Our Biggest Global Challenge

By Avi Loeb on February 14, 2022

The <u>Galileo Project</u> will use telescopes to search for space objects near Earth that are not natural or human-made. Its artificial intelligence software will aim to differentiate <u>atmospheric effects</u> - like clouds or lightning, from <u>natural objects</u> - like birds, meteors, asteroids, or comets, and from <u>human-made objects</u> - like drones, weather balloons, airplanes or satellites. "Whatever remains, however improbable, must be the truth", as the fictional detective Sherlock Holmes <u>argued</u>.

Extraterrestrial equipment should not be a national security concern but a matter of international importance. It falls under the rubric of science because it represents knowledge that is of interest the entirety of humanity. Figuring-out what exists in our cosmic neighborhood should not adhere to borders between nations. It should be the mainstream of astronomy.

This sentiment was <u>echoed</u> by the NASA Administrator, Bill Nelson, who responded to the <u>report</u> from the Office of the Director of National Intelligence (ODNI) to Congress in June 2021, by encouraging scientists to study the class of `*Unidentified Aerial Phenomena (UAP)*' mentioned in the report. In full disclosure, this class should be broadened to `*Unidentified Phenomena (UP)*' without the word '*Aerial*', because astronomers discovered in 2017 a weird interstellar object, '<u>Oumuamua</u>, that was not surround by air and did not resemble anything seen before. Following Nelson's vision, we founded the <u>Galileo Project</u> a month later. By now this initiative involves hundreds of volunteers eager to contribute. It is a big tent including members with opposite convictions, all united by the desire to know more and resolve the puzzle based on scientific evidence. By having different opinions in one team, I am assured that the conclusions we reach together will not be based on prejudice or societal conventions, but be guided by the scientific method of following the evidence wherever it leads.

World affairs are likely to be very different from the reality imagined in the science fiction novel: "The Three-Body Problem", by the Chinese writer Liu Cixin. It is highly unlikely that any of our extraterrestrial neighbors care about our national borders, especially if they are more intelligent than we are. This is for the same reason that we do not care when visiting the jungle, which tree a chimpanzee occupies. Therefore, future insights about our cosmic neighbors should not stem from our national intelligence agencies but rather from an international scientific collaboration, like the *Galileo Project*.

Given the global implications, what should the international community do after the <u>Galileo</u> <u>Project</u>'s telescopes will identify extraterrestrial equipment beyond a reasonable doubt?

Most urgently, who represents humanity and how should we engage with this extraterrestrial equipment? Even if an international organization is established, some people might engage with the object on their own - posing a risk to the rest of humanity. Just as with the COVID-19 pandemic or climate change, an extraterrestrial visit is a global challenge for all of us to collectively cope with; this was already noted by President Ronald Reagan during a speech before the United Nations in 1987. And if we will not get our act together wisely, then cosmic Darwinian selection might wipe us out of existence – justifiably so.

Here's hoping that we will find a message in a technological bottle that arrives at our shore. This message may be the key to our salvation from destructive disputes among nations over borders. Rather than focus on down-to-Earth tensions between Putin and Ukraine, our news reports might elaborate about neighbors in our cosmic street from whom we can learn how to prosper.

Later this week, I am scheduled to attend a forum with former Secretary of State, Henry Kissinger. I plan to ask Henry: "How long do you expect our civilization on Earth to survive, given our current behavior?" I am curious to learn what he thinks, but my answer will depend on what the *Galileo Project* finds. And then my follow-up question would be: "if we find extraterrestrials before we perish, how do we play "realpolitik" with them when we know nothing about their society?"

ABOUT THE AUTHOR



Avi Loeb is the head of the Galileo Project, founding director of Harvard University's - Black Hole Initiative, director of the Institute for Theory and Computation at the Harvard-Smithsonian Center for Astrophysics, and the former chair of the astronomy department at Harvard University (2011-2020). He chairs the advisory board for the Breakthrough Starshot project, and is a former member of the President's Council of Advisors on Science and Technology and a former chair of the Board on Physics and Astronomy of the National Academies. He is the bestselling author of "Extraterrestrial: The First Sign of Intelligent Life Beyond Earth" and a co-author of the textbook "Life in the Cosmos", both published in 2021.