

## Deep Space III: The Human Space Program

By Frank White

*The author elaborates on his previous essays regarding a space philosophy, both based on the Overview Effect – the experience of seeing the Earth from space and in space. This third essay explores in more detail the significance of a “deep philosophy of space exploration” and what it would mean to us to create a human space program as we venture off of our planet and out into the universe.*

In previous essays for this publication, I have written about a “deep philosophy of space exploration.” The primary element of such a philosophy focuses our attention on the benefits of human space exploration for the universe rather than primarily for human beings. This is not to say that space exploration is not beneficial to us, only that we should see the process as mutually beneficial for the parts (ourselves) and the whole (the universe).<sup>1</sup>

Accepting that this is our basic philosophy of space exploration and that the Overview Effect is at the heart of the philosophy, what kind of space program or space movement needs to emerge to embody it in action?

As Bob Krone wrote in his essay for the first issue of this journal,<sup>2</sup> a philosophy need not be an abstraction that is irrelevant to our everyday life. In fact, a philosophy can be a guide to what we do and how we do it. In our case, a philosophy of space exploration ought to be based on certain principles that are then put into action.

### The Star Trek Vision

As an example, consider the Star Trek philosophy of space exploration. Even though it is a fictional view of the future, many people have felt attracted to it, possibly because of its clarity of purpose. First, the Starship Enterprise has a simple and clear mission:

To explore strange new worlds. To seek out new life and new civilizations.  
To boldly go where no man has gone before.<sup>3</sup>

Starfleet captains are also guided by a Prime Directive, which reads in part:

As the right of each sentient species to live in accordance with its normal cultural evolution is considered sacred, no Star Fleet personnel may interfere with the normal and healthy development of alien life and culture.<sup>4</sup>

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<sup>1</sup> *The New Camelot* (Kindle Book, 2010), <http://tinyurl.com/lposvc3>.

<sup>2</sup> *Journal of Space Philosophy* 1, no. 1 (Fall 2012): 17-26.

<sup>3</sup> Gene Roddenberry (Executive Producer), *Star Trek* (NBC/Desilu, 1966-1969). This was later changed, for the better, to “where no one has gone before.”

<sup>4</sup> [http://en.wikipedia.org/wiki/Prime\\_Directive](http://en.wikipedia.org/wiki/Prime_Directive).

When I wrote about the Human Space Program in 1987, I attempted to lay out an approach that was also clear and compelling in terms of its mission and basic principles. I defined it in the following way:

The embryonic human space program exists in all the national space programs, the private pro-space societies and activities around the world, and the actions of individuals working alone for a positive future. However, there is no unifying vision to balance this diversity, and the human space program is not yet a conscious human system. To give power to the emergent reality, then, let us declare the establishment of the program and provide it with a long-range plan from which it will be possible for aspiring Terranauts to choose their vocations and contributions.<sup>5</sup>

The following were described as the fundamental elements of the program, including its mission:

*Vision:* a universal civilization, a golden age, humanity taking its rightful place as citizens of the universe.

*Purpose:* to support humanity's understanding and achievement of its purpose as an active partner in universal evolution, creating overview systems that increase conscious awareness throughout that universe.

*Long-term goals:* establishing planetary, solar, and galactic civilizations as steps to a universal civilization.

*Immediate objectives:* creating conditions for planetary peace and humanity's migration to the solar system and the stars.

*Participants:* all human beings and other sentient species.

*Spatial parameters:* the universe.

*Temporal parameters:* the millennium, 2000-3000.<sup>6</sup>

By drawing this comparison, I am not saying that the human space program should directly mimic the Starfleet philosophy. However, there are aspects of the fictional Federation space program that have proven quite interesting to people and should perhaps be considered as an aspect of the human space program. In particular, it seems to me that their program is focused on *exploration*, *inclusion*, and *ethics*.

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<sup>5</sup> Frank White, *The Overview Effect: Space Exploration and Human Evolution* (Reston, VA: American Institute of Aeronautics and Astronautics, 1998), 171.

<sup>6</sup> *Ibid.*, 172.

For example, the goal of the *Enterprise* is to explore, not conquer. It is not a military operation *per se*. Also, the *Enterprise* crew is emblematic of Starfleet's inclusion and diversity. Not only did the crew include members of every terrestrial race and nationality, but it also had extraterrestrials like Vulcans and Klingons. Finally, the ethic of non-interference in the evolution of other species means there is no hint of imperialism.

It seems to me that this tells us that the human space program, to be equally compelling and inspiring, must have a clearly defined mission and it must be based on basic principles that are not violated. Some 30 years after writing that early description, I believe we are close to that criterion.

When I first wrote about the human space program in 1987 in *The Overview Effect: Space Exploration and Human Evolution*, I likened it to the "central projects" of the Middle Ages, when the great cathedrals were built. In addition, though, I believe that, like Star Trek, we must be inclusive in fashioning a human space program and we must go even farther than I had imagined at that time. We need to be more open and inclusive on two levels, the individual and the global.<sup>7</sup>

On the individual level, if the Overview Effect is as critical to the future of humanity and the universe as we believe it to be, then logic suggests that having this experience should be seen as a *basic human right*, either by traveling into space or through a powerful simulation. Indeed, it might also be seen as a responsibility to have the experience and thereby more fully become a "citizen of the universe."

If this is true, then one of the most fundamental principles of the human space program must be that we are ending the era in which space exploration is limited to a few government employees and a wealthy elite. If a new epoch of evolution is about to be opened up as we move into the solar system, then everyone who wants to do so should be able to participate.

In practical terms, then, how do we implement this principle of individual inclusion for our space philosophy?

One proposal seems obvious. As private carriers like Virgin Galactic begin to take people on suborbital hops, we should establish what might be called "Overview Effect Scholarships" that would support ordinary individuals to go on these flights.

I call them "scholarships," not because they are academic in nature, but rather as an analogue to the financial aid received by students of modest means to attend colleges and universities. The goal there is to admit the most competent applicants regardless of financial capability. I would like to see the same idea implemented as we move out into the solar system. (Interestingly enough, the cost to endow a scholarship at a major university in the United States is about \$250,000. This is precisely the amount of money Sir Richard Branson is requesting for a Virgin flight to suborbital space.)

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<sup>7</sup> White, *The Overview Effect*, 5.

These scholarships should be established by a foundation or individual and have an organization like the Overview Institute or Space Tourism Society administer them. No matter how many scholarships we establish, the demand is likely to outstrip the supply, so we will need an organization dedicated to having more people experience the Overview Effect administering them. It is not nearly enough, but it is a start.

The second form of inclusion is global in nature. One of the key messages of the Overview Effect is that you cannot see borders and boundaries from orbit or the moon. It makes sense, then, to transcend national boundaries in the great adventure of exploring the universe.

We should therefore laud recent efforts to create a global space program in which many nations are participating. The International Space Station (ISS) represents a good start in the right direction. Moreover, there has been significant movement on this front since I first wrote about the human space program. We now have 14 national space agencies working together as the International Space Exploration Coordination Group (ISECG). They have recently released a Global Exploration Roadmap that focuses on the benefits to society of such a program.<sup>8</sup>

To implement our space philosophy, we must also go beyond the idea of a *program* to embrace the concept of a *movement*. I suspect that one of the reasons NASA does not get the support it deserves is that it has not emphasized opening up the space frontier for all people. Instead, it generally presents space exploration as a spectator sport. Taxpayers pay to watch others go into orbit or to the moon, but we do not get to go ourselves. Thus, the Human Space Movement would support a new kind of program that would be dedicated to the idea of space for all.<sup>9</sup>

Finally, an inherent aspect of this space philosophy should be not that it is only about moving into space but also preserving our home planet as a base of operations and as our home. We cannot abandon the Earth, nor can our efforts at space exploration be environmentally damaging to it.

We must avoid a different view of the future from the hopeful vision of the future exemplified by *Star Trek* and brought forth in a recent film called *Elysium*. It depicts a space settlement called Elysium where the wealthy live in luxury far above the planet, which is, in the meantime, deteriorating both ecologically and socially.

This is a vision that has no part in our space philosophy. The message of the Overview Effect is not simply that we should go into outer space and look back at the Earth. Rather, the message, repeated again and again by astronauts, is that we are *all in this together*. This refers to our life on Earth and our life in space. We must always remember a final key principle of a deep space philosophy, which is that *we are already*

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<sup>8</sup> For additional information, see <http://www.nasa.gov/exploration/about/isecg/#.UkBd6Y7eyAM>.

<sup>9</sup> I have recently been working with Space Synapse Systems, a company that is attempting to foster such a movement under the “space for all” banner. Space Synapse is supported, in part, by a grant from the European Space Agency.

*in space*. The Earth is our first and most important spacecraft, and it must be preserved just as we would preserve an artificial spacecraft.

### **Summary**

Humanity's greatest adventure—exploring the universe—lies before us. The time has come to put our space philosophy into action with a space program and space movement that are both worthy of this opportunity.

Let us boldly go....

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**About the Author:** Frank White is the author of *The Overview Effect: Space Exploration and Human Evolution*, first published in 1987 and re-issued in 1998. A member of the Harvard College Class of 1966, Frank graduated magna cum laude and was elected to Phi Beta Kappa. He attended Oxford University on a Rhodes Scholarship, earning an MPhil in 1969. He is the author or co-author of nine additional books, including *The SETI Factor*, *Decision Earth*, *Think about Space* and *March of the Millennia* (both with Isaac Asimov), *The Ice Chronicles* (with Paul Mayewski), *Space Stories* (with Kenneth J. Cox and Robbie Davis-Floyd), and *The New Camelot*. He also contributed chapters on the Overview Effect to four books on Space exploration: *Return to the Moon*, *Beyond Earth*, *Living in Space*, and *Space Commerce*. Frank is a member of the Board of Editors for *The Journal of Space Philosophy*.



**Editors' Postscript:** This is Frank White's third *Journal of Space Philosophy* article. He is one of America's top Space authors and philosophers and co-founded and co-directs the Overview Institute, which continues to capture astronauts' perceptions of Earth and the Cosmos. *Bob Krone and Gordon Arthur*.