The New York Times: -The Eruption of Mt. Vesuvius Wasn't Pompeii's Only Killer- [C2]

Secondo alcuni studi, sebbene l'eruzione del Vesuvio sia stata devastante, molti abitanti di Pompei furono uccisi da un potente terremoto prima che la lava travolgesse l'antica città romana.

Pompeii was destroyed by the catastrophic eruption of Mount Vesuvius in AD79, **entombing** residents under **layers** of volcanic **ash**. But there is more to this story of an ancient Roman city's **doom**. Research published last July in the journal Frontiers in Earth Science offers proof that Pompeii was simultaneously **wrecked** by a massive earthquake. The discovery establishes a new timeline for the city's **demise** and shows that fresh approaches to research can reveal additional secrets from well-studied archaeological sites. Researchers have always had an **inkling** that seismic activity contributed to the city's destruction. The ancient writer Pliny the Younger reported from his **vantage point** in a nearby town that the eruption of Vesuvius had been accompanied by violent tremors. But, until now, no evidence had been discovered to support this historical account. A team of researchers led by Domenico Sparice from Italy's National Institute of Geophysics and Volcanology decided to investigate this **gap** in the record. Sparice said that excavations of Pompeii to date had not included experts in the field of archaeoseismology, which deals with the effects of earthquakes on ancient buildings. Contributions from specialists in this area were key to the discovery, he said. "The effects of seismicity have been speculated by past **scholars**, but no factual evidence has been reported before our study," Sparice said, adding that the finding was "very exciting." The team focused on the Insula of the Chaste Lovers. This area encompasses several buildings, including a **bakery** and a house where painters were evidently interrupted by the eruption, leaving their frescoes uncoloured. After excavation and careful analysis, the researchers concluded that walls in the insula had collapsed because of an earthquake. First, they **ruled outhazards** such as falling **debris** as a primary cause of the destruction — a deposit of stones under the wall fragments in the insula suggested it did not **crumble** during the eruption's initial stage. Then they compared the damage to known

effects of seismic destruction — for example, on historical buildings. The excavation also revealed a pair of skeletons covered with wall fragments in the insula. One skeleton even showed signs of having attempted to take cover. According to the researchers, bone fracture patterns and crushing injuries observed in modern earthquake victims are evidence that these unfortunate Romans were killed by a building collapse. The end result is an updated timeline of Pompeii's epic **demise**: First, volcanic lapilli (small stones) rained down for eighteen hours, causing many roofs to collapse and killing people who **sought shelter**. Then, an earthquake triggered by the eruption violently **rocked** the city, killing even more residents. Finally, massive flows of **ash** and **debris** **streamed through** the city streets, sealing Pompeii's fate for eternity. Kevin Dicus, an archaeologist at the University of Oregon who has participated in excavations of Pompeii, said the new evidence is "amazing" and shows how interdisciplinary approaches can lead to new discoveries. "The evidence is always there — it just takes new questions, and new eyes, to look for it," he said. "Archaeology shouldn't be an entirely insular profession." Dicus pointed to how archaeologists are bringing in experts from the fields of architecture, data science and forensic anthropology to answer questions about the lives of average people in Pompeii, and not just their deaths. The interdisciplinary approach used by Sparice and his team could even aid the investigation of the effects of Vesuvius' eruption on cities beyond Pompeii. While Pompeii may be the most famous example of a city devastated by the volcano in AD79, it was **hardly** the only one. "We can be pretty sure that, besides Pompeii, other cities, such as Oplontis, Stabiae or Herculaneum" were affected by the earthquake, Sparice said. Now that researchers know what to look for, they can aim to build timelines of destruction for those neighbouring regions. There is also likely more to discover in Pompeii itself. The new study suggests that other building collapses throughout Pompeii may have been **misattributed** to volcanic activity, when, in reality, an earthquake was **to blame**, Sparice said. The team is now expanding its research to other areas of the city. "Pompeii has been the focus of many excellent volcanological studies, but there is still information that can be gained about the eruption and its effect on the city and its inhabitants," he said.

Glossary

- **bakery** = panificio
- **hazards** = pericoli
- **rocked** = scuotere
- **streamed through** = scorrere attraverso
- **entombing** = seppellire
- **demise** = rovina
- **vantage point** = punto di vista
- **scholars** = studiosi, esperti
- **ruled out** = escludere
- **wrecked** = distruggere
- **doom** = distruzione
- **inkling** = intuizione
- **gap** = lacuna
- **crumble** = sgretolarsi
- **sought shelter** = cercare rifugio
- **misattributed** = attribuire erroneamente
- **to blame** = essere colpevole
- **ash** = cenere
- **debris** = detriti
- **hardly** = difficilmente
- **layers** = strati