

The Play is Not About Us

We tend to think that the cosmic storyline is about us. Finding others will enable us to mature with a more modest perspective.

By Avi Loeb on September 27, 2021

We are born into this world like actors placed on a stage without a script and we tend to think that the play is about us. This misconception stems from our ego, which naturally assigns a central role to our existence. In this mindset, things that happen to humans must be triggered by their actions.

A recent [study](#) by archeologists found evidence in the excavation of [Tall el-Hammam](#) that an ancient walled city overlooking the Jordan valley 7 miles northeast of the Dead Sea was destroyed by a fireball airburst from a meteor with a diameter of 60-75 meters, comparable to the [Tunguska bolide](#) that flattened a forest in Siberia in 1908. The timing of the city's destruction, 1650(+/- 30) years BCE, coincides with the period of Abraham and Lot in the biblical story of [Sodom and Gomorrah](#). The traditional story attributes the event to a divine retribution for sins conducted by the city residents. But the modern scientific perspective implies that the rock triggering the destruction of the city was on its deterministic path for a collision with Earth long before the city was constructed or any misconduct associated with free will occurred within its walls. The message from this meteor rock is loud and clear: this cosmic storyline is not about humans.

This misconception is not unique to the mythological stories. The ancient Greek philosopher, [Aristotle](#), asserted that we are at the center of the Universe. Similarly, the same self-centered notion was contemplated outside of Europe.

For example, the ancient [Mayans](#) accurately tracked changes in the positions and relative brightness of the Sun, Moon, planets and stars. They documented their astronomical data in books called codices, with many more quantitative details than other civilizations at the time. The priest-astronomers used observations and advanced mathematical calculations to predict eclipses, and devised a 365-day solar calendar that was off by just one month every 100 years. They determined the orbital periods of Venus, Mars and Mercury around the Sun, but Earth was at the center of their Universe. The Mayans used their accurate data to support a culture of [astrology](#). They correlated the periodic motions of celestial objects with human history and, rather than seeking a physical explanation for their astronomical data, they used it to initiate wars or rituals. The astronomers acquired a high status in Mayan society because their data had political implications. It was based on the belief that the outcome of human actions is related to the rest of the Universe, as observed on the sky. But the reality is that we do not matter that much in the global cosmic perspective beyond Earth.

The [geocentric model](#) was the prevailing paradigm until [Nicolaus Copernicus](#) used observational data to revolutionize the perspective about our cosmic status. The modern

viewpoint based on data on the [cosmic microwave background](#) and the [large-scale distribution of matter](#) around us is that we are not central to any system in the physical universe that surrounds us.

Yet many scientists still believe that we might be central as unique intelligent beings within the [biological universe](#). In the summer of 1950, Enrico Fermi [asked](#): “where is everybody?” but his paradox is presumptuous. It assumes that if we do not hear a knock on our door or do not see anyone partying in our “backyard”, then we do not have neighbors. A more reasonable assertion, premised on [cosmic modesty](#), is that we do not deserve special attention or we did not search enough for related clues.

Even today, many scientists dismiss the search for extraterrestrial intelligence based on the notion that the Earth may be [rare](#). But the Kepler satellite data [implies](#) that major fraction of Sun-like stars host a planet the size of the Earth roughly at the same separation. Thus, nature keeps giving us the message that we are not privileged in any way. The time is ripe for a new Copernican revolution regarding our status among forms of [life in the cosmos](#).

My daughters thought that they are the smartest until we took them to the kindergarten. Similarly, our civilization will mature only after it finds others. Here’s hoping that finding a smarter kid on our cosmic block would have a profound impact on the way we treat each other. Much of human history was shaped by groups of people feeling superior relative to others. Our small genetic differences will become insignificant as soon as all of us stare with awe at technological equipment far more advanced than we ever developed.

The recently announced [Galileo Project](#) will search for such equipment in space near Earth. By following scientific data, we can derive a better sense of reality. Learning is all about letting go of misconceptions without assessing it as a threat to our self-esteem.

We know that the play has been going on for 13.8 billion years since the [Big Bang](#), ten thousand time longer than human history. There is therefore no doubt that the play is not about us. Thus, we should search for other actors who had been around longer and may have a better perspective on what the storyline is about.

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Actress [Sarah Bernhardt](#) as [Hamlet](#) (1899)