

IAA/IISL Scientific/Legal Roundtable
On SETI and Society

POLICY ISSUES ON COMMUNICATION WITH ETI

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Concerning Communication with Extraterrestrial Intelligence

If you have seen the film "Contact," you have some idea of the chaos that might follow the detection of extraterrestrial intelligence. The reactions depicted in the film include religious mania, government intervention in the name of national security, and efforts to exploit the discovery for career advancement. The good news is that the astronomer played by Jodie Foster took the correct first steps. First, in cooperation with other astronomers, she confirmed that the detection was real. Second, she informed the world.

What happens after that? Should we humans send messages to the civilization we have detected? What should those messages say? Who should decide?

These questions are matters of policy, not science. Until recently, there was no consensus on how to answer them. These decisions were left up to individuals and their immediate organizations, a recipe for confusion.

For the past twelve years, an international, non-governmental effort has been under way to seek consensus on a preferred human response. That effort, based in the International Academy of Astronautics, has produced two documents: a Declaration of Principles Concerning Activities Following

the Detection of Extraterrestrial Intelligence, and a proposed Declaration of Principles Concerning the Sending of Communications to Extraterrestrial Intelligence.

The First Declaration

The first Declaration is about what SETI researchers should do if they detect a signal. By signing up to this Declaration, SETI researchers agree to follow certain guidelines in handling a detection. In addition to technical procedures, there are three basic principles:

-- confirm the detection in cooperation with other researchers

-- inform the public, the scientific community, and several international organizations

-- do not send a response to a signal until international consultations have taken place.

This Declaration, sometimes referred to as the First SETI Protocol, was endorsed by the International Academy of Astronautics in 1989. Since then, this Declaration also has been endorsed by the International Institute of Space Law, the International Astronautical Federation, the International Astronomical

Union, the International Council of Scientific Union's Committee on Space Research, and Commission J of the International Scientific Radio Union. In 1992, The International Academy of Astronautics asked all organizations engaged in radio searches for extraterrestrial intelligence to endorse the Declaration. In the United States, all significant SETI research efforts except one have adhered to the Declaration.

There have been many misunderstandings about this Declaration, mostly caused by inaccurate press reporting. The Declaration is not an intergovernmental agreement; the signatories are individuals, not Governments. The Declaration is not a product of the United Nations. The Declaration is not law or regulation; adherence to it is entirely voluntary. The Declaration is an attempt to build consensus on how to respond to a future event.

The Proposed Second Declaration

The International Academy of Astronautics also has been studying the question of sending communications to extraterrestrial intelligence. In 1992, members of the Academy began drafting a paper proposing a process for deciding whether messages should be sent and for deciding what the content of the messages should be. That paper includes a Draft Declaration of Principles Concerning the Sending of Communications to Extraterrestrial Intelligence.

The Academy's paper, which has been endorsed by the International Institute of Space Law, proposes that international consultations on these questions should take place within the United Nations Committee on the Peaceful Uses of Outer Space. The

purpose of those consultations would be to develop recommendations reflecting a consensus. If those recommendations were adopted, the United Nations General Assembly would consider making the decision on whether or not to send a message, and on what the content of that message should be. The content of that message should reflect a careful concern for the broad interests and well-being of Humankind. The draft also proposes that consideration be given to a long-term institutional framework for communications.

A year ago, the President of the International Academy of Astronautics, Dr. George Mueller, transmitted the Academy's paper to the foreign ministers of nations that are members of the United Nations Committee on the Peaceful Uses of Outer Space, asking that each Foreign Minister consider the possibility that his government might introduce the draft Declaration of Principles into the Committee. While some governments have expressed interest in this concept, none have yet agreed to propose that this subject be added to the Committee's agenda. Apparently, each interested government would prefer that another government go first.

The drafters of the proposed Declaration recognize that its language almost certainly would be changed if it were discussed in the United Nations. Our effort is not to dictate the outcome, but to provide a starting point for a discussion leading to international consensus.

We recognize that the United Nations may be reluctant to take action on this proposal in the absence of a confirmed detection. But the international community will need to start the discussion somewhere. The draft Declaration provides a starting point.

Other Dimensions

The Declarations implicitly rest on the classic radio astronomy scenario of detecting a signal from a very remote source. Some people involved in this debate have asked if the Declarations would apply to other scenarios, such as detecting an alien probe in our own solar system. Some have proposed that Humankind conduct “active SETI,” broadcasting a signal to the Cosmos in the hope of provoking a response. Most of us involved in this debate believe that, in both cases, the basic principles of the existing Declaration should apply: don’t send a communication without some form of prior international consultation.

One participant in this discussion has urged that we address what to do in a “close encounter of the Third Kind,” in which aliens land on the Earth. While this scenario is provocative, most people involved in the debate find it highly unlikely. Another critic proposes that anyone who wants to send a communication to an extraterrestrial civilization should be allowed to. This would lose the benefits of consensus-building and might cause confusion at the receiving end. In any case, few people have access to transmitters capable of sending messages to interstellar distances.

The Politics of the Moment

We can not predict when a confirmed detection will take place. The more time that elapses between now and the moment of detection, the more the cultural and political climate may change. That future climate may be more welcoming and enthusiastic than it is now, or less.

The distances and times involved in interstellar communication are such that there is no essential immediacy in sending a reply. However, there may be some urgency within political systems in deciding how to react or publicly respond to the detection. Political reactions would depend on the circumstances of the time and the nature of the signal.

Some social groups might seek to capitalize on or discredit the discovery. If the detection were made by a private organization rather than by a governmental program, that organization might take the position that the information is not in the public domain. Some political entities in the nation making the discovery might disagree with the view that information about the detection should be shared with other nations. These concerns suggest the desirability of putting in place an open international process.

Developing consensus on how to handle and respond to a detection is a long-term effort, with no guarantee of quick results. But the way we answer these questions may have profound implications. It is in our interest as human beings to assure that the process is open, and that our response to detecting an extraterrestrial civilization rests on as broad a consensus as possible.

Related Documents

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