

***Existence* by David Brin**

Part One

Once before, when I was reading Stepten Baxter's utterly enthralling cosmological epic *Evolution*, I wrote a book review in two installments, writing the first installment before I had finished reading the book. I am going to do the same thing again, writing my review of David Brin's new science fiction novel, *Existence*, in two parts. At the moment I am about halfway through the book.

In a previous CFC newsletter, I included a short piece on [David Brin's website](#). What is noteworthy about Brin is that he writes both excellent science fiction, as well as intelligent and thought-provoking non-fiction. Brin has a good grasp of history, contemporary affairs and issues, and possibilities and challenges pertaining to the future. Moreover, he pulls together hard science and technology and social-ethical concerns. He can think philosophically, technologically, and humanistically. In essence, he possesses what I would describe as an expansive temporal consciousness, as well as an interdisciplinary and integrative understanding of the human condition. (I used some of his non-fiction essays in a course I taught on the future of science and technology.) Finally, Brin is a clear and articulate writer and thinker.

Existence clearly demonstrates all these qualities. Right off the bat, the reader is immersed within a highly detailed vision (or scenario) of the future, circa 2050. Brin extrapolates from the present along multiple lines of technological development but also along multiple social, political, and ecological contemporary trends, creating a rich and complex setting in the near future. We see, for example, multiple levels of virtual reality layered on top of the "real world" (done so well in Vernor Vinge's *Rainbows End*); collective techno-facilitated "smart mobs" emerging in immediate response to momentary events occurring within the world; the fracturing of the United States into a multitude of sub-cultures and antagonistic semi-autonomous political entities; the ongoing and progressive inundation of coastal cities, as the oceans rise due to climate change; individual consciousness engulfed within (but also empowered by) an array of communication and information technologies that directly display into one's visual and auditory space (the further evolution of "google glasses"--see also Stross's *Accelerando*); and finally, multiple saviors of the world, all of whom have the answer -- the solution -- the key -- to how to fix the world.

Indeed, *Existence* presents a very stressful world, where nothing really has been fixed relative to today. In many ways, it's more of the same, only worse. We live on the edge of chaos, if not annihilation, but we will still be here in 2050.

It is both ironic and appropriate that in conjunction with my new essay on the psychology of hope in the April issue of the CFC newsletter, I introduce Brin's new book. The future world of *Existence* is teetering on the edge of disaster along multiple dimensions, and it is not at all clear whether anyone can do anything about it. (Who's in

charge? Who has the power? The insight? The wisdom?) Technology continues to evolve (AI keeps getting "smarter") but the modern human condition continues to be crazy -- perhaps even more so.

What Brin includes, in the context of this theme of our ongoing tenuous existence, is a series of often comical, non-fiction inserts documenting and commenting on all the different ways that humanity may bite the bullet or devolve into barbarianism. These non-fictional inserts provide a thoughtful and informative overview of the negative possibilities of tomorrow. Is hope for the future of humanity realistic?

Into this context come the aliens, offering "something," though it is not clear what. A jump forward in our social evolution? Admission into a galactic society? Or the end of the world as we know it? Will we be swallowed up?

Part Two

There is a general theory of cosmic evolution (of which there are numerous versions) that describes the history, as well as the future, of the universe as an ongoing evolution toward greater and greater complexity, yielding, at some point in the process, increasingly advanced forms of intelligence, mentality, and civilization. The overall thrust of evolutionary time is toward the development and ascension of mind. In many respects, evolution on the earth seems to be going in that direction -- complex chemistry evolved into life; life increased in complexity, and nervous systems and brains emerged; and conscious minds, civilizations, and technologies came into being and continue to evolve. (See for example, Kevin Kelley's *What Technology Wants*, Eric Chaisson's *The Epic of Evolution*, and Ray Kurzweil's *The Rise of Spiritual Machines*). Perhaps in other locations in the universe, this same general directionality toward higher mentality and intelligence is occurring as well. Sooner or later (and perhaps it is happening already) minds across the cosmos will come together and ascend to higher and higher levels of consciousness and civilization. It may be that this entire process represents the universe acquiring a cosmic mind and becoming aware of itself. (See Olaf Stapledon's *Starmaker* and Frank Tipler's *The Physics of Immortality*). All other things being equal, this view of cosmic evolution is a highly optimistic vision of the future of the universe.

But, the history of life on the earth, and in particular, the ongoing saga of humanity, seems filled with chaos and disasters, with great extinctions of life, and in our own time, innumerable ways in which human civilization may falter and fail. Is mental or technological evolution inevitable?

Further, if one looks to the sky, at this point in time there does not seem to be any clear evidence of advanced technological civilizations anywhere out there. This is Enrico Fermi's Paradox: Why don't we see any signs of this great cosmic thrust toward advancing intelligence and civilization? Perhaps we are alone? Perhaps "something" gets in the way of the ongoing evolution of technological civilizations thriving and flourishing? Perhaps humanity will fall victim to the same event or process that has made the night skies so silent?

This general question of humanity's continued evolution, as well as the even more cosmic question of the evolution of intelligence and technology across the universe, are the central connected themes of *Existence*. Is the evolution of advanced intelligence a viable or plausible possibility within the cosmos? As I mentioned in Part One of this review, Brin inserts into his novel a series of short pieces that list and describe many of the major possible causes of humanity's future extinction or collapse into barbarism. Even if the reader is familiar with this general issue, Brin provides an excellent overall and thoughtful consideration of the various dangers looming in front of us. Toward the latter part of the book, Brin also provides, in a series of short essays, a list of all the conceivable reasons why advanced alien species (if they exist) haven't contacted us.

To recall, I ended Part One of the review with the coming of the aliens into our wild, stressful, and crazy world circa 2050. The future is both a source of great hope and great fear, and the possibility of alien contact carries with it the same dual emotional charge. Are the aliens to be feared? Are the aliens the source of our salvation? In 2050, people across the globe react both ways; in fact, the aliens provoke numerous other typical human reactions and motives. Are the aliens a potential source of great power for those who can, ahead of others, monopolize communication and cooperation with the alien minds? All told, the aliens bring out the best and the worst in us. No surprise there.

When the aliens come, what will they be up to? Will they conquer us? Eat us? Rob us of all our resources? Will they come in giant spaceships? Will first contact be with one species or many? Will their arrival mark the end of human civilization or some great new beginning or evolutionary step forward? Will they share a cornucopia of new knowledge and new gadgets, or deprive us of what we have? The answers that Brin, in *Existence*, gives to these questions are imaginative and surprising, and I am not going to spoil the story by revealing the answers to these questions.

What I will say is that perhaps the stillness of the skies doesn't indicate that we are alone, but rather that because of our late arrival on the scene (the universe is 13.7 billion years old) we have missed at least the first wave of cosmic fireworks that have permeated the heavens above. Perhaps the dinosaurs did not become extinct due to "natural causes."

As revealed in *Existence*, David Brin is a realistic optimist about the future -- indeed he is an optimist regarding the cosmic future for humanity and other intelligent alien life forms throughout the universe. He is realistic because he clearly acknowledges and discusses the threats to our future survival, as well as the general sound and fury and "tooth and claw" nature of our evolutionary universe. Yet, through the competitiveness, selfishness, foolhardiness, egocentricity, and violence -- which may indeed span the cosmos -- Brin still sees the possibility for hope. *Existence* is a struggle that permeates the universe, but it is a struggle that can be successfully and wisely engaged.

I very much enjoyed reading *Existence*. It is perhaps a bit too long (almost 900 pages), but the main characters (of which there are many) are interesting, diverse, memorable, and engaging; the story line moves along at a good pace; the future reality of human society is rich and imaginative; the aliens (of which there are many as well) are a fascinating bunch; the dramatic stream of the story connects together well with the ongoing philosophical and theoretical expositions throughout the book; and the ending pulls it all together. I particularly would recommend *Existence* to futurists who may not see the value of science fiction as a provocative and valuable approach to seriously thinking about the future. *Existence* teaches, educates, and stimulates the human mind into thinking about both our earthly and cosmic futures.