The Spiritual Quest in the SETI Research

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Abstract

The SETI research assumes that we live in a bio-friendly universe. But do we live in a spiritual-friendly universe? We propose to include the spiritual quest in a new multidisciplinary approach to the search for ETI (Extra-Terrestrial Intelligence). We plan to quantify different types of alien civilizations including a *Spiritual* factor according to the characteristics of those civilizations as described in our paper. We propose to apply this model to the different ages of human history. Once we have validated our model for human history, we will consider different hypotheses in a stochastic process for alien civilizations and their impact on the galactic neighbourhood.

1. Introduction

We consider the question whether a spiritual genesis is a necessary product of the cosmic evolutionary process or if it could have happened on Earth by chance, as a result of the development of particular events in human history. We should distinguish between intelligent beings and spiritual beings. A further caveat is that we should discuss if the scientific rationality is the only approach that could address adequately the spiritual nature of *Homo sapiens* or any other ET (extra-terrestrial) species.

We propose here a parametrization of the spiritual condition risking a superficial 'mathematization' of the quest when this investigation also requires the philosophical and theological rationalities. We should also consider multiple types of intelligences but this discussion would go beyond the scope of this paper. *Homo sapiens*, as the only available study case, has a spiritual nature that can be manifested in a variety of ways. However, this might not be the case for any other ET civilization.

There are three levels of evolution - cosmic, biological, and human - that represent different levels of complexity and emergence. The natural and human sciences correspond to different types of rationalities that interpret the complex reality. As pointed out by Murphy & Ellis (1996) to give a complete account of reality the ethical and metaphysical rationalities should be considered. We propose to focus on the human evolution as part of a spiritual process.

2. Spiritual characteristics of ET

Instead of giving a definition of spirituality we prefer to describe the characteristics of a spiritual being that includes multiple intelligences. This description might be incomplete but it is an acceptable starting point. Here we propose some features that one might find in a spiritual ET:

1. Symbolic communication: ability to experience beauty and to communicate the emotions, visual arts, literature, compose music, etc. As part of this inter-subjective communication, ET should be able to listen - in other words, to develop a SETI project – and to send messages.
2. Understanding of the universe in scientific categories, explanation of the universe formulating hypothesis founded on cause-effect relationship based on experimental data. As Davies (2011) suggests, the emergence of the science could be related to the historic evolution of the Greek philosophy and monotheism. Here there might be a link between spirituality and science.

3. Ability to invent technology making a rational use of natural resources.
4. Ability to form social structures at different scales: clans, village-cities, nation-states, global organizations governed by rules – a global consciousness.
5. Awareness of past, present and future with concern for future generations.
6. Cult of the dead, reverence for ancestors.
7. Ability to create and to be convinced by a myth, a narrative.
8. Desire of exploration that in an advanced stage of ET evolution would imply space exploration. This desire could express and fulfil a cosmic awareness.
9. Capacity to ask *why* questions going beyond the immediate perception of reality, ability to find meaning and values to actions and structures. This ability allows to do philosophy.
10. Ability to develop a personal relationship with the sacred and a sense of belonging to a spiritual-religious community that might go beyond a national or cultural consciousness. The religious predisposition should not be identified with the spiritual nature though religions provide structure and contents for some ways of spirituality. Will our core spiritual values of love and compassion be a part of alien religions? Will they even make the same distinction between religion and science or will it all be mixed together? (Grinspoon, 2009)
11. Moral sense. Ability to give oneself for the sake of others, to react to evil and to do wrong to others. Freedom to make a choice.

If life is a common characteristic of the universe, we can assume that after a long evolutionary process life will have evolved into a 'Symbolic Species' (Deacon 1997). Forms of iconic and indexical communication are present in many species on Earth, but as far as we know, only humans have built on thought and communication symbolically (Schilhab, Stjernfelt, and Deacon, 2013). If transcendental consciousness is made possible by symbolic thinking, then a spiritual nature could be considered a universal consequence of the symbolic capacity (Deacon and Cashman, 2009). It is fair to say that SETI searches for spiritual beings, someone with whom we could communicate symbolically at an inter-subjective level, – an *alter cosmic ego*.

3. The project OTHER

Homo sapiens has transformed the earthling landscape according to three dimensions that can be described as 1) physical: we have transformed nature using science and technology; 2) subjective which refers to meaning and values; and 3) social-normative which is related to the emergence of civilizations with social rules on which they are based. From these three perspectives, the landscape is built not only in a physical sense - transformation of the land by the emergence of social structures - but also as a mindscape.

We build human landscapes and mindscapes from the other's perspective, moving away, differentiating ourselves from the other, in an attempt to find a common *"we"* or cosmic *"we"*. Therefore the question *who is the other?* is equivalent to the question *who are we?* This is a crucial quest to the SETI research.

The question *who is the other* rises a series of questions. Should we consider ourselves exclusively as *Homo sapiens*? Are we part of a bigger *"spiritual cosmic family"*? Could we establish an intersubjective relationship with other spiritual species? Does it include other animals? Does it include the entire cosmos? How to relate to the *other* without invading ET; without converting ET into us? To address these and similar questions in Córdoba, Argentina, we have started with the project OTHER (Otros mundos, Tierra, Humanidad, and Espacio Remoto) which is a multidisciplinary laboratory of ideas.

4. The spiritual factor

One way to approach the search for a spiritual ET is to introduce the spiritual factor or S factor in the Drake equation that could be included in two of the factors of the equation, *fc* - the fraction of intelligent civilizations that develop technology that releases detectable signs of their existence - and *L* - the length of time such civilizations send detectable signs. Since it is not

possible to directly measure the S factor, the strategy that we propose is to search for signs of the consequences of a spirituality in ET civilizations.

Taking the risk of falling into stereotypes, we could assume that an ET civilization could have developed a moral sense - a system of meanings and values. If this is the case, we would like to find some indicators of the level of spirituality. In a first approach, civilizations can be based on a spiritual-moral sense (S+) or the spiritual-moral dimension might be not only missing but might be evolved in an aggressive-predator attitude (S-). We also consider a S-free or spirituality-independent civilization in which science-technology and spirituality have developed in a complete separated way.

S+ civilizations can be characterized by:

- Respect for other emerging civilizations, openness to other ideas or organizations, willingness to share its cosmic vision and spiritual experience.
- Achievement of a certain degree of civilization would require the integration of groups and their differences, maintaining diversity while reaching global agreements. This characteristic implies the respect of individual rights (human or universal rights), minorities rights, and stewardship of the natural resources in their planet, etc.
- Desire to seek for other civilizations to deepen their spiritual understanding and to communicate their experience of the sacred and their spiritual-religious cosmic vision.

S- civilizations can be described by:

- The pursue of survival at any cost, even when it requires to conquer or enslave another species.
- The opposite of respect of individual freedom and cultural groups would be absolute submission to a dictatorship.
- The development of an absolute ego - in opposition to altruism-, and chauvinism - in opposition to openness to diversity - that determines the system of meanings and values.
- These characteristics might be driven by the fear to the otherness and could derive into religious fundamentalism.

In a S-free civilization, science and communication would be regarded as the highest stage in cultural evolution, that would allow the society to overcome all survival crises and assure a happy and pleasant future. In this scenario, science is the only rationality that gives access to a correct interpretation of reality.

How would the S factor affect the survival or lifespan of a civilization? Would a S+ civilization have more chances to survive than a S- civilization? Would a S+ civilization be more open to listen and to send messages transferring knowledge, information, and technology? Would a S+ civilization have developed a system to listen and decode arriving signals from outer space? On the other side, would a S- civilization be monitoring other civilizations in a lower-level of ETI evolution to control them – *"a galactic censorship"* - and exploit their resources?

One way to quantify the three types of civilizations is to parametrize the S factor according to their characteristics. We propose to apply this model to the different ages of human history. Once we have validated our model for human history, we will consider different hypotheses in a stochastic process for alien civilizations and their impact on the galactic neighbourhood.

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