Men Facing Earthquakes: The Example of Rognes (Bouches-du-Rhône, France)

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Abstract:

This article's purpose is to show that men, confronted by earthquakes, natural disasters of telluric origin, do not ignore them, as one would think a priori considering the scale and unpredictability of these events. On the contrary, humans socially appropriate them through cultural tools (ideal and material). This paper is based on a field study conducted in a French community whose inhabitants have transformed a past earthquake into a primary symbol of their collective identity, and are now elaborating social means with the purpose of managing the seismic risk that threatens them.

Introduction

The earthquake of Izmit, which struck Turkey on August 13, 1999, and the successive earthquakes that troubled Greece in the beginning of the month of September 1999, are as many reminders, recent and painful, of the fact that the Mediterranean basin is subject to an important seismic risk. Like many other populations all around the world, human societies living in these areas are confronted with "telluric" or "geological" phenomena: volcanos, earthquakes, and tsunami; natural phenomena of considerable scale which inflict desolation, death, and ruin in striking and unpredictable ways.

Although those telluric phenomena are the favorite research topic of different scientific and technical disciplines,² the study of their relations with human groups dealing with them has been slightly neglected by human and social sciences. Despite this, ecological anthropology considers the analysis of the relations between men and their environments as one of its favorite and fundamental subjects of research:

In a well-known praise of Jean-Jacques Rousseau, Claude Levi-Strauss acknowledges that the author of the "discourse on the origin of inequality" has the merit of having founded the field of anthropology by posing the problem of the relations between nature and culture (1). This question [...] also accompanies the development of the discipline since its origins; driving Michel Foucault to consider this question as its "distinctive mark" (Descola, 1999: 46).

Studies in this domain have notably shown that an interaction or reciprocity exists inside the relations between human societies and their natural milieus.

Indeed, nature imposes constraints to men, who adapt to them by elaborating material and conceptual tools – in a word, cultural tools – allowing them to transform nature. This adaptation itself has repercussions on culture:

the natural milieu is never a variable completely independent from men, nor a constant factor. It's a reality that men transform more or less by their different ways of acting on nature, of appropriating its resources" (Godelier, 1984: 44).

This "domestication" or "appropriation" of nature by men is a phenomenon that has been studied by anthropologists on the level of the relations between societies and their "ecosystems," that is, the unity made of the living beings and the physical characteristics of their milieu (composition of the soil, water, minerals, etc.). However, this "domestication" has not been overly studied on the level of the relations between societies and telluric phenomena, at least in France. It seems, on first thought, that menhave no grasp on these phenomena, characterized by their scale, their suddenness, their "sturdy and implacable character" (Allegre 1987: 11). Men can neither predict them nor prevent them from happening, and they cannot modify their intensity or their magnitude. Nevertheless, human societies try to culturally appropriate them. Confronted with the occurrence and the threat of these telluric phenomena, they integrate them into their conceptual system of thinking about the world, build sets of representations concerning them, and elaborate practices, knowledge, and savoir-faire meant to adapt to them and manage their existence.

Because of their characteristics – the scale of their effects, the unpredictability of their occurrence – these

telluric phenomena imply specific forms of cultural appropriation that I volunteered to study by taking the example of a small rural community in the south-east of France: the village of Rognes (Bouches-du-Rhône). This village was destroyed on June 11, 1909, by an earthquake reaching a magnitude of 6.5 on the Richter Scale, which killed 14 victims.³ Nowadays, Rognes remains exposed to the threat of new earthquakes because, according to the specialists, the occurrence of an earthquake in a given region proves that the region has geological characteristics that submit it to a seismic risk. Besides, Montessus de Ballore, a french volcanologist, declared that "where the earth has shaken once, it will shake again." The French volcanologist Haroun Tazieff used this sentence during a symposium held in Rognes, in 1981, and many villagers still repeat it to this day. This expression will serve as a base for the organization of this paper. Indeed, this sentence illustrates the existence of two temporal dimensions of the seismic phenomena: the earthquake of 1909 (past event) and the threat of new earthquakes (future, potential events). Those two temporal dimensions correspond to two types of social appropriation that I will develop in two different parts. Thus, the first part will concern the construction of the memory of the earthquake of 1909, and the second part the management of the seismic risk.

When the Natural Catastrophe Becomes a Historical Patrimony and an Element of Collective Identity

The seismic event which destroyed Rognes on June 11, 1909, remains nowadays a memory that has been transmitted notably by two groups of sociability; the family, and the rural community. In the analysis, this memory can be decomposed in several types, principally the familial memory and the collective memory of the village. Notwithstanding unconscious memories that go through emotional channels I will not analyze in this paper, the descendants of witnesses of the earthquake convey an oral memory mostly constituted of anecdotes, and transmit to the following generations written documents (memories of ancestors, albums of souvenirs) and pictorial documents (postcards representing the ruins of the village) concerning this event.

The collective memory of this earthquake is conveyed in priority by the association of "The Friends of the Old Rognes," whose objective is the conservation and the transmission of the village's patrimony. Its members work notably on the collection of oral stories and of material supports (written, pictorial, and archeological*) of the memory of the earthquake, but

also on the restitution of this memory by the way of expositions and articles in the annual publication of the association.

The analysis of those forms of memories has revealed the existence of a process of social appropriation of this historical earthquake. This process is based on a set of steps, successive or simultaneous, that have allowed the Rognian society to make this natural event enter progressively into the social field until it finally became a patrimony of the village. Thus, it came to be the symbol of a certain form of familial and collective identity, but also an object of diverging social, economical, and political interests.

The first step of this process is an act of language, which consists in naming or designating this earthquake. This step is fundamental, because it allows the Rognens to give a meaning to this natural event, to assign it a place in their way of comprehending the world by inserting it in their system of thought. Several authors4 have thus underlined the importance of collecting the taxonomies, because they are the means by which men identify, name, and classify the natural elements that compose their environments according to cultural criterions. Although the terms employed by the Rognens to designate this historical event are spread through the whole French society, they assume here a very particular meaning: they say "The Earthquake," referring implicitly to the June 11, 1909 one, without specifying any date. They also call this earthquake "catastrophe," an anthropocentric term, as it refers to the disastrous consequences of the earthquake on the level of human and material losses. They can also name it the "natural catastrophe," because they admit its natural origin, which is independent from men.

Another way of appropriating this dramatic event in the history of the village has taken place progressively in time. It proceeds from the inherent properties of memory and forgetfulness, properties that drove to the evolution of the representations linked to the earthquake of 1909. Real tragedy in the years following its occurrence has stripped the earthquake of a part of its dramatic and frightening component. Indeed, the familial and collective memories usually convey anecdotes and say nothing—consciously ornot—about the painful and personal memories.

Pictorial documents (postcards, photographs) and written ones (memorial album, texts written by witnesses) constitute another step in the process of the community's appropriation of the earthquake of 1909. Indeed the earthquake, through its impact on the

structures of the village, has left marks that the community has seized to perpetuate its memory. Thus, by the way of different cultural tools (like the techniques of photography, the journalistic style of the time, the means of communicating information, notably by the way of postcards), men have produced pictures and texts that the Rognens have appropriated, and for whom they have taken the meaning of reminders of the earthquake. Memories of a traumatic event in the lives of the community and its families, but also memories of the history of the village; these social productions have taken over the part of documents bearing memory and meaning. Their conservation and transmission are assumed by the families and the Association of the Friends of the Old Rognes, whose mission is precisely to conserve and transmit the historical and cultural patrimony of the village.

The old village, destroyed by the earthquake, was leaning against a hill, the "Foussa," on which remain nowadays only some ruins overrun by vegetation. The village has been rebuilt at the foot of this hill, and is towered by these ruins, marks of the earthquake and symbols of its impact on the village. For the villagers, those ruins also represent memories of the historical event. Therefore, some of them would like to conserve these ruins as such and, therefore, try to clear them of the vegetation and fallen rocks and earth. This work of clearing the area has been undertaken by the municipality, in collaboration with the Association of the Friends of the Old Rognes. It represents, for most of the villagers, a way to recall not the earthquake, but the old village as it was before the destruction. Nevertheless, the two representations are linked, because the earthquake is the event which has caused the village to be petrified in time and has given it its actual aspect. Laying eyes on the ruins leads one to remember the earthquake. The desire to clear these ruins is therefore another way of socially appropriating the memory of this earthquake.

These ruins, as well as the pictorial and written documents produced by the Rognens, also constitute social, economical, and political stakes that different social groups have projected in the core of interest conflicts. First, they are social stakes, because the documents are being transmitted and exchanged by the way of different and particular networks of sociability. These are notably centered on the Association of the Friends of the Old Rognes, which is, thanks to its status of institution keeper of collective memory, the addressee and sender of many documents.

Secondly, these ruins and documents are also political and economical stakes that crystallize notably around two activities meant to conserve, transmit, and valorize some reminders of the earthquake. The first activity is the clearing of the ruins of the old village, and the second is a project aiming at the creation of a museum devoted to the patrimony of the village, and notably to the earthquake of 1909. They imply particularly two social institutions whose aims are often in conflict: the municipality and certain members of the Association of the Friends of the Old Rognes, reputed to be politically opposed. Whereas the municipality must weight economical interests and manage all its responsibilities according to political and financial priorities, the association mostly attempts to conserve the memory of the village.

The preservation of the ruins on the hill of the "Foussa" (which belongs to the village's landscape), leads to real estate, environmental, and esthetical stakes. Indeed for the association, the priority is the preservation of the site, the respect of the environment, and the valorization of its esthetical patrimony and of its part in the memory of the village. On the contrary, for the municipality, the priority is the valorization of the real estate capital of the plots on the hill; valorization that goes through the management of the attributions of construct permits for parcels that enjoy a privileged view.

Another object of divergent economical interests exists and is directly linked to the earthquake of 1909: a project for a museum bearing on this event, alone or together with the other patrimonies of the village. This project has been proposed by the Association of the Friends of the Old Rognes. It is actually on a standby, because, in spite of the municipality's agreement with the principle of its creation, its realization constitutes an economical stake. Indeed, it needs the freeing of monetary founds. Thus, the question is, "who must pay?" It has been raised during the launching of the project, and is still on a standby: this project does not seem to be a priority, in comparison with some other actions of the municipality (who is officially responsible for this kind of project).

The earthquake has petrified the village in time, marked it and caused its actual aspect and structure. For the Rognens, it belongs to the historical patrimony of the village, a fact confirmed by the will to consecrate a municipal Museum to this event. Now, the patrimony is a vehicle of collective identity. It speaks of the community, of its history, its characteristics and its identity. Moreover, for the Rognens, the fact of

belonging to a family whose members have witnessed the earthquake is intimately linked to the fact of belonging to a "real Rognen family." This natural event has thus become a constitutive component of the collective and familial "Rognen" identity.

According to Pierre Nora (1992: 977 and 985), "France has entered into a stage of high commemorative frequency," whose "two inevitable pillars" would be "the compulsory exposition and the fateful symposium." Commemoration would then constitute another step in the process of memorization of a historical event. Now, 90 years after, the "commemoration" of the historical earthquake of 1909 turns out to be conveyed not by ceremonies, but only by the publication of a few texts and pictures in a special issue of the annual publication of the Association of the Friends of the Old Rognes. Among the factors liable to explain this absence of commemoration (according to the definition of Pierre Nora), there is first the fact that this event happened a long time ago (90 years), and secondly the fact that it concerns actually a small number of Rognens. Indeed, the majority of the population is formed by new residents (not originated from Rognes) who feel a large indifference toward the earthquake of 1909. This relative indifference is to be found in all the neighboring villages that were touched by this natural catastrophe in 1909. However, World War I does not directly concern the actual generations either, but it is nevertheless commemorated over the whole French territory. Here intervenes a factor linked to the will of the authorities to commemorate such an event. The commemoration of the War concerns the whole nation and is organized through the entire territory, whereas the earthquake of 1909 concerns only a few villages in a small region. However, this local characteristic does not constitute an obstacle in itself. Indeed, according to Pierre Nora, the commemoration "obeys to the own logic of particular, regional, corporately or institutional interests" (Nora 1992: 987). But the absence of cohesion between the villages concerned by the earthquake on the level of a possible joint effort of conservation and transmission of its memory can constitute an obstacle to the organization of commemorative manifestations.

Finally, a primordial factor resides in the choice of the historical events about which a commemoration is considered necessary by the society. The choice is linked to the interest that the society can find in the commemoration. Thus, commemorating a war can be a means to instruct the young generations, to prevent them from reproducing the errors from the past. But war is a man-made catastrophe, that is, caused by men, while earthquakes are natural and unpredictable events. Has the commemoration lead to a pedagogical perspective in this case? Does the nature of the event which is the object of the social appropriation (the earthquake) pose a limit to this process? Such a question surely calls for a comparative study with societies that have suffered other deadly earthquakes.⁷

When Society Arms Itself Against Earthquakes

The whole region of Rognes is submitted to a seismic risk. The Rognens have become aware of it while some of the villagers were thinking about the lessons they could learn from the history of the village, and more precisely from the events that took place there during the earthquake of 1909. Relying on their knowledge of this time, they have proposed "rules of common sense" meant to manage efficiently the state of crisis following an earthquake that happens after the occurrence of the catastrophe and before the arrival of the emergency rescue. They have, for example, suggested the necessity to create store-rooms forclearing instruments (shovels, pickaxes, etc.).

This realization that took place in Rognes coincides with an awakening of the consciousness on a national scale. For instance, Haroun Tazieff has reminded us of the existence of a seismic risk in the south-east of France. However, he as also underlined its moderation: earthquakes of high intensity in this region are rare and spaced out in time. The fear they inspire is thus slight, all the more since a certain form of forgetfulness exists that permits human groups to go on living under a diffuse threat without being perpetually anxious. We must add here the faculty of the human mind which consists in thinking that misfortune only happens to others, never to oneself, a faculty which has the same reassuring function as forgetfulness. In this context, the emergence of an awareness of a seismic risk and of the necessity to take charge of it is harder to manage, all the more since the political, economical, technical, and scientific authorities responsible for this action are confronted with this attitude of the population and tend to adopt it themselves.

In spite of the moderation of the seismic risk in France, measures have been taken through the constitution of a group of national laws whose aim is the protection of the population in case of earthquakes. These measures are of three kinds: the first group is a corpus of rules concerning the construction of buildings and urban development, the second group bears on the information of the population, and the third group aims at the organization of the emergency rescues. A study

of the way the Rognens manage the seismic risk must then be founded on an analysis of the way those national rules are applied on the level of the village. We will thus also consider the "official" formulation of those rules. Besides, the analysis will also bear on the reflections, actions, and projects conceived more specifically by the Rognens themselves.

The norms concerning the construction of reinforced buildings are obligatory and depend on a zoning of the communal territory, which takes into account the nature of the soils and their behavior during seismic tremors. This zoning is transferred in a document owned by all the villages which are submitted to natural risks, the "Preventive Plan for Predictable Natural Risks" (formerly called the "Plan for the Exposition to Natural Risks"). The municipality of Rognes owns this document, which contains a zoning of the pieces of land of the village, numbered from 1 to 13 according to the risk.⁸ To each of these numbers correspond a certain number of construction measures to be respected. This Plan has been created in Rognes by taking account of the seismic past of the region, notably of the earthquake of 1909. It is annexed to another document which is owned by all the municipalities in France, the "Plan for the Occupation of the Soils," which takes into account all the environmental factors necessary to organize and manage the territorial development and the use that can be made of all the pieces of land within this communal territory, and principally the norms of construction that have to be applied on those plots.

The municipality of Rognes, when it delivers a construction permit to the owner of a plot, refers to the "Preventive Plan for Predictable Natural Risks" and to the "Plan for the Occupation of the Soils," and warns the owner about the existence and the nature of the risks which threaten his plot, and about the obligation to apply the suitable measures of construction. However, even if it is obligatory according to the lawto apply those rules, no control is ever made on the building site to verify that those norms are respected on the level of the individual houses. On the other hand, State organizations and security commissions control the construction of the public buildings.

The creation of the "Preventive Plan for Predictable Natural Risks" is the consequence of the elaboration of laws relating to the compensation of the victims of natural catastrophes that have also lead to the creation of insurance covers. All those measures are meant to allow the French society to act on the reconstruction of its economy afterthe occurrence of natural catastrophes

like the earthquakes. They are based on a definition of the "state of natural catastrophe" that does not stand out by itself:

...are considered as effects of natural catastrophes, according to the meaning of the present article, the direct material damages uninsurable whichhad fordeterminant cause the abnormal intensity of a natural agent, when the usual measures that have to be taken to avoid these damages could not prevent their occurrence or could not be applied (*Code des Assurances* 1997: 123).

...the state of natural catastrophe is asserted by a ministerial decree which determines the zones and periods where the catastrophe took place and the nature of the damages resulting from it and covered by the insurance cover aimed at by the first paragraph of the present article (*Code des Assurances* 1997: 124).

Thus, the disaster-stricken municipalities have to ask the prefecture to be classified in a zone of natural catastrophe, and an inter-ministerial decree must be emitted so that the "state of natural catastrophe" can be recognized. This state is thus decreed by national political authorities according to economical and social criteria.

In order to manage the citizens' security in case of a natural catastrophe, two plans of rescue exist in France, the O.R.S.E.C plans, and a group of emergency plans meant to "face risks of particular nature or linked to the existence and to the working of installations or specific devices8" (Journal Officiel 22 July 1987). In concrete terms, the enactors of these plans of rescue are the Civilian Security Agents who are, for the village of Rognes, the firemen of Lambesc, a village of 10 km distance. The firemen, as such, are trained to execute these national plans, but those of Lambesc have also taken - because of the local seismic risk - a few initiatives on the level of prevention. To inform the population about what to do if an earthquake was to happen, they have created posters and have inserted security orders and counsels in their calendars. Moreover, in the first-aid training they usually teach, they have introduced an additional set of lessons about the rescue of earthquake victims.

The village of Rognes also owns a "Communal Committee for Forest Fires" whose members are Rognens who have volunteered to survey the surrounding forests, because of the risk of fires, which are frequent in this region of France. They benefit from the first-aid training of the firemen of Lambesc, but also from a teaching about the management of natural catastrophe that they have obtained from the Civilian Security and adapted to their local level. Indeed, originally devoted to the survey of the forests, the members of the Committee have decided to prepare themselves to the seismic risk and to the management of the crisis usually following earthquakes. This decision is the consequence of a reflection about their ability to manage the immediate emergency in the village while waiting for the Civilian Security to rescue the people. Indeed, as Rognens, they have a certain knowledge of the logistics and means of the village. and as a structured group (the Committee), they feel better prepared and trained to manage the panic and to guide and comfort the population.

Concerning the information of the population about the existence of the seismic risk and about the behavior to cope if an earthquake should occur, the national regulation provides for the realization of informative posters by the prefecture, which have to be posted up in the public buildings and premises receiving people. It plans also the creation, by the prefecture, of a "Cell for the Analysis of the Risks and for the Information of the This "Cell" is meant to constitute a "Departmental File for Major Risks," which must present – with the help of maps – an inventory of the major risks representing all the villages of the region under the responsibility of the prefecture. From this inventory, the "Cell" must send to each concerned mayor a "Synthetic Communal File" which must allow the municipality to realize a "File of Information on the Major Risks," available in the town hall for all to consult. The municipality is also supposed to create informative posters and post them up in the public premises.

The municipality of Rognes is still waiting for the "Synthetic Communal File" that the prefecture has to send. In the meantime, it plans to elaborate an "official plan of communal rescue" in order to organize an autonomous preventive plan for the village that should face the crisis while waiting for the emergency rescue, and that should make the whole population participate. On this level, some members of the Association of the Friends of the Old Rognes wish to constitute an extramunicipal cell, meant to think about the best ways to protect the population. The relations they maintain with the municipality (who is officially the only one responsible for security plans) raise political, economical, and social stakes through which the modes of social appropriation of the seismic risk in Rognes

fully manifest themselves. Indeed the members of the Association would like to create a "politically neutral cell" made of people belonging to every political side and social strata. Thus, they hope to share the ideas with the greatest number of Rognens, arguing that, should the plan be thought about only by the members of the municipality, it wouldn't be representative of the whole population. The municipality agrees with the creation of this cell as long at it keeps only a reflexive part. The realization still belongs to the municipality.¹⁰

Concerning the social appropriation of the seismic risk, as we can see, the rognen society is not isolated from the national context as it is on the level of the memory of the earthquake of 1909, which concerns only this village and a few neighboring ones. Concerning the management of the seismic risk, the inhabitants of Rognes apply on a local level French rules put into place by political, economical, and scientific authorities. Besides, we can see the influence of the French cultural and scientific context in the way the Rognens explain earthquakes. For them the earthquakes have no supernatural or religious origin, but their explanations follow from the theory of plate tectonics, which is spread notably by the mediation of schooling and the media. The Rognens' knowledge is more or less precise, but it always relates to the scientific knowledge admitted by modern occidental societies. The causes given to explain earthquakes are factors conceived as totally natural (and not as supernatural manifestations, as in certain societies¹¹), and the fact of considering them that way proceeds from a cultural act which goes through a culturally structured thought, a formulation in a certain language, and which obeys social stakes and preoccupations.

The earthquake is a natural catastrophe, but men's fears bear on the consequences of its impact on the society, and it's against those consequences that men try to defend themselves by working on the protection of lives and material possessions like houses, urban superstructures, communication networks, public buildings, and works of high technological risk. Thus, scientists and authorities in charge of civilian protection have determined three parameters that define the seismic risk:

- the natural hazard, which is the probability for the occurrence of an earthquake;
- the worth of the persons and material possessions exposed to the consequences of an earthquake;
- the vulnerability of these persons and material possessions.

Nowadays, on one hand, mencan not act on the seismic hazard, which remains a natural factor, independent from human action. Men can determine neither when, where, nor with what intensity an earthquake will occur, and they cannot control any of these parameters. They can appropriate this natural hazard only by the mediation of language, the elaboration of conceptual and technical tools, and the development of knowledge and *savoir-faire* meant to comprehend the natural mechanisms of the earthquakes in order to discover effective methods of prevention. Those instruments of comprehension are culturally determined by the technical knowledge of the society in a given period of its history.

On the other hand, human societies can act on the consequences of the earthquakes by working on the vulnerability of the persons and possessions exposed in zones that have been recognized as risky ones. Indeed, they can distribute the population on the territory, because "populations and possessions exposed are more and more numerous, and this tendency should carry on because the risks of damages in case of a natural catastrophe increase with demographic and urban growth" (Ramade 1987: 11), the latter being frequently corollary of conditions like "the concentration of socioeconomical activities in geographical areas subject to a high effect of cataclysms" (Ramade 1987: 11). In the south-east of France, a simulation of the earthquake of 1909 took place in 1982 in the same region illustrating this correlation between demographic growth and social activities on one hand, and the increase of human and material losses on the other hand. Acting on the vulnerability of persons and possessions exposed is problematic, because it implies the reduction of the demographic growth in a Mediterranean region valorized on urban and tourism levels. Asking the population to stop settling in the south-east of France is an illusory enterprise, especially when the seismic risk is moderate.

However, in this region, the example of Rognes shows that the society can act on the vulnerability of persons and possessions exposed thanks to preventive measures, rules for the construction of buildings, the organization of emergency rescue, and the information of the population. In order to determine the forms that its action will take, it makes a calculation in terms of costs and benefits which will be determined by the importance accorded to losses that an earthquake can generate in relation to the cost of the struggle against this earthquake. Through the means it gives itself to act on the consequences of an earthquake, the society thus appropriates this aspect of the earthquake which is its

impact on the human material and social structures. To achieve this aim, the society acts not directly on the earthquake, but it modifies its own structures in order to make them less vulnerable. For instance, it can transform its legislative system, its practices in terms of architecture oremergency rescue, or the representations of the population (notably through information, media, laws, and the popularization of scientific knowledge).

Conclusion

In Rognes, the work of the memory, individual and collective, of the earthquake of 1909 has transformed this phenomenon of natural origin into a historical event. Its impact on the village (symbolized by the ruins) has been memorized through the elaboration of documents which are bearers of memories and vehicles of the history of the village (papers, souvenir albums, postcards). These documents – as much as the ruins and the earthquake itself – have become the stakes of a process of conservation and transmission, and have then been invested with the function of patrimonial elements; elements which are symbols of the collective identity of the village. As for people, the seismic risk is the object of a reflection in terms of a communal plan of rescue and of rules of national prevention through one of its particular aspects, which is its potential consequences on the community, its structures, and its inhabitants. While trying to become less vulnerable. men have engaged in a "struggle" with the seismic risk that goes through a modification of their own social practices.

Through this study, it is possible to arrive at a few conclusions on the particularities that arises between the relation nature and culture, speaking of phenomena a priori unreachable, the telluric phenomena. Indeed men, even confronted to wide, sudden, and implacable manifestations of their planet, elaborate forms of cultural appropriation on the level of the natural hazard (by the elaboration of representations, knowledge, etc.), and at the same time on the level of the consequences of these telluric phenomena on the societies. On this level, the appropriation goes notably through an adaptation of the social structures aiming at the reduction of their vulnerability before the impact of these telluric catastrophes. The example of Rognes shows that a human society, confronted with an outward telluric catastrophe, tries to elaborate cultural means in order to make it penetrate the social field.

Notes

- 1. Cécile Quesada is a second year doctoral canidate at the EHESS, Ecole des Hautes Etudes en Sciences Sociales.
- 2. Geology, seismology, technology of the constructions, etc.
- 3. 46 victims, counting those of the neighboring villages.
- 4. The ruins of the old village were destroyed in 1909.
- 5. For example, French authors like Descola 1986: 100; Levi-Strauss 1962.
- 6. Well-known scholars have worked on the topic of collective memory such as Candau 1996; Halbwachs 1968, 1994; and Muxel 1996.
- 7. A project I intend to apply on Polynesian societies confronted with phenomena of seismic and volcanic origin.
- 8. From 1 to 7 for the seismic risk and 8 to 13 for the risk of landslides.
- 9. Like dams, dikes, nuclear reactors, etc. (note of the author).
- 10. The municipality itself has informal contacts with the Minister of Environment, the Technical Center for the Equipment, and the Department Direction of the Equipment in order to make inquiries about the information of the population.
- 11. I have written a D.E.A. thesis on this topic by studying the representations and practices of three Polynesian societies confronted with telluric phenomena.

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