

PROJECT DESCRIPTION

The project entails the creation of a set of twelve scenarios, set in the mid-21st century, that explore how major world religions might be affected by the reception of various radio transmissions from an extraterrestrial intelligence.

My knowledge and interest in this subject partly rises from my employment with a Houston-based firm, Encounter 2001, LLC, that sends messages to other stars that may harbor extraterrestrial life. The messages are transmitted using a radio astronomy dish in the former Soviet Union. Several scientific messages are included in these transmissions, along with names and short personal messages of the company's customers. The company's first transmission occurred May 24, 1999. It represented only the second time in history that a powerful radio transmission containing information about Earth was sent to other star systems. I have overall responsibility for coordinating the scientists and engineers who make these transmissions happen, and I composed one of the scientific messages included in the company's transmissions. I am aware of at least two other companies, Bentspace.com and the Heineken beer company (see <http://www.heinekenoutreach.com/homepage/>), and a non-profit organization ("Grupo Independente de Radio Astronomos," based in Brazil) that plan to conduct similar transmissions in the near future.

A common premise of the scenarios is that a message transmitted from an extraterrestrial intelligence (i.e., the transmission we would receive in the mid-21st century) would be a reply to a transmission which had been sent from Earth by Encounter 2001 or some other organization. In brief:

- A transmission is sent from Earth
- An extraterrestrial intelligence responds
- The nature of that response affects Earth's religions – but how?

The scenarios were written with the idea in mind of eventually publishing one or more of the scenarios in a popular science fiction magazine.

SUMMARY OF ACTIVITIES

The project activities fell into four categories: background trend research, readings, a course in the future of Christianity, and writing the scenarios.

WRITING THE SCENARIOS

I used the “maximizing difference” approach to scenario construction designed by Dr. Wendy Schultz. Basically, this approach begins by painting a backdrop against which a futures research question is explored. Three trends or emerging issues are chosen from separate Social, Technological, Economic, Environmental, and Political (STEEP) categories. These trends or emerging issues are similar to what Ian Wilson refers to as “macroenvironmental drivers” (“Mental maps of the Future: An Intuitive Logics Approach to Scenarios,” in *Learning from the Future: Competitive Foresight Scenarios*, eds. Liam Fahey and Robert M. Randall, 1998). That is, the trends or emerging issues concern the development of society as a whole, not (in this case) the development of religion in particular. One then considers possible impacts of each of the

trends over a period of time in the future: in this case, through the next half-century. The result is the creation of three separate lists of impacts. Then one considers how these three lists of impacts might impact each other. The result is the creation of one set of cross-impacts upon which to build the background of a scenario. This process is performed four times to produce backgrounds for four scenarios.

However, the purpose of the project is to consider how receipt of various extraterrestrial transmissions would affect major world religions in four futures. For each of the four futures, three possible extraterrestrial replies (to Earth's transmission) are considered:

- A message indicating simply that the extraterrestrial civilization has received Earth's transmission
- A detailed message indicating extraterrestrial belief in the existence of a supreme being.
- A detailed message indicating extraterrestrial belief that no supreme being exists.

The end result, then, is the creation of twelve scenarios.

BACKGROUND TREND RESEARCH

As the maximizing difference approach to scenario construction requires the input of three separate STEEP trends for each of the four scenario backgrounds, I needed to choose a total of twelve trends. Using both library and Internet resources, I spent approximately one week in September researching and then choosing the various trends.

The twelve trends chosen appear in Appendix A. These twelve trends were chosen in consultation with both Dr. Schultz and Dr. Bishop.

Dr. Schultz facilitated a brainstorming session of Futures Studies students on October 2, 1999 to think about the possible impacts and cross-impacts of the twelve trends. The brainstorming session was held at the University of Houston-Clear Lake. Approximately eighteen students participated in the workshop, in addition to Dr. Schultz, Dr. Peter Bishop and me.

During the course of the brainstorming session the impacts and cross-impacts provided by the brainstorming session participants were posted on large tear sheets. After the brainstorming session, I transcribed the impacts and cross-impacts into a Microsoft Word file. This set of impacts and cross-impacts appears in Appendix B. In the process of creating the twelve scenarios, I treated the set of impacts and cross impacts as raw data: as food for thought. In other words, I neither limited myself to the ideas generated in the brainstorming session, nor incorporated all of those ideas in the scenarios.

READINGS

I read approximately one dozen books in their entirety, in addition to several journal articles. I also scanned several other relevant books, journal articles and websites. What follows is a listing both of the books I read in their entirety, and the most significant journal articles and websites I studied.

I began with Ian G. Barbour's 1997 book *Religion and Science: Historical and Contemporary Issues*. This book served as a useful introduction to the relationships between science and religion.

Not having any formal academic training in theology, I placed special emphasis on learning as much as possible about the major world religions, including their history, theology and major sects. Especially helpful were the following books which I read in their entirety: *The Complete Idiot's Guide to The World's Religions* by Brandon Toropov and Father Luke Buckles (1997), Huston Smith's *The World Religions* (1991), Thomas Cleary's (1993) *The Essential Koran: The Heart of Islam* (a selection of representative passages from the Koran), and George H. Smith's *Atheism: The Case Against God* (1989). I also read significant portions of several other books concerning major world religions, including books describing the common rituals practiced by adherents of the religions. To supplement these latter readings I also visited a Hindu temple. (I had visited a mosque earlier this year, prior to beginning formal research on the project.) I also spent a significant amount of time viewing Pentecostal and fundamentalist preachers on KETH-TV, the Houston affiliate of the Trinity Broadcasting Network.

In order to better understand the status of religion in society, and the religious trends that may influence the future of religion in general, I read the following books: *Religion in the Twenty-first Century* by Mary Pat Fisher (1999), *Shopping for Faith: American Religion in the New Millennium* by Richard Cimino and Don Lattin (1998), *Fire from Heaven: The Rise of Pentecostal Spirituality and the Reshaping of Religion in the Twenty-first Century* by Harvey Cox (1995), and *Why Christianity Must Change or Die: A Bishop Speaks to Believers in Exile* by John Shelby Spong (1998).

Regarding extraterrestrial intelligence (ETI) *per se* and methods of communicating with ETI, Albert A. Harrison's *After Contact: The Human Response to Extraterrestrial Life* (1997) was valuable, as was John Prytz's "CETI: What are the Benefits?" in *The Journal of the British Interplanetary Society* (1985). Dr. Doug Vakoch provided several relevant journal articles he has written including, "The View from a Distant Star: Challenges of Interstellar Message-Making," in *Mercury* (1999), "Constructing Messages to Extraterrestrials: An Exosemiotic Perspective," in *Acta Astronautica* (1998), "The music of the spheres" in *Sky & Space* (1998), and "The Dialogic Model: Representing Human Diversity in Messages to Extraterrestrials" in *Acta Astronautica* (1998).

As one who believes that one of the best ways to think about the future is to study the past, I read several books concerning the history of the extraterrestrial life debate. As I show in my research summary below, theologians and scientists have debated the existence of extraterrestrial life for centuries. That intellectual history provides clues as to how contact with an extraterrestrial intelligence might affect religion. These books included: *Plurality of Worlds: The Origins of the Extraterrestrial Life Debate from Democritus to Kant* by Steven J. Dick (1982), *The Extraterrestrial Life Debate 1750-1900: The Idea of a Plurality of Worlds from Kant to Lowell* by Michael J. Crowe (1986), and *The Last Frontier: Imagining Other Worlds, from the Copernican Revolution to Modern Science Fiction* by Karl S. Guthke (1990). Also illuminating about the history of the concept of God was Karen Armstrong's *A History of God: The 4,000 Year Quest of Judaism, Christianity and Islam* (1993). While Armstrong's book does not specifically

discuss ETI, this history provides interesting insights into how flexible religion can be over time and addresses the future of the God concept.

I read several materials that are directly relevant to my research question, including, “Theological Responses to SETI: Catholic Views on the Possibility of Extraterrestrials” by Doug Vakoch (unpublished), and “Christian Theology and Extraterrestrial Intelligent Life” by Thomas F. O’Meara in *Theological Studies* (1999). Particularly relevant were three surveys that attempted to measure how modern clergy or laity would view the discovery of ETI: “Reactions to Receipt of a Message from Extraterrestrials: A Cross-Cultural Empirical Study” by Doug Vakoch and Yuh-shiow Lee in the International Astronautical Federation’s 48th *International Astronautical Congress* (1997), “Attitudes Toward Interstellar Communication: An Empirical Study” by William Sims Bainbridge in *Journal of the British Interplanetary Society* (1983), and a website, “The Alexander UFO Religious Crisis Survey: The Impact of UFOs and their Occupants on Religion” (1994, http://www.accessnv.com/nids/articles/alexander/response_analysis.html). Also, while I did not read this book during the course of my project (I had read this book well before beginning the project), Paul Davies’ *Are We Alone? Philosophical Implications of the Discovery of Extraterrestrial Life* (1995) provided me with many insights.

COURSE IN THE FUTURE OF CHRISTIANITY

I also participated in a four-week course/discussion group concerning the future of Christianity offered through The Center for Theological Studies at Christ Church

Cathedral in downtown Houston from mid-September through mid-October. The discussion group was led by Wes Seeliger, an Episcopal priest in the Diocese of Texas, and Executive Director of The Foundation for Contemporary Theology. The course was based upon Douglas John Hall's book *The End of Christendom and the Future of Christianity* (1997).

PROJECT SELF-EVALUATION

The most enjoyable aspect of carrying out this project was learning about the major world religions as well as learning about the general characteristics of religion and religious change (see pp. 23-26 of the "Research Summary"). The project was certainly a very spiritually uplifting experience: It allowed me to further explore and develop my own sense of spirituality – and priorities in life – all the while advancing my understanding of interstellar communication theory.

Certainly the most challenging part of the project was writing the scenarios. I found the process of writing the scenarios to be extremely time-consuming – much more so than I had anticipated. If I had this project to do over again, I would start writing the scenarios at least a month earlier than I did. I think part of the problem I had was that I had not written scenarios for at least two years before undertaking this project.

Also very challenging was the process of learning about the eastern religions of Hinduism and Buddhism. Muslims believe that the only true version of the Qur'an is in the original Arabic. They believe that something is lost in translations into other languages. The same must be the case with Hindu and Buddhist texts. The Hindu and

Buddhist minds operate under a completely different mindset, or paradigm than the western mind, which is so familiar with the Adamist religions of Judaism, Christianity and, to a lesser extent, Islam.

Once I learned the basic tenets of these religions I decided to scope the scenarios by writing sermons from the perspectives of Christians, Muslims and Hindus. I found that books about world religions usually list five religions as constituting the “major world religions”: Christianity, Islam, Judaism, Hinduism and Buddhism. Because I chose to write four sets of scenarios, I decided to choose four religious perspectives from which to view the three possible extraterrestrial messages in any given scenario set. I chose two different types of Christian perspectives, Pentecostalism and a feminized mainline Christian church of the future, because my research indicated that Pentecostalism and feminism are important change-drivers in Christianity. That left two sets of scenarios to split among Islam, Judaism, Hinduism and Buddhism. While Judaism is theologically, historically and politically significant, as Appendix C demonstrates only 0.2% of the world population is Jewish. Because Islam is the second largest religion, the fastest growing religion in the world, and, with Christianity and Judaism, one of the so-called “Adamist” religions, I chose to write one set of scenarios from a Muslim perspective. Similarly, Hinduism and Buddhism share much in common. In fact, Buddhism grew out of Hinduism. Furthermore, because there are over twice as many Hindus as Buddhists, I chose to write the last set of three scenarios from a Hindu perspective.

Overall I learned a great deal about the world religions, religion in general, and the process of writing scenarios. The next section of this report summarizes my research with regards to religious trends, the limits interstellar communication theory places on the

religious content of interstellar messages, and the possible impact that communication with an alien species might have on major world religions.