

Protocol for Contact with Extraterrestrial Equipment

Finding equipment sent by other civilizations would require a new protocol for immediate engagement.

By Avi Loeb on October 17, 2021



[Enigma machine](#), displayed at [Museo Nazionale Scienza e Tecnologia Leonardo da Vinci, Milan, Italy](#)

Previous [protocols](#) for possible contact with extraterrestrial intelligence were mostly inspired by the possibility of detecting radio signals from planetary systems around distant stars. Given that the nearest star system, [Alpha Centauri](#), is 4.4 light years away, such signals would require a decade or more for a round trip conversation. As a result, they do not bear consequences to our immediate future.

But a different type of contact could deliver a prompt impact. It concerns physical objects from another civilization, that are already within the Solar system. The arriving hardware need not be brainless but could possess [artificial intelligence](#) (AI) - seeking information about the habitable region around the Sun, our back yard.

The recently announced [Galileo Project](#) will employ telescopes in search for extraterrestrial equipment near Earth. An encounter with related objects would enable instant contact without a significant delay in communication time. The potential for an immediate engagement changes the response protocol relative a delayed radio signal, just as it does for an in-person meeting compared to a letter which is delayed by surface mail.

Currently, there is no international agreement on how humanity should engage with a visiting object of extraterrestrial origin. It would be prudent to formulate guidelines before they are needed, for example - as a result of the [Galileo Project](#) discovering [AI astronauts](#). Any engagement could have implications for the future of humanity and should not be left to the spontaneous whims of a small team of researchers. Since this is an international matter, the [United Nations](#) has the responsibility for formulating the contact protocol.

The safest course of action would be to use passive instrumentation in collecting as much data as possible about the objects of interest. This would include monitoring their response to unrelated human activities.

Given this information, we should weigh the risks and benefits that will result from different engagements. The decision tree on how to proceed will have branches that depend on the objects' properties and behavior. Since it is difficult to forecast these unknowns in advance, decisions will have to be reached in real time.

In order to avoid catastrophic misinterpretations as in the "[Trojan Horse](#)" story from ancient [Greek mythology](#), data must be analyzed carefully within the broadest possible mindset. Deciphering the intent of an intelligent extraterrestrial equipment may resemble the challenge of breaking the code of an [encryption](#) device, as portrayed in the excellent film "[Arrival](#)". This would require a team of linguists and computer scientists, resembling the pioneering work led by [Alan Turing](#) a century ago in breaking the [Enigma](#) code. We might need to rely on our AI systems in figuring out the intent of extraterrestrial AI systems.

A proper interpretation of prompt contact with extraterrestrial technologies could bring about the most significant advance in understanding of the reality around us in the entire history of [humans](#). This new understanding could have major consequences for our future aspirations in space.

Our historic migration out of Africa started about a hundred thousand years ago, but our future migration out of Earth may be triggered by a dialogue with a [messenger from afar](#) that [does not](#) resemble anything we had seen before.

ABOUT THE AUTHOR



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