

## **Earthquakes: Extent, Effects and Evidence**

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Over the past few months, earthquakes have featured again in public attention in the tragic case of the major Nepali earthquake, a growing consensus about the earthquake-inducing side effects of fracking in the US and a major feature film. Despite the obvious implications for modern policy making and planning, there has been relatively little research into historical earthquakes, partially because of the very limited data we have about such tectonic events before 1500. After defining a few basic terms, this presentation goes over the varied types of damage earthquakes can cause while providing examples from ancient and medieval historical sources referring to them. Rather than limiting our understanding of the effect of these damages to numbers of people killed and percentages of buildings destroyed, past cases have repeatedly shown that major earthquakes can have a significant impact over a region and its inhabitants for decades. To a certain extent, better documented 20th century events from developing countries can help us better understand the long-lasting ripples of these events. Just as important in this regard are the central and local administrations' responses to the catastrophe, which clearly changed over time even in the pre-modern era.

Contemporary research on pre-modern earthquakes usually takes the form of a detailed case study of a single event or a catalog - which is the most widely-useful product of such research. Unfortunately, despite their valuable information, they also skew our understanding of past events, creating a false image of past tectonic activity, and are quite inconsistent with the events they choose to include. The presentation will provide several examples of these issues using pre-modern seismic activity in Anatolia before concluding and suggesting a few promising paths for future research.