

A rabbi and an alien walk into a bar: What happens when religious leaders meet extraterrestrials?

A single message from space will show that it is possible to live through technological adolescence...It is possible that the future of human civilization depends on the receipt of interstellar messages.

That famous quote comes from Carl Sagan in his article “The Quest for Extraterrestrial Intelligence”, published in *Smithsonian* magazine, May, 1978. It caused quite a kerfuffle. In the 1997 film *Contact*, based on Sagan’s 1985 novel about humanity getting its first proof of an extraterrestrial civilization in the form of an interstellar radio transmission, one of the characters says this:

My coalition’s phone lines have been flooded with calls from concerned families, wondering if this message signifies the end of the world or the advent of the rapture. We feel that U.S. policy in this matter wants to be extremely conservative – if there’s any chance of danger or threat to our way of life perhaps the message and its contents should simply be disregarded.

Portrayed by actor Rob Lowe, the character is a social conservative political leader. The contrast with the enthusiastic scientist protagonist, Ellie Arroway, played by Jodie Foster, could be a good model for what might really happen if we do discover real evidence of an ET civilization during an era when our own civilization still looks something like it does today. Looking as it does today means having political and social groups that might welcome the news alongside other political and social groups that might rather not have confirmation that this little rock on which we live is not the only place in our galaxy that gave rise to sentient, technologically savvy beings — a galaxy containing billions of Earth-like planets, within a universe containing hundreds of billions of galaxies.

Just considering the numbers should make anyone think that only extreme human arrogance, bordering on psychosis, could lead anyone to think seriously that we are the only creatures in the universe that got to this point, and that nobody else is ahead of us. But we’re isolated on our world, involved in our local problems, and, so far, nobody is talking to us.

That perspective almost automatically brings up the topic of religion, and organized religion in particular, since the latter has set stories and explanations regarding how we got here and our place in the cosmos. Needless to say, Carl Sagan realized that the moment of first contact would put many aspects of society on a collision course with the future, but the religious component of society in particular will probably struggle with it, perhaps even put up resistance.

Hollywood versus reality

Before considering how Earth’s organized religions are likely to face an era characterized by humans knowing about an extraterrestrial civilization, we should outline what kind of contact and knowledge it’s likely to be. Unlike in Steven Spielberg’s wonderful, memorable film [ET: The Extraterrestrial](#), or in [Star Trek: First Contact](#), humanity’s real first contact is probably not going to be a physical contact with

extraterrestrials landing here, holding up a finger with a red light, or a full hand in the Vulcan salute. Extraterrestrials are not going to invade our planet either, like in movies from the 1940s and '50s.

Genetic SETI

One intriguing scenario is sometimes called “genetic SETI”. The idea is that the search for extraterrestrial intelligence (SETI) should look at the DNA of life on Earth. A recent study by a team in Kazakhstan [revealed what the investigators describe as mathematical hallmarks of artificiality in the sequences of Earth's Genetic Code](#), the language that our cellular machinery uses to translate sequences of DNA and RNA building blocks into the sequences of amino acids that make proteins. If it turns out to be true, the Kazakhstan finding would support the hypothesis that life on Earth began as a seeding event, meaning that early microorganisms came from another planet or moon.

Moreover, if sequences within the Genetic Code really are of artificial origin, it would suggest that such a seeding event billions of years ago was carried out purposefully by some intelligent race, rather than by accident due to meteoroids carrying the life forms after being catapulted into space by an impact event at the planet of origin. This scenario may prove to be far fetched, but should it turn out to be true it does not mean that our DNA would carry a specific message for us to read, telling us about the beings who seeded Earth. We would still have an enormous mystery on our hands.

Conventional SETI with electromagnetic signals

More likely, the SETI program, or a future project descended from it, will hone in on some kind of long distance signal — either by way of radio or some other segment of the electromagnetic spectrum — that's being sent out over a time long time period to get the attention of anyone listening. That's how it gets started in *Contact*. But, unlike in *Contact*, it's extremely doubtful that after we learn the language of the transmission we'll find it's telling us how to build some kind of hardware that will transport a human representative (or his or her mind) to the location of the ETs. Sagan knew this better than any of us, but he was also a great writer and knew that a novel needed a great story.

No, probably what will happen is that we'll take years learning the language and the message content will tell us about the history of the beings who sent the message. Generations of graduate students will do their dissertation work analyzing small components of the message and research professors in fields ranging from physics and mathematics to anthropology and linguistics will thrive analyzing the data.

In the course of all of this, hopefully, then we'll learn whether the senders of the message know about other civilizations, and, importantly, how they survived their period of “technological adolescence.” That's the term that Sagan used for the critical period that we seem to be in right now, when technology is increasing exponentially and when we have at our fingertips our own destruction by our own technology like nuclear weapons, or our rescue from natural disasters by our technology. For the senders of the message, their own technological adolescence era would be ancient history, but anything they could tell us might help. We'll spend decades debating about it and we'll enter an era during which we know of the existence of another civilization, know where its home planet is located (which star the planet orbits and how far away it is from us), know that it's possible to survive technological adolescence, but don't have the

technology to send anybody there.

We'll also probably spend a long time debating over whether to send a reply message, telling the other civilization that we're here. If we do decide to reply, there also will be a period when we've sent the first message to them and we're waiting for it to get there and for them to reply. Depending on how far away the other civilization is located, that waiting period between sending our reply and waiting for them to reply specifically to us might be only ten years, or hundreds or thousands of years.

How will religion react?

Whenever discussing a potential sea change issue, there's often an urge to consider how religions or religious people will react. That may make us seem like politicians, but given the centrality of the belief in many religions that humans are special in the universe it seems reasonable to suspect that many religious groups might not welcome the news that we're not alone in the cosmos (unless it's in the form of a divinity). We've had radio communication technology for only about a century. Thus, if we tap into an interstellar communication network, it goes without saying that we would be the most primitive member of such a network. We could be learning about civilizations whose histories are measured in millions of years and with capabilities for controlling planetary environments that make the gods of the Bible and old Greek stories seem like second rate, Stone Age magicians. The ETs could be atheists. They could be effectively immortal, because of technologies that have evolved them into durable machines that never get sick and so to humans, for all intents and purposes, the ETs might be gods themselves.

Or they too could have religions. While a few extremely religious humans devoted to religion X (fill in any religion you want) might feel confident today that the ETs will also be followers of religion X, thereby proving to humans that it's the correct religion, those of us outside of religion, and probably most practically minded people within mainstream religion, can reasonably predict that the ET religions (if they have them) will be nothing at all like Earth religions. And if the religious leaders on Earth are realistic about human nature, and if they remember the history of contact between civilizations of varying technology levels on Earth, then surely they are worried that they might lose large followings of people switching to the alien religion. Given this, it's fairly reasonable to predict that the leaders of the world's big religions, such as Islam, Christianity, Hinduism and Judaism, might be suspicious at best and might get extremely defensive and possibly attempt to place roadblocks against SETI activities.

Given the gravity of the likely religious reaction to a successful SETI, astronomy professor David Weintraub of Vanderbilt University has investigated organized religions for writings and other communications that might be clues of how they would react to a first contact. He consulted and otherwise checked with leaders of more than two dozen major religions and came up with some interesting [trends](#) that could serve as a clue. For instance, on simply believing in the existence of intelligent extraterrestrials, the percentage of atheists saying yes is 55 percent.

That seems low and suggests that even among atheists, 45 percent would be shocked to learn that we're not alone. But within organized religions these are the [numbers](#): 44 percent of Muslims believe in intelligent ETs, compared with only 37 percent of Jews. That may not matter so much in the long run, since, as a group, Jews tend not to be so religious anyway and large numbers of Jews today fall into the

“no religion” category. At the same time, though, it suggests that Islam might turn out to be a little more tolerant of the knowledge of ET life compared with Judaism, Christianity and Hinduism. In his book about the topic, Weintraub notes that the Qur’an includes texts that support the idea of beings on other planets, beings who probably do not practice Islam “as it is practiced on Earth”. According to Weintraub, “All Muslims, likely would agree that the prophetically revealed religion of Islam is a set of practices designed only for humans on Earth.”

But things are different when it comes to Christianity. Different categories of Christians had different rates, ranging from Baptists, of whom only 29 percent believe in ETs to Eastern Orthodox at 41 percent.

Religious Jews and certain Christians may also be preparing to adapt to a time when humans know of extraterrestrial beings. Anybody growing up in a Jewish culture knows that rabbis who study the Talmud are notoriously talented at making Judaism and Jewish life compatible with whatever reality science introduces to the world. As surely as the Earth makes an orbit around the Sun each year, rabbis will have a field day when the existence of an ET civilization is discovered and the details of the civilization explained to the world. They’ll hone in on some religious rule and debate about how it should be observed, based on some examples from a Talmudic passage that somehow parallel the new discovery.

And the Roman Catholic Church is pretty good at this too. Less than a year ago, Pope Francis issued an official [statement on astrobiology and intelligent extraterrestrial life](#). Not only does the Vatican have an observatory with a chief astronomer and research papers in peer review journals, but the pontiff claims to be supportive of humanity’s scientific quest to find out if we’re not alone. Indeed, should we make physical first contact one day, Pope Francis will be eager to baptize the aliens.

And so, at least some elements of the world’s religions are ready, in their own minds at least, for the discovery of extraterrestrial beings. But that begs another question: Will the extraterrestrials be equally ready to deal with Earth’s religious leaders?

David Warmflash is an astrobiologist, physician and science writer. Follow [@CosmicEvolution](#) to read what he is saying on Twitter.