

The Lessons of the Italian Earthquake

by Claudio Celani

Aug. 28—I woke up at 4:30 AM Aug. 24 and turned on the Italian television news. I have lived in Germany for many years, but my cable television provider offers some Italian channels.

The announcer was reporting on a severe earthquake in central Italy, but it was not clear where. A news ticker ran along the bottom of the screen, and suddenly I noticed: “Arquata del Tronto.” That is in the province of Ascoli Piceno, my birthplace and where my relatives and friends live.

I dialed my brother-in-law’s cellphone and he answered. He and my sister had been knocked off their bed by the strong shock and immediately left the house where they live, in the countryside, to reach my mother’s townhouse, which is more solid. Their house might be damaged,— how severely will be clear with the daylight. I spoke to all three of them. A lot of fear, but thank God nothing more.

I reached other friends. One was out in the street, like most of the inhabitants of Ascoli. Another was at home; the rest of his family, though, had left the apartment and joined the crowd on the streets. A trained physicist, he was confident that the aftershocks would follow the statistical model and be of lower intensity, and saw no reason to leave the building. A third friend, a doctor at the hospital, said her family was unhurt, but her aged parents were so afraid that they were moving to a safer place on the Adriatic coast.

It was a strong, long, and frightening shock. There were reports of victims, but it was too early to say how many. A few minutes after the shock, rescue teams were on the way, directed to the mountain areas close to the epicenter. Contrary to some international media reports, the rescue machine was highly efficient. Many persons were pulled alive from under the rubble, and the injured were flown to hospitals in Ascoli, Rieti, and L’Aquila. Food, medication, and tents were available immediately, as well as specialized personnel.

As the day progressed, and aftershocks occurred, the full dimensions of the tragedy unfolded. Villages such as Pescara del Tronto and Accumoli were levelled. Tens of victims were reported there and in the larger village of Arquata. These are places I have been intimately familiar with since my childhood. My



RT video grab

Rescue teams, shown in an Aug. 24 live broadcast by RT, looking for survivors after a quake of 6.2 on the Mercalli scale struck Amatrice, Italy.

mother's family comes from Montegalio, a village next to Arquata, and my grandparents are buried there. My mother herself was in Montegalio until two days earlier, benefiting from the fresh air there in the hot month of August. Later on, I learned that the hotel where she stayed was so damaged that it was condemned.

Besides frequent family excursions to the area, as a boy I had spent two weeks of every year in a summer camp there. At the end of our stay, we would climb Monte Vettore, the highest in the Sibillini chain, elevation 2,478 meters or 8,123 feet.

Arquata, which had the highest toll of human lives lost in Ascoli Piceno Province (an Italian province is comparable to a U.S. county) with 46 dead, is on state road 4, which follows pretty much the route of the old Salaria (the salt road) that connected Rome to Ascoli, and beyond that to the Adriatic Sea. Further west in the direction of Rome, closer to the epicenter and already in the province of Rieti, one comes to Accumoli and Amatrice. The latter is known for having invented the famous culinary specialty "spaghetti all'Amatriciana." Amatrice is also rich in Renaissance and pre-Renaissance monuments, and is the birthplace of Cola d'Amatrice, a famous architect who was a collaborator of Raphael.

In this area, four regions are adjoined: Marche, Umbria, Abruzzi, and Latium. The local population lives on agriculture and tourism: the survivors have lost not only their homes, but also their jobs.

Today, Amatrice is half-destroyed. Two hundred twenty-five people died, killed by the collapse of houses that in many cases were four centuries old. Those houses were built after the town had been destroyed in a similar earthquake in the 17th Century. They were built of stone, some surmounted by a cement roof. But newer houses, which had been or should have been built with anti-seismic techniques, also collapsed. Such is the case of a school which is now the object of a criminal investigation.

What Must Be Learned

The final reckoning of the earthquake is 291 dead and 2,500 homeless. This is simultaneously a tragedy and an indictment of the budget policies implemented by the European Union.

If the necessary investments had been made, there would not have been one victim to mourn today. Italy is a seismic area—the peninsula is crossed from north

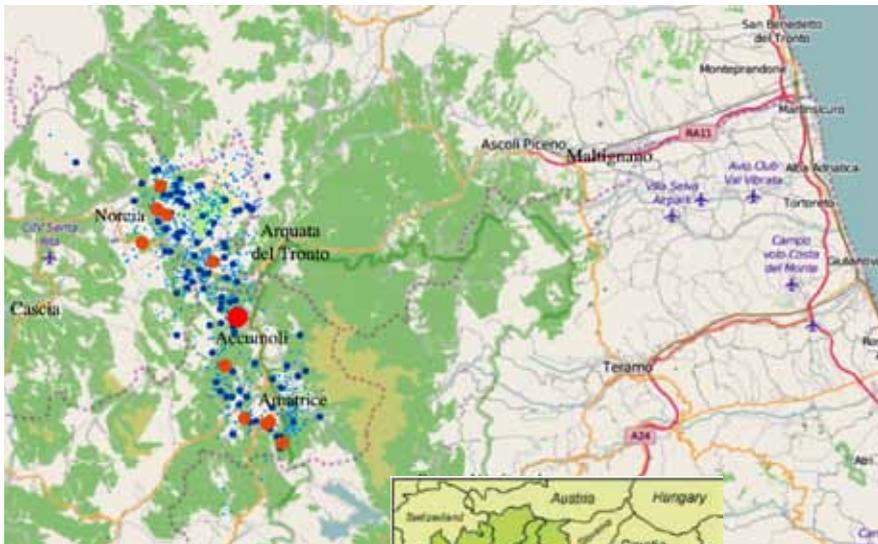
to south by the fault between the African tectonic plate and the Eurasian plate. Over the last 2,500 years, there have been over 30 thousand quakes of magnitude higher than 4 and 5 on the Mercalli linear scale of 1 to 12, and about 560 quakes higher than grade 8. The latter were thirty times as strong as the quake that just hit Amatrice and Arquata.

Thus, nothing justifies the fact that in the towns close to the epicenter, so many houses collapsed and people died. Even if many of them were centuries old and were built of stone, such buildings should have been made safe with known modern building techniques. That this is possible, was shown by the town of Norcia, as close to the epicenter as the destroyed towns, where not one house collapsed and no one died. As the mayor of Norcia explained to the media, this is the result of a serious prevention program implemented in the last decade by the regional authorities, after an earthquake of similar magnitude struck in 1997, with its epicenter in Foligno.

A national prevention program has been on the agenda for decades, dating back to the discovery of such modern techniques, but despite promises by government after government, nothing has been done. The reason is the balanced budget policy which has been imposed on Italy by the Euro system, most strictly since 1992, which become more deadly after 2011. The result is that in the last forty years, it has been calculated that 150 billion euros have been spent in reconstruction after earthquakes, and, astonishingly, merely one billion have been spent for prevention. Professor Armando Zambrano, chairman of the National Council of Engineers, said that a comprehensive national plan to make old houses and buildings safe, might cost up to 100 billion euros. But even if it costs more, it will be money well spent and will save lives.

Budget cuts have also included an awful reduction in university programs in Geology, a key department for mapping seismic activity. From a total of 29 in 2010, there are now only 8, as a result of a 2010 reform that shut down all departments with fewer than 40 teachers.

Additionally, research on earthquake precursors, which is very important, is completely unsupported by the government. Yet the study of precursors is very promising, as shown by researcher Giampaolo Giuliani, who predicted the 2009 L'Aquila earthquake by monitoring radon gas emissions, and warned again



zz/Phoenix7777

An Aug. 24-25, 2016 aftershock distribution map of the earthquake in Italy.



of a coming seismic event by monitoring an increased level of radon. On his Facebook page, Giuliani on Aug. 10 had published a chart of the seismic anomalies, which were part of the earthquake swarm that led to the earthquake on Aug. 24. “At that time I was in California, and while monitoring stations in Italy, I grasped the presence of an anomaly that in the following days gave birth to four earthquakes in the area,” Giuliani said in an interview with *affaritaliani.it*

On Aug. 6, Giuliani had also warned of a “slight increase in radon flux observed in the last hour from one of the stations in Abruzzo.”

However, one parameter is insufficient to make exact forecasts. In fact, in 2009 Giuliani had forecast the epicenter to be in Sulmona, and had authorities acted on that forecast, they would have evacuated the population, or part of it, to L’Aquila, thereby creating more victims.

Nevertheless, radon is one parameter to be included in a multi-parameter system including satellites, that, if adequately developed, could one day allow us to forecast, if not all, at least certain earthquakes.

But this research receives no government money. Scientists such as Professor Pier Francesco Biagi, of

Bari University, have built detector systems which have been collecting precious data in the framework of the International Network of Frontier Research on Earthquakes (INFREP), a group which includes scientists from many nations. However, they are obliged to organize private funds to finance their research, funds which are not always there. Indeed, Professor Biagi reported to *EIR* that he had had a detector only 30 km distant from the epicenter of the latest earthquake, but was forced to unplug it and send it to Romania, because of a lack of

funds. For the same reason, Biagi’s three remaining stations in Italy have been inactive in the recent period.

On Aug. 20, 2009, after the L’Aquila earthquake, Professor Biagi issued a note calling for a national government institution to study earthquake precursors. Biagi started with two considerations: “The first is that those scientists who publish seismic forecasts, at any level, are wrong; the second is that those scientists who insist that earthquake forecasting is impossible are also wrong. Results obtained in the last twenty years have revealed that forecasting an earthquake is not possible in the absolute. At the point when research in this field will have developed better defined techniques and increased the degree of their reliability, some forecasts can be made successfully, even if not everywhere and not every time. In any case, a national institution should be created to this purpose.” That call was ignored.

Italian Prime Minister Matteo Renzi has now promised that the time has come for a change, and his cabinet ministers are calling for separating the costs of damage “prevention” from deficit accounting to avoid violating European Union budget rules.

However, Italy should ask no one for permission to do that. A national program must be drafted and implemented under Italian law, regardless of what so-called “EU law” says. Unfortunately, although Renzi plays the great leader and stages European summits on an aircraft carrier, the man giving the orders sits in the European Central Bank bunker in Frankfurt, and the line from there is: let them eat cake.