Why are we so attracted to prophecies of doom, from religious raptures to environmental collapse? It's part of our psychology.

IN 1919, William Butler Yeats wrote The Second Coming, an allegory of the atmosphere in Europe after the carnage of the first world war.

Things fall apart; the centre cannot hold;

Mere anarchy is loosed upon the world,

The blood-dimmed tide is loosed, and everywhere

The ceremony of innocence is drowned;

The best lack all conviction, while the worst

Are full of passionate intensity.

The poem draws heavily on the mythic narrative of the apocalypse -- or at least the first half of it, destruction. What usually follows is rebirth and redemption, a second chance, life born anew. The archetype is the Noahian flood myth, the world born again after being washed of its sins.

The latest incarnation of the destruction-redemption myth is brought to you by numerological number-cruncher and evangelical Christian radio host Harold Camping. Originally predicted to unfold on 21 May, the rapture has now been postponed until October after a no-show. It is easy to mock, but such apocalyptic scenarios are not the exclusive property of religion.

Secular end of days may be found in Karl Marx's end of capitalism and Francis Fukuyama's end of history, along with scientistic doomsdays brought about by global warming, ice ages, solar flares, rogue planets, black holes, cosmic collisions, supervolcanoes, overpopulation, pollution, nuclear winter, genetically engineered viruses, the grey goo of runaway nanotechnology -- and
let's not forget Y2K, the millennium bug. In 2004, UK Astronomer Royal Martin Rees put our chances of surviving the 21st century at 50 per cent. Stephen Hawking famously warned humanity that contact with aliens could result in our enslavement or extinction.

Like Camping's rapture, many of these prognostications have failed to unfold. Given that there can only be one apocalypse, most of the others will too.

Why, then, do we find the basic narrative so appealing? What is the underlying psychology behind apocalyptic prophecies, both religious and secular? The answer lies in the emotional and cognitive processes of our brains.

Emotionally, the end of the world is actually a renewal, a transition to a new beginning and a better life to come. In religious narratives, God smites sinners and resurrects the virtuous. For secularists, the sins of humanity are atoned through a change in our political, economic or ideological system. Environmental prognostications of calamity are usually followed with reproaches and recommendations for how we can save the planet. Marxists projected communism as the liberating climax of a multistage process that requires the collapse of capitalism. Proponents of liberal democracy proclaimed the end of history when the cold war was won by democracy and liberty.

Most recently, the US Tea Party's messiah is John Galt, one of the heroes of Ayn Rand's apocalyptic novel Atlas Shrugged (recently adapted into a movie) who leads a strike by the men of the mind, forcing civilisation to collapse into anarchy -- only for the heroes to resurrect an "Atlantis" on Earth. As Galt and co-hero Dagny Taggart fly over the shattered ruins of a once-great civilisation now darkened into a charred landscape, Taggart proclaims, "It's the end." No, Galt rejoins, "It's the beginning."

Cognitively, there are several processes at work, starting with the fact that our brains are pattern-seeking belief engines. Consider this evolutionary thought experiment. You are a hominid on the plains of Africa 3 million years ago. You hear a rustle in the grass. Is it just the wind or is it a dangerous predator? If you assume it is a predator but it turns out that it is just the wind, you have made what is called a type I error in cognition, also known as a false positive, or believing something is real when it is not. You connected A, the rustle in the grass, to B, a dangerous predator, but no harm. On the other hand, if you assume that the rustle in the grass is just the wind but it turns out that it is a dangerous predator, you have made a type II error in cognition, also known as a false negative, or believing something is not real when it is. You failed to connect A to B, and in this case you're lunch.

The problem is that assessing the difference between a type I and type II error is highly problematic in the split second that often determined the difference between life and death in our ancestral environments, so the default position is to assume that all patterns are real; in other words, assume that all rustles in the grass are predators. Thus, there was a natural selection for the cognitive process of assuming that all patterns are real.

Apocalypse thinking is a form of pattern-seeking based on our cognitive percepts of time passing. We connect A to B to C to D causally because they are connected chronologically, and even
though occasionally they form false patterns, in the natural world they are connected often enough that in our brains time and causality are inseparable.

Apocalyptic visions also help us make sense of an often seemingly senseless world. In the face of confusion and annihilation we need restitution and reassurance. We want to feel that no matter how chaotic, oppressive or evil the world is, all will be made right in the end. The apocalypse as history's end is made acceptable with the belief that there will be a new beginning.

By Michael Shermer

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