

# On Control of Earth Civilization by Extraterrestrial Civilizations

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**Abstract:** This article explores the possibility of the existence of extraterrestrial civilizations that are more advanced than earth civilizations. If such a more advanced extraterrestrial civilization exists, even from the perspective of the existing scientific and technological developments on the earth, advanced extraterrestrial civilizations should be able to send various control signals to the earth to control the evolution of life on earth And the way of thinking of human beings, thus changing the development of human civilization. Of course, this article also explores the situation where extraterrestrial civilizations do not emit such control signals to the earth. This article believes that this means that the development of existing science and technology is actually limited, and it cannot promote the Communication. Whether or not such a control signal of extraterrestrial civilization exists, it will have a profound impact on the development of human civilization on earth.

**Keywords:** civilization; extraterrestrial civilization; society; control

## 1 Introduction

Recently, the structure and causes of the Milky Way are being considered<sup>[1 ~ 4]</sup>. Its main purpose is to be able to have a physical basis to explore extraterrestrial civilizations in the Milky Way. From a statistical point of view, there is no doubt about the existence of extraterrestrial civilizations. After all, there are so many galaxies like the solar system in the Milky Way, and many of them have the same development environment as the Earth, and it is inevitable to evolve a highly civilized society. In addition to the evolutionary process of life on earth, in addition to the emergence of intelligent human beings, there may be certain accidents, but the emergence of other creatures, such as dinosaurs, has great inevitability. This inevitability will also appear in other galaxies in the Milky Way.

Of course, the development history of civilizations in different galaxies is different. There is naturally a difference between advanced civilization and backward civilization. If the hypothesis that the center of the galaxy is a white hole<sup>[1]</sup> holds, it points us to the location of extraterrestrial civilizations that are more advanced than the earth.

However, even if we have determined the positions of more advanced civilizations in the galaxy, it is very difficult to reach these positions directly at least for now. Here, based on the current level of science and technology theory of our planet, let's explore how more advanced civilizations can affect the planet, and then control the development of the earth's civilization.

## 2 Interstellar information transfer

I mentioned in an article a few days ago<sup>[2]</sup> that the mechanism of information transmission between interstellars can be accomplished through four major interactions, including gravitational interaction, electromagnetic interaction, strong interaction and weak interaction. Among these interaction options, signals such as photons and neutrinos are better choices. But it does not exclude other options. For example, the advanced level of a civilization can be judged by observing the various basic particles generated by the nuclear reaction process. After all, the more advanced the civilization, the more energy it will consume. The more nuclear reactors you need to rely on.

However, there is one possible interaction that is also an option worth considering. This option is called "quantum entanglement". There is already a certain amount of evidence to confirm the existence of quantum entanglement<sup>[5,6]</sup>. If the result of quantum entanglement exists, it means that there is an over-range effect, which effectively solves the problem of the speed limit of light.

We can even further infer that if quantum entanglement does exist, our current brain thinking process will involve a large number of electronic movements, then is there a quantum entanglement between the electrons of neural impulses in different human brains? If such quantum entanglement exists, it means that the thinking process of one person will affect the thinking of another person. As a result, de facto information is transmitted between the human brains. This kind of information transmission exceeds the limits of the five sense organs of the human, is it the so-called "sixth sense" in literature?

We can go one step further. If extraterrestrial civilizations have advanced enough to develop this "quantum entanglement" technology, they will be able to use this technology more freely to control the biological evolution of other galaxies. It is speculated that more advanced civilizations should be able to control the evolution of earth civilization through technologies such as quantum entanglement.

However, although there have been many experiments to verify quantum entanglement, many positive results have been obtained. But unfortunately, there have been no actual application cases so far, so further observations on this technology may be needed.

In addition to quantum entanglement, ordinary photons can also be used to transfer information. We can measure brain waves in the brain non-destructively early. Using magnetic resonance technology, we can also non-destructively measure the flow of blood in the brain. In the space station, high-energy cosmic rays can even directly stimulate the optic nerve of the brain, producing a light sensation. Therefore, signals such as microwaves can penetrate the brain and affect the brain's thinking process. If extraterrestrial civilizations have made great progress in controlling the brain's thought process through external signals, they can also purposefully emit corresponding microwave signals to the habitable zones of each galaxy, affecting the civilization development of the galaxy. This is also very likely.

Of course, if it can affect the cognitive process of the brain, these signals, including quantum

entanglement and microwave signals, can definitely cause genetic mutations, and then allow intelligent creatures to evolve and grow purposefully. This directly affects the life evolution process of a galaxy.

### 3 Some evidence

From the theory of evolution theory, the evolution of some organisms has a strong regularity, which can be well explained by evolution theory. However, the process of human evolution seems abrupt.

First look at human evolution. Judging from the current evolution of the animal kingdom other than humans, their ability to develop is mainly the ability to adapt to environmental changes. Then evolved stronger limb skills such as running, jumping, predation, camouflage. Although the chimpanzees, which are most closely related to humans, have strong intelligence, they are only some of the abilities to use simple tools to adapt to the social environment. For the survivability of animals on earth, complex language systems are not essential to survival. This raises a question for us? Why do humans appear? After all, even in the absence of humans in nature, a very perfect ecological balance can be achieved. Just like the dinosaur era.

For human evolution, there is a more confusing problem, that is, humans have obtained such a high level of intelligence, but their evolution time is very short. The earliest human being ever discovered is the ancient ape 2 million years ago. It took only 2 million years for the evolution from ancient apes to humans. In comparison, the evolution of dinosaurs took tens to 100 million years. After the dinosaurs became extinct, other creatures have evolved for more than 60 million years. Humans suddenly appeared only during the last one million years of these sixty million years. There may be some factors that we don't know are promoting. If we consider that civilizations in the Milky Way exist millions of years or even hundreds of millions of years ahead of the Earth, then these civilizations have been able to purposefully guide the evolution of Earth's life through quantum entanglement or microwave communication technology. Good explanation.

In addition, humans in the Stone Age seem to have emerged suddenly. Humans in this period are about 35,000 years away from modern times, and have been completely consistent with the appearance of modern people. 10,000 years ago, the ancient Hemudu people in China began to grow rice, and their lifestyle is basically the same as that of farmers in many rural areas in modern China.

However, archeological findings before the Paleolithic period have confirmed that humans are still the appearance and lifestyle of ancient apes, just like the gorillas we see now. How did this happen to an intellectual mutation? It is relatively easy to explain if induction by external information is used. Because at least human power alone, it is impossible for the gorilla population to evolve at least as intelligent as Paleolithic humans.

Secondly, many scholars have noticed the development of ancient China and ancient Greek civilization. Two thousand years ago, two ancient civilizations appeared thousands of miles apart without any communication between them. The two ancient civilizations were China and Ancient

Greece during the Spring and Autumn and Warring States Periods. An important feature of both civilizations is that they are at 30 degrees north latitude. At that time, there was no very advanced means of transportation, and the two civilizations were still separated by high mountains, so high-level civilization exchanges were basically impossible. However, almost at the same time, there were many great philosophers and thinkers in both places. This may be a coincidence. But if we can get many other explanations, it must be very interesting. For example, we can consider if this period of time is the time when quantum entanglement or microwave signals emitted from advanced civilizations to the earth reach the earth. At this time everyone's thinking process is affected by these signals, and the people with the highest level of intelligence can understand the truth, and then put forward new doctrines and opinions. In this way, even the existence of two ancient human civilizations that have nothing to do with each other can be affected by the information of these extraterrestrial civilizations at the same time, thus producing many outstanding thinkers and philosophers.

Of course, the evidence is not very convincing. After all, other theories or hypotheses can be used to illustrate. Therefore, this article is not certain that there must be alien control of earth civilization. Of course, since there are so many galaxies in the Milky Way, the solar system is neither the oldest nor the youngest. Therefore, the probability of the existence of an extraterrestrial civilization that is more advanced than that of earth civilization is very large.

## 4 logical paradox

There are two logical paradoxes here. The first is that if there is indeed the control and guidance of extraterrestrial civilizations on earth civilization, this does not violate any scientific law. Second, if there is no such control and guidance, it is likely that the scientific theory we already know is indeed the ultimate theory. The spread of human information can only stop there.

The first point shows that there must be some important information transmitted by extraterrestrial civilizations around us. In this case, we should be able to detect these special signals through the corresponding equipment. The current task is to use what methods and technologies to detect. And if we cannot detect this information at present, it may also indicate that our current level of scientific and technological development is not enough, and we do not have a deep understanding of the interaction between materials, so we are unable to detect the information transmitted by these extraterrestrial civilizations.

Secondly, if the information transmitted by extraterrestrial civilizations does not exist, it may be a very pessimistic status quo, which also means that human beings will always live alone on the earth.

Such a logical paradox has an important impact on the development of our culture and civilization.

If information from extraterrestrial civilizations does exist around us, there will be more and deeper opportunities for communication in our culture. It means there is still a bright future for our culture. Once we have established an effective communication channel with extraterrestrial civilizations,

even if this channel is one-way, there can be more ways to solve the various global problems we now face, including population issues, economic development issues, Ethical issues in science and technology, global warming issues, etc. This is just like the conflict between eastern and western cultures that year, and finally the current status of human society's prosperity and rapid development of science and technology.

And if there is really no information transmitted by extraterrestrial civilizations, our future development may be another situation, that is, we no longer need to do any aggressive work, rest assured to do the prosperity and stability of human society, and ensure Before the entire galaxy is destroyed, maintain an ecological balance so that humans can survive on Earth as long as possible. This is like ancient closed China, satisfied with the rich small peasant economy, and continuing the culture as far as possible.

## **5 Methods for detecting control signals of extraterrestrial civilizations**

Whether it exists or not, we can now try to detect the control signals of extraterrestrial civilizations. According to the development status of the existing earth technology, we can try to do these tasks from the following aspects:

First, in terms of quantum entanglement, some existing quantum entanglement experimental devices can be considered to detect the quantum entanglement signals that extraterrestrial civilizations may emit.

There are already some very advanced quantum entanglement experimental devices in China. This includes the ground-based device for long-distance signal transmission using fiber optics built by Professor Jianwei Pan of the Chinese Academy of Sciences <sup>[7]</sup>, and the Mozi quantum science experimental satellite <sup>[8]</sup>. These devices are used to verify the effectiveness of quantum entanglement. On the other hand, some practical work of quantum communication is also performed. My vision is to consider using these devices' ability to transmit information to detect other quantum entanglement signals that may exist on Earth. For example, in the process of optical fiber or satellite communications, some photons or electronic states change regularly, and this change may indicate the existence of quantum entangled signals transmitted by extraterrestrial civilizations.

Second, improve existing devices for detecting cosmic microwave signals. Currently, UC Berkeley has a project to explore extraterrestrial civilizations. This project analyzes the cosmic microwave signals received by radio telescopes around the world in order to find out those very regular signals to prove the existence of extraterrestrial civilizations. I think the improvement is that this project can also analyze various microwave signals existing on the ground. If extraterrestrial civilizations specifically send control signals to the earth that can guide the development of civilization, these signals should affect the human brain's thinking processes and gene mutation processes on the surface of the earth for a long time. Of course, since there are already a lot of microwave signals

emitted by human beings, in order to distinguish these microwave signals, it may be necessary to establish relevant detection devices in some remote places where human microwave signals are relatively small. Including the earth's north and south poles, plateaus, etc.

Third, understand how the human brain works. This work has been done and great progress has been made. However, how external microwave signals and quantum entanglement signals affect the human brain's thinking process, many of these rules need to be further explored. Once we have a better understanding of how the human brain works and how it is affected by external signals, it will help us to more purposefully detect the control signals emitted by these extraterrestrial civilizations.

Fourth, the detected signals are not limited to electromagnetic interactions and quantum entanglements. It is also possible to consider new control information dissemination that may be brought about by various methods such as strong interaction, weak interaction, and gravitational interaction. For example, high-energy cosmic rays can easily pass through the human brain and affect the functioning of the nervous system of the brain. For the detection of high-energy cosmic rays, either a ground device or Dr. Samuel C.C.Ting's Alpha Magnetic Spectrometer (AMS-02) device can be used<sup>[9]</sup>. The device is still continuously detecting and collecting high-energy particles in cosmic rays, and has discovered radiation phenomena of high-energy positrons that cannot be explained by theories<sup>[10]</sup>. As for neutrinos, we still have very little knowledge, so whether neutrinos can transmit information and whether they can affect people's way of thinking are all worthy of in-depth research. At present, there are huge devices for detecting neutrinos around the world, including Japan's Super Kamioka detector<sup>[11]</sup>, China's Daya Bay neutrino detector, etc.<sup>[12]</sup>.

Fifth, explore new ways of interaction in the universe. In addition to the four major interactions we now know, are there other ways of interaction in the universe? If present, it can also be used to convey control signals of extraterrestrial civilizations. It's just that we don't know anything about it.

Sixth, pay attention to studying those abnormal human thoughts and genetic mutation processes. If extraterrestrial civilizations use an interaction method that we have no idea about to transmit control signals, it may also be an important reason that we have never been able to detect the control signals of extraterrestrial civilizations. But in any case, because these control signals will eventually change our way of thinking or genetic structure, we can also note that if the human thinking process or genes show abnormal and difficult to explain phenomena, they may be the control signals of extraterrestrial civilizations. There are relationships.

## 6 Summary

This article explores the control of extraterrestrial civilizations on earth civilization. At the beginning I wanted to put it in the categories of cosmology and relativity. It was later discovered that in fact I did not involve the theory of relativity, and there were very few theories of cosmology. So I feel that this is still a philosophical issue. After all, the various ideas involved have not yet had a very effective scientific device for experimental verification.

Since it is a philosophical issue, it involves more logical paradoxes. That is, if there is control of earth civilization by extraterrestrial civilizations, then we should be able to detect these control signals. Then we can consider what kind of device to use for detection. If these signals can be detected, it means that we can establish an at least one-way communication channel with extraterrestrial civilizations. This channel of communication with extraterrestrial civilizations will also affect the development of our existing human civilization. And help solve the global problems we face today.

And if there are no extraterrestrial civilizations, we will never be able to detect the control signals emitted by extraterrestrial civilizations, and we will eventually survive on the earth alone. This also means that no matter how we develop science and technology or extraterrestrial civilizations, the ultimate scientific theory can only improve the way in which civilizations in the galaxy exist to a certain extent. Various civilizations in the universe are doomed to communicate with each other.

Although this is currently limited to philosophical thinking, in fact we can still do some exploration work. Including quantum entanglement experiments, detection of cosmic microwave signals, and cosmic ray signals, there are currently some important experimental devices for us to choose from. Of course, the new way of interaction is a direction worthy of further exploration.

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# 地外文明对地球文明的控制

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摘要: 本文探讨了比地球文明先进的地外文明存在的可能性。如果这种更先进的地外文明存在, 则即便是从现有的地球上的科学技术发展情况来看, 先进的地外文明也应该可以向地球发射各种控制信号来控制地球上生物的进化以及人类的思维方式, 从而改变人类文明的发展进程。当然本文也探讨了如果地外文明并没有向地球发射这样的控制信号的情况, 则本文认为这意味着现有的科学技术的发展实际上是有局限性的, 它并不能够促进星际文明之间的交流。无论这种地外文明的控制信号是否存在, 都会对地球人类文明的发展产生深远的影响。

关键词: 文明; 地外文明; 社会; 控制

Аннотация: В этой статье рассматривается возможность существования внеземных цивилизаций, которые являются более продвинутыми, чем земные цивилизации. Если существует такая более продвинутая внеземная цивилизация, даже с точки зрения существующих научных и технологических разработок на Земле, передовые внеземные цивилизации должны иметь возможность посылать на Землю различные управляющие сигналы, чтобы контролировать эволюцию жизни на Земле и путь мышления людей, тем самым изменяя развитие человеческой цивилизации. Конечно, в этой статье также исследуется ситуация, когда внеземные цивилизации не излучают такие управляющие сигналы на Землю. Эта статья считает, что это означает, что развитие существующей науки и техники на самом деле ограничено, и это не может способствовать коммуникации. Существует ли такой контрольный сигнал внеземной цивилизации, он окажет глубокое влияние на развитие человеческой цивилизации на Земле.

## 1 导论

最近在思考银河系的结构与产生的原因[1~4]。其主要目的是为了能够有一个物理基础来探讨银河系中的地外文明。从统计学的观点来看, 地外文明的存在是没有疑问的。毕竟在银河系中那么多如同太阳系那样的星系的存在, 其中很多都具备了与地球相同的发展环境, 进化出高度文明的社会是必然的。而且地球上的生物进化进程, 除了拥有智慧的人类的出现可能存在一定的偶然性之外, 其他生物, 诸如恐龙等的出现却有着很大的必然性。这种必然性也将出现在银河系的其他星系之中。

当然不同星系中的文明发展历史不同, 自然存在先进的文明与落后的文明的区别。如果银河系中心为白洞的假说[1]成立, 则为我们指明了比地球更先进的地外文明所存在的位置。

然而即便我们确定了更先进文明在银河系中的位置, 要直接达到这些位置至少目前来说存在非常大的困难。这里按照我们地球现有的科技理论水平为基础, 来探讨一下那些更先进的文明可以如何对地球进行影响, 进而控制地球文明的发展。

## 2 星际之间信息的传递

我在前几天的一篇文章中提到[2]，星际之间信息的传递机制可以通过四大相互作用来完成，包括引力相互作用、电磁相互作用、强相互作用和弱相互作用。在这些相互作用的可选项中，包括光子、中微子等信号是比较好的选择。但是也不排斥其他的选项。比如通过观察核反应过程所产生的各种基本粒子可以判断一个文明的先进程度。毕竟文明越先进，则需要消耗的能源也就越多。所需要依赖的核反应堆数量也就越多。

不过还有一种可能存在的相互作用也是值得考虑的一个选项。这个选项就是“量子纠缠”。目前已经有一定数量的证据证实存在量子纠缠的现象[5,6]。如果量子纠缠的结果存在，则意味着存在超距作用，有效解决光速限制的问题。

我们甚至可以进一步推论，如果量子纠缠是确实存在的，则我们现在的大脑思维过程会涉及到大量的电子运动，那么不同的人大脑内部的神经冲动的电子之间是否存在量子纠缠现象？如果存在这种量子纠缠现象，则意味着一个人的思考过程，将会影响到另一个人的思考。从而产生事实上的人脑之间的信息传递。这种信息传递超出了人的五种感觉器官的限制，是否就是文学中的所谓“第六感”？

我们还可以再进一步，如果地外文明足够先进已经对这种“量子纠缠”技术进行了深入的开发，则他们也将能够更自如地使用这项技术来控制其他星系的生物进化过程。由此推测，更先进的文明应该是能够通过量子纠缠等技术来控制地球文明的进化的。

不过目前对于量子纠缠虽然已经有很多的实验进行了验证，也获得了很多正面的结果。不过遗憾的就是直到目前为止，还没有一些实际的应用案例，因此对于这项技术或许还需要进一步的观察。

除了量子纠缠之外，也可以使用普通的光子来传递信息。我们很早就可以无损测量大脑的脑电波。而使用磁共振技术，我们也可以无损地测量大脑中血液的流动情况。而在空间站中，高能宇宙射线甚至能够直接刺激大脑的视神经，产生光感。因此微波等信号是可以穿透大脑，进而影响大脑思维过程的。如果地外文明在通过外部信号控制大脑思维过程方面有了很大的进展，则也可以有目的地向各星系宜居带发射相应的微波信号，影响该星系的文明发展。这也是有很大的可能性的。

当然如果能够影响大脑的认知过程，则这些信号，包括量子纠缠、微波信号也肯定能够引起基因突变，进而有目的地让智慧生物进化成长。这就直接影响到了一个星系的生命进化过程。

## 3 一些证据

从进化论的理论来看，一些生物的进化是有很强的规律性的，能够很好地用进化论来进行解释。然而人类的进化过程却显得有些突然。

首先看看人类的进化过程。从目前除人类以外的动物界的进化情况来看，它们发展出来的能

力主要是适应环境变化的能力。进而进化出更强的跑步、跳跃、捕食、伪装等四肢技能。与人类关系最密切的黑猩猩等，虽然有较强的智力水平，但是也只是适应群居环境而获得的一些使用简单工具的能力。对于在地球上的动物生存能力来说，复杂的语言系统等其实对于生存并非是必不可少的。这就引起了我们的一个疑问？为何人类会出现？毕竟自然界中即便是没有人类也可以达到一种非常完美的生态平衡。就如同恐龙时代一样。

对于人类的进化，还有一个更令人迷惑不解的问题，就是人类获得这么高级的智慧水平，其进化时间却是非常短的。目前发现的最早的人类是 200 万年前的古猿。从古猿进化到人类只用了短短 200 万年的时间。相比较而言，恐龙的进化用了几千万到一亿年的时间。而在恐龙灭绝之后，其他的生物又进化了六千多万年。人类只是在这六千多万年的最后一百多万年期间就突然出现了。这其中或许存在一些我们目前还不知道的因素在起促进作用。如果我们考虑到在银河系中存在比地球先进几百万年，甚至几亿年的文明，则这些文明已经能够通过量子纠缠或者微波通信技术来有目的地引导地球生命的进化，则也并非不是一个很好的解释。

另外石器时代的人类似乎是突然冒出来的。这个时期的人类距离现代大约 3.5 万年左右，已经跟现代人外观上完全一致。到了一万年前的中国古代河姆渡人已经开始种植水稻，生活方式跟现代中国很多农村地区的农民生活方式基本无异。

然而在旧石器时代之前的考古发现，却证实人类还是古猿的外貌和生活方式，就像现在我们看到的大猩猩一样。这其中是如何产生智力上的突变的？如果用外部信息的诱导倒是比较容易解释的。因为至少单凭人类的力量，是不可能让大猩猩群体进化出至少如同旧石器时代人类那样的智慧的。

其次，很多学者都已经注意到古代中国和古希腊文明的发展。在两千多年前，两个相隔几千里，互相之间没有任何交流的两个古代文明出现。这两个古代文明分别是春秋战国时代的中国和古希腊。这两个文明还有一个重要的特点都是在北纬 30 度。当年没有非常先进的交通工具，两个文明还间隔了高山，基本无法进行高层次的文明交流。然而就几乎是在同一时间，这两个地方同时出现了很多伟大的哲学家和思想家。这或许是一个巧合。但如果我们能够获得多种其他的解释，也一定是非常有趣的。比如我们可以考虑如果这段时间正是地外先进的文明向地球发射的量子纠缠或者微波信号达到地球的时间。这时候每个人的思维过程都受到了这些信号的影响，而其中智力水平最高的几个人就可以悟出了其中的道理，然后提出了新的学说和观点。这样即便是两个完全没有关系的人类古文明的存在，也都可以同时受到这些地外文明信息的影响，从而产生出众多杰出的思想家和哲学家。

当然这些证据并不是很有说服力的。毕竟也可以使用其他的理论或者假说来进行说明。因此本文并没有肯定就一定存在外星人对地球文明的控制。当然既然银河系存在这么多的星系，而太阳系既不是最古老的星系也不是最年轻的星系。因此存在比地球文明更先进的地外文明概率是非常大的。

## 4 逻辑悖论

这里存在两点逻辑悖论，第一，就是说如果确实存在地外文明对地球文明的控制和引导，这并不违背任何的科学规律。第二，如果没有这样的控制和引导，则很可能是我们现在已经知

道的科学理论确实已经是终极理论了。人类信息的传播也只能够止步于此。

第一点说明在我们的周围一定存在一些重要的地外文明发射过来的信息。既然如此，我们就应该可以通过对应的设备来探测到这些特殊的信号。目前的任务则是采用什么样的方式，什么样的技术来进行探测。而如果我们目前探测不到这些信息，这也可能说明我们现在的科学技术发展水平还不够，对物质之间的相互作用理解的还不深刻，因此没有能力探测到这些地外文明发射过来的信息。

第二点，如果确实不存在地外文明发射过来的信息，则或许是一个非常悲观的现状，这也意味着人类将永远孤独地生活在地球上。

这样的逻辑悖论对我们的文化和文明的发展都有重要的影响。

如果我们周围确实存在地外文明发射过来的信息，则我们的文化将存在更多更深刻的交流机会。意味着我们的文化还存在继续深入发展的美好前景。一旦我们建立起跟地外文明有效的交流渠道，即便这种渠道是单向的，也可以有更多的方法来解决我们现在面临的各种全球性问题，包括人口问题、经济发展问题、科技伦理问题、全球气候变暖问题等。这就如同当年东西文化冲突发生一样，最终形成现在的人类社会繁荣、科技快速发展的现状。

而如果确实不存在地外文明发射过来的信息，则我们今后的发展或许是另一种状况，即我们不再需要做任何进取型的工作，安心做好人类社会的繁荣稳定工作，确保至少在整个星系没有被毁灭之前，维持生态平衡，让人类在地球上能够生存尽可能长的时间。这就如同古代封闭的中国，满足于富足的小农经济，尽可能将文化延续下去。

## 5 探测地外文明控制信号的方法

不管是否存在，我们现在都可以尝试着做探测地外文明控制信号的工作。按照现有地球科技的发展现状，我们可以尝试从下面几个方面来做这些工作：

第一，在量子纠缠方面，可以考虑利用现有的一些重要的量子纠缠实验装置来探测地外文明可能发射过来的量子纠缠信号。

目前在中国已经有了一些非常先进的量子纠缠实验装置。包括中国科学院潘建伟教授建造的地面利用光纤进行远距离信号传输的装置[7]，也包括“墨子号”量子科学实验卫星[8]。这些装置一方面用来验证量子纠缠的有效性。另一方面也进行量子通信的一些实用性工作。我的设想是可以考虑利用这些装置传输信息的富余能力，检测地球上可能存在的其他的量子纠缠信号。比如在光纤或者卫星通信过程中，一些光子或者电子状态的有规律性改变，这种改变可能预示着存在地外文明传输过来的量子纠缠信号。

第二，改进现有的探测宇宙微波信号的装置。目前加州大学伯克利分校已经有一个探测地外文明的项目。该项目对世界各地射电望远镜接收到的宇宙微波信号进行分析，以便找出那些非常有规律的信号以证明地外文明的存在。我觉得可以改进的地方就是，这个项目也可以对地面存在的各种微波信号进行分析。如果地外文明专门对地球发射能够引导文明发展的控制

信号，则这些信号应该会长时间影响着地球表面人类的大脑思维过程和基因突变过程。当然由于人类自身发射的微波信号已经非常多，要分辨出这些微波信号，可能需要在一些比较偏僻，人类微波信号比较少的地方来建立相关的探测装置。包括地球南北极、高原地带等。

第三，了解人的大脑工作机理。这项工作一直在做，也取得了很大的进展。不过外部微波信号、量子纠缠信号是如何影响人的大脑思维过程的，其中的很多规律还有待深入探讨。一旦我们对人的大脑工作机理以及受到外部信号影响的方式了解的比较深入，则有助于我们更加有目的地探测这些地外文明发射过来的控制信号。

第四，探测的信号不仅局限于电磁相互作用和量子纠缠。还可以考虑强相互作用、弱相互作用以及引力相互作用等多种方式可能带来的新的控制信息传播。比如高能宇宙射线能够很容易穿过人的大脑，并影响大脑神经系统的运作。对于高能宇宙射线的探测，可以使用地面装置，也可以使用丁肇中博士的 Alpha Magnetic Spectrometer(AMS-02)装置[9]。该装置目前仍在不断探测和收集宇宙射线中的高能粒子，且已经发现了高能正电子无法解释的辐射现象[10]。而对于中微子，目前我们的知识还非常少，那么中微子能否传递信息，是否还能够影响到人的思维方式，这些都是非常值得深入研究的工作。目前世界各地都有探测中微子的巨大的装置，包括日本的超级神冈探测器[11]，中国的大亚湾中微子探测器等[12]。

第五，探索宇宙存在的新的相互作用方式。除了我们现在已知的四大相互作用之外，宇宙中是否还存在其他的相互作用方式？如果存在则也可以被用来传递地外文明的控制信号。只是目前我们对此还一无所知。

第六，注意研究那些异常的人类思维以及基因变异过程。如果地外文明使用了一种我们完全不知道的相互作用方式来传递控制信号，则也可能是我们始终未能够探测到地外文明控制信号的重要原因。但无论如何，因为这些控制信号最终都要改变我们的思维方式或者基因结构，因此我们也可以注意一下，如果人类的思维过程或者基因出现异常难以解释的现象，都可能和地外文明的控制信号有关系。

## 6 总结

本文探讨的是地外文明对地球文明的控制。开始的时候我想把它放在宇宙学和相对论的分类之中。后来发现其实我并没有涉及到相对论的理论，宇宙学的理论也很少。因此感到这还是一个哲学问题。毕竟其中涉及到的各种想法目前都还没有很有效的科学装置能够进行实验验证。

既然是一个哲学问题，则其中涉及到的更多的是逻辑悖论。即如果存在地外文明对地球文明的控制，则我们应该能够探测到这些控制信号。然后我们可以考虑使用什么样的装置来进行探测。如果能够探测到这些信号，意味着我们可以跟地外文明建立起一条至少是单向的交流渠道。这种与地外文明的交流渠道也将影响到我们现有的人类文明的发展。并有助于解决我们现在所面临的各种全球性问题。

而如果不存在地外文明，则我们将始终无法探测到地外文明发射过来的控制信号，我们也终将孤独地在地球上生存下去。这也意味着无论我们还是地外文明如何发展科学技术，终极的

科学理论也只能是在一定程度上改善一下该星系中的文明存在的方式而已。宇宙中的各种文明注定是无法相互进行交流的。

虽然目前这仅限于哲学上的思考，不过实际上我们还是可以做一些探测工作的。包括量子纠缠实验、宇宙微波信号、宇宙射线信号的探测等，目前都有一些重要的实验装置可供我们选择。当然新的相互作用方式更是一个值得我们去深入探索的方向。

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