VUELCO: Volcanic Unrest in Europe and Latin America 2nd WORKSHOP

"Scientific advice, decision-making, risk communication"

7th – 8th November 2013

SESSION 3- "Risk communication: building a risk aware and prepared community"

Talk 6: "Risk communication via mass media".

Marco Cattaneo, Editor in chief at "National Geographic Italy" and at "Le Scienze", Italy.

First of all, I would like to thank you for asking me to intervene in this context.

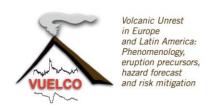
It will not be a scientific intervention, because I'm a journalist. That is to say, I'm one of those people who, in his daily practice, find themselves between scientists (in this case geophysical volcanologists), the Civil Protection that deals with the protection of citizens, and the citizens themselves, who are the end users of an information- education process that in Italy has some problems.

The problems of risk communication through the media have emerged during the L'Aquila earthquake of 6 April 2009. Such problems existed even before, but that event highlighted them as part of the most important elements of the seismic and volcanic risk management in Italy.

My view as observer suggests that the problem of risk communication has grown worse, further and seriously, with the trial of the members of the Major Risks Commission - convened a week before the earthquake in L' Aquila – that finished in October 2012, with a sentence of six years imprisonment in the first degree for the members of the Commission.

Since the L'Aquila earthquake, several seismic events occurred in Italy, for which different methods of risk communication have been implemented, and there have been several situations, often quite bizarre, I would dare to say questionable, also regarding information that has reached citizens.

I would like to start with the Emilia earthquakes of May 2012. The first major shocks in Emilia occurred at the end of May 2012, and affected also Lombardy and Veneto. There was a long seismic sequence, of which the Italian media largely informed the citizens, even in relation to things that had never occurred in Italy . For example, information was given about a quite common phenomenon, that can be experienced









on the beach with a bucket for kids, wet sand and a stone. The phenomenon, according to the information provided, seemed something mysterious linked to water emerging in homes during the shocks, while it is a rather well known phenomenon. Unfortunately, some kind of mystery was built around this phenomenon and newspapers presented it as some kind of exotic event.

Regarding information to citizens, an even worse situation occurred during the long seismic Emilia sequence: several media, both paper and web publications, especially the not verified ones, spoke of *fracking* as the possible cause of earthquakes. Hydraulic fracturing or *fracking* has never been performed in Italy, as well as any oil survey over the past few years in that territory, yet such information was conveyed to citizens, raising panic and disinformation on something that has never taken place. And this is the Emilia case-study.

There was a second case, which I deem very positive in terms of information, at least to the local population: it is what happened during the Pollino earthquake in October 2012. The Major Risks Commission launched a risk warning for potential pretty intense earthquakes in that area, that is a seismically at risk region, as all the maps of seismic risk in Italy have been claiming for years.

The report released by the Commission was conveyed through a perfectly linear process.

What reached citizens - at least through the local media and not through national ones (but this is a different kind of consideration that should be done)-, is a standard by communication terms; a message perfectly understandable and perfectly interpreted was conveyed to newspapers and local TV stations.

A different matter occurred just a few months later, in January 2013, with the seismic sequence in Garfagnana (Tuscany) where, as we know, there was a communication misunderstanding, whose origin was never completely discovered.

There was a communication released by INGV to Civil Protection, that reached local authorities. This has been immediately transmitted to citizens via twitter and through by-law, causing spontaneous evacuation of thousands of people.

It was one of those cases where the use of social networks has been a little reckless and caused panic that, all things considered, could be prevented to citizens. The information originally was not exactly what was eventually conveyed by the local authorities.









Therefore there are several aspects that should be considered to some extent: internet and social networks are extraordinarily important means to make people get information on risk perception, risk communication, and also on the risk prevention, but at the same time they represent a terrible double-edged sword. The information conveyed through social networks and internet is rarely verified and can be hardly controlled by those who have a thorough understanding of such problems and issues.

There is another episode I would like to remember, because so far I have talked about earthquakes, whereas this workshop focuses primarily on volcanoes. Actually, the issue of risk communication is extremely similar in both cases.

At the beginning of last September, Italian newspapers reported the claims of a Japanese volcanologist, Setsuya Nakada, on the possibility of a Vesuvius' explosive eruption. Moreover, Nakada also stated that — maybe not knowing extensively the subject — the issue is not widely discussed in Italy. As a matter of fact, the subject was being discussed in Italy, although I cannot take credit for that as I wasn't directing the magazine yet, but National Geographic published a 20-page article on the risk of an explosive eruption of Vesuvius. The article was also highly debated and partially disputed, but it definitely tackled some of the aspects that Nakada placed no later than two months ago.

Italian newspapers gave much importance to this news, but no one talked about the new evacuation plans and new "red zone" that the commissioner Cosenza talked about during his just given presentation.

The alert launched by an expert (preferably a foreign one, as the same alert launched by an Italian expert would not have the same relevance) in the world of media, creates a short-circuit that ends up being published on news websites within the following 30 minutes. It takes just one journalist to be present at a conference of that kind and the news will bounce around in all directions.

Yet, no one, not even at the local level (although maybe Dr. Cosenza could confirm) ever spoke in detail and in depth of the red zone enlargement and of its reasons.

Actually, a great controversy occurred in local media about the red zone of Vesuvius, although related solely to the authorization of the set-up of an hospital in that area. This means that, to some extent, there is a short circuit in the Italian information. In-depth information does not reach the pages of a newspaper; it perhaps reaches the newsrooms, perhaps at the level of chief editors, but generally, deeper and somewhat more important information, that we would like to convey to the public, cannot go beyond the









stage of the press, cannot get over the embankment of a newsroom that says "Yes, it sound okay and interesting but still, no one would understand".

There is a whole range of problems that delays communication risk through Italian media. On one side, there is a typical Italian problem (or partially it can exist even abroad) represented by the lack of trust in institutions. Dr. Christie talked previously about "trust in scientific expertise", that is the trust in what scientists know. This is what lacks right now in the Italian scene, and not just that: what lacks is trust in any type of institutions. Today's Italian journalism, the world of Italian information, lack of trust no matter where the institutions go and what the institutions say.

The control over the media (not meant in a whatsoever negative way) means to check that information over a given matter is correct and based on facts and or research on which scientists may even spend years or decades. Information depends on and is necessarily linked to the reliability of who conveys it.

All things considered, when any type of trust – even the scientific one - in institutions is missing, it is hard to convey a positive message, or, at least, it is difficult to have control over the outflow of messages, that should be not necessarily positive, but not less than correct.

On the other hand, I have the impression – and I had the chance to discuss about it two months ago during a meeting promoted by the INGV in Pisa – that some gaps are present in the communication process with the INGV and the Civil Protection on one side, that already exchange information, and on the other, local authorities like the ones in Garfagnana, that thought to rush an alert, maybe also after the experience of the process to the Major Risks Commission.

If I were an Italian mayor, after the outcome of the first instance of the process of L'Aquila, I would probably behave like a "Pontius Pilate" as much as I possibly could, and I would also evacuate a city of 6 million people, in order to avoid the risk of being involved in judicial matters and proceedings.

Therefore, I have the feeling that what is missing is a specific link between the world of civil protection and science on one side and local authorities and media on the other. That, after all, are the only channels through which citizens can get certain information. As I have already said in Pisa, I think that a univocal point of reference is missing in communication, something that can convey this type of information, made up of communication professionals. I have already pushed for the creation of something that already exists in England, as well as in the countries that we define "civilized" and that is a "science media center".









It should be a communication centre, where communication professionals with expertise in the relevant subjects (not only seismic and volcanic risks but also medical research or anything that is on the agenda nowadays, or anything that represent a sensitive issue for the public), that represents a point of reference for those who work in the information process. I would therefore wish for a place, at institutional level, where communication professionals work, where contacts of scientists could be found, in order to answer to "difficult questions" and clear any doubts to the colleagues working at a newspaper office.

If we are unable to establish a culture of scientific communication (hard thing from my point of view as it would take years or perhaps decades), or a culture of risk communication, media will begin talking about risk communication only during emergencies.

Think about it, nowadays no one in Italy talks about seismic risk, also because, if an earthquake occurs, it generally has a magnitude 2, 2.2, 3. When there is an emergency, such as the seismic swarm in L'Aquila or any other difficult situation to deal with and dramatic as the Emilia Romagna experience, then immediately we need risk communication. So, since there is no background culture, it is very difficult that those involved in the communication of the risk, may have the proper skills to do it.

In Italian newspapers and TV broadcasting networks, today does not exist what in the rest of the world is called "science journalist". The existing ones are usually freelancers who cover sensational subjects or spectacular science, *i.e.* they are asked to write a piece when there is a new million-dollar robot, or something spectacular, but they never get involved when science need to be in the news.

If newspapers deal with risk communication only at the time of an emergency, then an institutional point of reference is needed, and no one else but politics should find one. Rather than from anyone else, I would hope that it came from the Ministry of scientific research. An institutional point of reference that allows to offer certified and guaranteed information - and, most importantly, based on reliable facts - to those who afterwards will have to convey it to the public.

Thank you.

