How Seven Italian Scientists Were Charged with Manslaughter for Failing to Predict a Deadly Earthquake

Faulted For An Earthquake

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Can We Sue Meteorologists for the Blizzard that Never Happened?

Just weeks ago, New York was paralyzed for an entire day after weather experts warned about a massive "historic" blizzard that threatened the region. Nothing more than a light snow followed, and New York's economy suffered $200 million in damages, mostly to small businesses and low-income workers. The meteorologists were not fined for their false predictions, other than being roundly criticized and taking a severe beating to their public image.

For seven scientists in Italy, though, matters took a much more ominous turn after they failed to predict a deadly earthquake. They were accused in court of manslaughter!

It was late at night on April 5-6, 2009. Rome, the capital of Italy, was fast asleep. Giulio Lorenzo Selvaggi, director of Italy's National Earthquake Center, had been working overtime. When he arrived home tired, he went right to bed. But, he had barely fallen asleep, when he awoke with a sudden start. The entire house was shaking! Selvaggi jumped out of bed as if bitten by a snake.

Selvaggi instantly understood that a severe earthquake was in progress, though he could also tell that the epicenter was not in his area. Closer to the epicenter and he would have felt like a corn kernel being tossed around inside a hot-air popcorn popper. As it was, the shuddering was slower and more stable; back and forth, back and forth.

Selvaggi grabbed his cell phone and dialed his office as he ran to his living room.

Giulio Selvaggi, director of Italy's National Earthquake Center, analyzes seismographs.

Journalist Giustino Parisse will never forgive himself for convincing his son and daughter to remain indoors.

"Where did it happen?" he asked as soon as his aide picked up.

"L'Aquila," came the reply. "5.8 on the Richter scale."

Selvaggi breathed a bit lighter. "At least it wasn't a seven," he told himself.

It turned out to have had a magnitude of 6.3—a bit higher, but still short of a 7. An earthquake of that magnitude in L'Aquila, an ancient city high up in the Apennine Mountains of central Italy, could have meant a death toll of 10,000!

"Go Back to Sleep"

Seventy miles from Rome, the Parisse family spent a sleepless night. They had already been awakened twice by the tremors. The second time, at 12:39 AM, the trembling was so strong that everyone got out of bed. The father, Giustino Parisse, who was also a journalist for L'Aquila's local newspaper *Il Centro*, walked through his home to thoroughly inspect the damage.

In the hallway, he met his son who looked very nervous. "All this shaking is terrifying me," said seven-year-old Domenico.

"I know, I know," his father responded, "but you have school tomorrow. You must go back to sleep."

Giustino entered the room where his 15-year-old daughter Maria slept, and turned on the light. She was also awake. "We're all going to die here," the terrified girl told him. Giustino was also very frightened, but he tried to reassure his daughter. "Nothing can kill you," he smiled to her. Then he went back to his own bed.

Three hours later, Parisse was awakened once again by tremors, but this time much more violent and accompanied by a shower of bricks and debris raining down on his head. Giustino and his wife dashed into the hallway again, using a cell phone to illuminate the way. They tried to reach their children, crawling between the crumbling walls, but it was too late. Domenico and Maria were both dead, buried beneath a pile of rubble.

The earthquake lasted 28 seconds, long

L'Aquila, the city of 75,000 in the Apennine Mountains, in better times.

enough to destroy thousands of buildings all across L'Aquila. When the tremors finally stopped there were 297 dead, thousands wounded and tens of thousands left homeless.

The Earth Is Restless

Already months earlier, the residents of L'Aquila had entered a state of heightened fear. Selvaggi and other seismologists had kept a watchful eye on the city after it was hit by a long series of small tremors (known to the scientific community as a "seismic swarm") that shook the city throughout the winter and spring of 2009.

Small earthquakes were not uncommon in L'Aquila, however. Thus, despite the fact that the tremors followed in quick succession, superficially there appeared to be no reason to panic. Local government officials told residents to remain calm and that there was no cause for concern.

In actuality, there was reason for concern. L'Aquila was crowded with ancient, historical buildings that were not reinforced to protect against the quakes. Furthermore, local officials did not enforce building codes even on newly erected buildings. As a result, many of the city's structures were completely unprepared to withstand a severe earthquake.

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Italy has a long and tragic history of seismic activity. It is situated above the fault line between two major tectonic plates—the Eurasian and African plates—as well as several smaller ones. But no locale in Italy was in as great a danger from earthquakes as L'Aquila. The city of 75,000 was built on an ancient riverbed, which added a special intensity to tremors during an earthquake.

L'Aquila's long history of deadly earthquakes includes one in 1703 that killed 10,000 people. Another in 1915, estimated to have been 7.0 on the Richter scale, left 30,000 dead.

Due to this history, residents were always concerned about it happening again. Whenever the ground shook they grabbed blankets and cigarettes—a time-honored tradition passed down from generation to generation—and ran to the *piazza* (an open square) or a nearby park. Others spent the night in their cars. Anything was better than staying inside an ancient