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The K/T impact hypothesis and secular neocatastrophism—why is this important to Flood geology?

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Historians of the secular geological sciences have documented the 19th-century victory of Lyellian gradualism over biblical and secular catastrophism. However, gradualism’s rigid approach stifled creative thought and forced many secular geologists to accept counterintuitive interpretations of geological phenomena. Any appeal to catastrophic processes was generally deemed unacceptable. As a science, geology then languished under the burden of gradualism.

This stranglehold was challenged in the early 1920s by Bretz’s work on the Channeled Scablands¹ of Washington State. The refusal of mainstream geologists to admit the obvious was a reflection of the depth of the philosophical commitment to Lyell. Lest anyone should doubt the seriousness of ending one’s professional career by defending some aspect of catastrophism, one needs to look no further than the extensive disclaimer in Derek Ager’s classic book, *The New Catastrophism*.² Thanks to Lyell’s efforts to smear Cuvier with the brush of ‘Scriptural Geology’, geologists long equated any form of catastrophism with the Genesis Flood.

What changed?

Though many credit Bretz with breaking the stranglehold of gradualism, the modern rebirth of secular catastrophism (i.e. neocatastrophism) actually was forced on the gradualists with the unique proposal for the extinction of the dinosaurs at the end of the Cretaceous by the impact of an asteroid.³ This simple proposal

initiated a debate between those who defended an Earth-based cause for the extinction and those who invoked an extraterrestrial (and catastrophic) cause.

At the time of the Alvarez *et al.* proposal, a major shortcoming of the extraterrestrial hypothesis was the lack of any supporting impact crater dated to the Cretaceous-Tertiary (K/T) extinction event. Many who rejected the asteroid impact hypothesis pointed to large-scale volcanism. In 1991, the Chicxulub impact crater was identified in the southern Gulf of Mexico and dated to the K/T boundary.⁴ But even then, many rejected it as the cause of the extinction event and continued to believe that a better cause was to be found in massive flood basalts. However, supporting evidence of an extraterrestrial cause—impact glass spherules and tsunami deposits—were identified at several locations around the Gulf of Mexico. Also, radiometric dating of flood basalt candidates returned dates that fell outside an acceptable range. Those who continued to advocate a terrestrial cause for the K/T extinction event were effectively running out of ammunition.

Solidification of the extraterrestrial cause

Mounting evidence in support of an extraterrestrial cause for the extinction at the K/T boundary has slowly overwhelmed its opposition such that there is now little debate among secular geoscientists over the extraterrestrial cause for the global extinction that they allege occurred at the K/T boundary. Most of the work being conducted today regarding this theory revolves around better defining the formation, morphology, and scale of the Chicxulub Crater.^{5,6}

Why does this matter?

Few outside of the geological sciences fully appreciate or understand the paradigm shift that was cemented by the acceptance of the extraterrestrial ‘dinosaur killer’. Lyellian gradualism suffered a fatal blow. Neocatastrophism, if only relegated to discrete periods of deep geological time, was

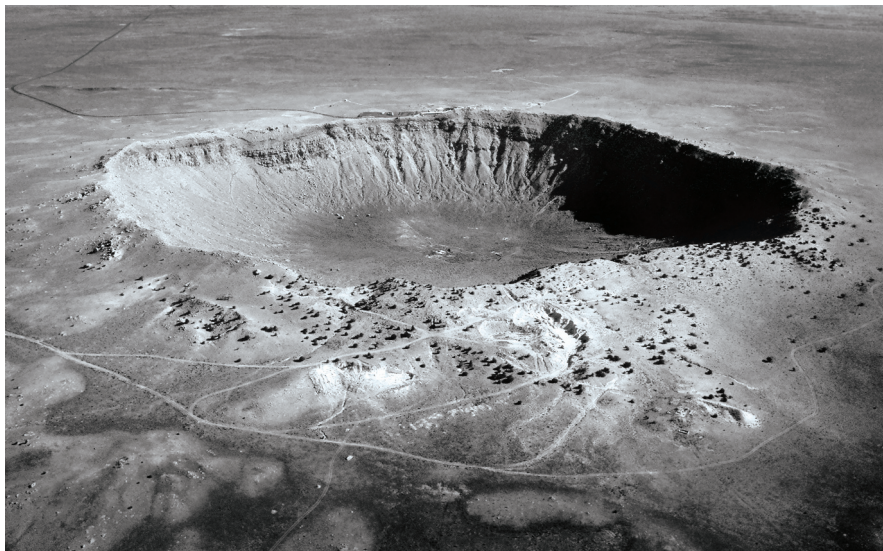


Figure 1. Arizona Meteor Crater. Originally envisioned as a crater created by a volcanic explosion, later study demonstrated it was formed by the impact of an iron asteroid. Questions remain regarding its age but creationists interpret it as having formed after the Flood.

no longer automatically rejected. Suddenly, the rock record could allow for catastrophism (see figure 1). Predictably, once the dam burst, phenomena attributed to catastrophic causes were rapidly identified in many places.⁷ Ironically, these global events now include large scale volcanic eruptions which have been tied to other extinction events. Historically speaking, Cuvier's catastrophism has triumphed over Lyell's gradualism. Of course, both secular gradualism and secular catastrophism are opposed to the biblical catastrophism of the Genesis Flood; another indication of how worldview assumptions drive geological interpretation. But the advent of neocatastrophism has changed the terms of the debate and removed the concepts of uniformitarianism and gradualism from the arsenal of secular geology.

Summary and conclusions

The dominance of gradualism in the geological sciences stifled geologic thought for more than a hundred years. Historians of geology now realize that non-scientific factors preserved that paradigm, even when it was clearly contrary to the evidence. Ridicule and peer-pressure once reserved for any form of catastrophism is now solely

reserved for biblical catastrophism. The simple idea that an asteroid created the massive K/T extinction event recorded in the rocks has forced open the way for neocatastrophism.

Secular geologists now recognize many catastrophes have been documented in the rock record. Creationists would counter that all of these 'events' are merely the location-specific details of the Genesis Flood. Although young-earth creationists were often criticized by gradualists for interpreting the rock record in a more catastrophic manner, this is no longer the case. Without their commitment to the rigid framework of the standard geologic timescale, today's secular neocatastrophists would actually be more aligned with the biblical understanding of earth history.

The rise to dominance of secular neocatastrophism has greatly helped the young-earth Creation/Flood framework. Simply put, there are not enough of us to do the field work necessary to interpret the rock record consistent with biblical history. In many instances, secular catastrophism provides a significant first step towards defining a Flood interpretation of the rock record made possible following the widespread acceptance of the K/T extraterrestrial extinction hypothesis.

References

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