on territory sustainable economic development, as well as to discuss and elaborate effective policies for the protection of the urban and natural ecosystem. The "territorial consultants" have the requisites to provide a valuable contribution of experience, skills and civic passion of associations and voluntary

work, the world of professions and that of school and research; they can turn out to be a possible permanent channel for discussion and comparison between citizenship and institutions.

# 5. Conclusion: looking for a measure

In light of the urban and social situation exposed above, it seems clear that the particular Vesuvian context requires new questions and new answers, compared to the sole emergency approach. As the social sciences teach, every risk is a historical, collective and localized product, so that the cultural response, provided by a human group living under a given threat, always relates about the way it makes daily life possible. In other words, the assessment of how safe that particular territory is at a given time (or how "acceptable" certain types of risks are) depends both on the relationship that the group members have with each other in the places, and on the relationship, that they have with the places themselves [48]. In this sense, the risks should not be considered exclusively in terms of distancing, as if the question they raise depended only on being more or less contiguous to a given thread. They must also be examined in terms of translations and mediation, so as to promote a holistic and interconnected vision of them, in order to full understand and manage them.

It emerges, therefore, the need to enrich and improve the current purely technocentric and emergency-based conception of risk management. Through an approach attentive not only to technical factors, but also to the social, political and cultural context of the exposed location, it is increasingly necessary to develop new methods of communication between scientists, humanitarian workers, legislators and the population. Above all, with the strengthening of the circularity and effectiveness of information, this perspective opens to the subversion of top-down logic, often applied in the design and implementation of the management of an alarm (and justified by the same emergence logic), leading to an unprecedented re-elaboration of prevention planning based on a more democratic, lively and local approach. In this sense, the elaboration must be urged of analytical models which are not univocal and inflexible, but rather elastic and with "multiple rationalities", that is, that take into account that the anthropological variables orient practical behaviors "of acceptance or non-acceptance of risk, of acceptance or non-acceptance of specific interventions, of economicsocial development projects, of external help in mass emergencies" [18]. A systematic analysis [49], the detection and constant monitoring of the various local cultural responses to a remote or imminent threat, as well as of the inhabitants' needs and the doubts is thus required. Though it, a "participatory planning" of the whole territory (not only of eventual urgency) can be done, in the same spirit as that of a recovery of what Di Gennaro calls "measure of the land", "in the double meaning of measurement of the natural capital, and of definition of the measure of behavior more appropriate for its care" [9].

#### **Conflict of interest**

The author declares no conflict of interests.

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