Telling Tales
in New Biospheres
by Adam P.

Think of a young girl who likes to play with her sole possession, a doll. She names the doll Laura. This is then the name given to her by a group of adults who routinely enter her room, but the girl doesn’t feel like a Laura: her doll is Laura. There are 37 other young girls like her that reside in rooms up and down the same corridor. Once a day, they meet each other in a low-ceilinged hall and are forced to exercise, all routinely subjected to a series of examinations by the adults. Their monitoring is endless. Even when the adults take her doll, Laura, away from her, she’s never alone. This girl, whose name may or may not be Laura, has never stepped foot outside. Beyond the walls of her world lies another one that is not yours. She is one of 102 test subjects in humanity’s last applied experiment in outliving its own demise.

This isn’t, admittedly, everyone’s idea of a fun story. It’s also what some would call a ‘tall tale’, a bit of fantasy, a science fiction.

So let’s try to tell the story by beginning somewhere else shall we, give it some factual starting points? Think to points far back in time at various locations on the planet we call Earth: in 1994 a man who would go on to become a political strategist of divisive power and acumen was hired to manage a multi-million research project bankrolled by a billionaire whose aim was to create a working model of sustaining life on other planets. Or, think of how in 1832 an English philosopher requested in a highly eccentric last will and testament that his dead body be dissected, preserved, and wheeled out anytime his mates get together so that he can join the party. Consider how in 1997 a group of Dutch media producers sat around and brainstormed fruitlessly when somebody mentioned an edenic venture in Arizona, America, that is a kind of recreation of Noah’s Arc, a comment that will go on and change popular culture forever...

In telling this story we can reflect on what has happened over the last number of years: the Internet has fractured what were once immutable hegemonies and with the fissures have come long simmering political volcanoes and ecological and existential challenges. These are exemplified not least by the election of a reality TV presenter and business tycoon to the most powerful position in the world. More than anything, this election will define the present moment for years to come. An election and political campaign greatly leveraged by Steve Bannon. A man who by any standard has had an interesting life, careen-
ing from navy officer to investment banker to media mogul before he entered the sphere of Trump and ended up as a Chief White House Strategist. Well, that was until he was spun out by the chaos machine of the Trumpian West Wing. I try to understand this trajectory. And, like many others, try and calculate where it started exactly — and where it might end.

I am interested in how a country like the United States of America, in that decade of the 1980s, seems to have encouraged circuitous routes in a life like Bannon’s: after studying Urban Planning (a subject I find very interesting) he joined the Navy and travelled overseas, before returning to work in the Pentagon and then on to Harvard to earn a Masters degree in business admin. From there he went to New York to start working at the investment bank Goldman Sachs. He then moved to Los Angeles to work for the firm’s burgeoning involvement in movie finance and from there left to start his own investment banking company. It was at this time that a billionaire called Edward Bass hired Bannon to run the latter’s Space Biosphere Ventures, the company that fronted around 200 million dollars for something called the Biosphere 2 project based in Arizona.

Biosphere 2 may seem straight out of a science fiction film (a comedy of dubious merit called Bio-Dome has in fact been produced) and as such an unlikely place for someone like Steve Bannon to end up running, as we’re used to hearing him — and his more recent media venture Breitbart news — enact routine climate change calumny. Biosphere 2 was a closed Earth system science facility whose aim was to recreate the conditions of life in a self-sufficient ‘glass ark’ mega-terrarium sealed off from the first biosphere (Earth itself). The idea was simple enough: build a large, airtight structure that was fully self-contained and totally cut off from the outside world, put inside it the elements of life and see how the ecological systems would fare and whether humans could be supported and maintained within it. In many ways it was a simulation of a space colony or a spaceship.

Let’s be honest, there are many problems to colonising space and covering the vast distances to other habitable planets. One set of these problems is firmly biological: we need to not only understand the complex web of systems in ecology\(^1\), but we must be able to successfully replicate and maintain them — Biosphere 2 was nothing less than an effort to begin to do just that.

Inside the large domes were seven biomes, from rainforest to savannah and added to these would be ‘species packing’ whereby a host of flora and fauna, insect and organic materials would be introduced, along with animals ranging from pygmy goats to tilapia fish. Eight ‘biospherian’ human subjects and scientists would enter the dome for a period of two years. The results were both predictable and surprising: the group descended into tribal warfare and suffered from low morale due to constant hunger pangs and low levels of oxygen (indeed the growing media circus that enveloped the project led some commentators to get whipped up into a frenzy when they heard that the experiment allowed for oxygen to be pumped into the dome at one point, presumably they wanted the biospherians to die
if the initial oxygen projections turned out to be incorrect and needed adjusting — some humans are just so unyielding). Things all went somewhat more awry for the second experiment, which also coincided with Steve Bannon joining the venture when he was asked by Bass to step in and run the company. The experiment descended into the kind of chaos now common in political reportage: two of the previous participants returned to the site when they heard Bannon had been recruited and tried to force their way into the dome in order to tell those inside that the project was headed in a direction other than the one they had first signed onto. Windows were broken, doors left open, and the artificial atmosphere inside wholly compromised. The investors took over and placed restraining orders on the scientists — within six months the experiment ended prematurely and Bannon left soon thereafter, not before a civil court case in which Space Biosphere Ventures were ordered to pay 600,000USD to the plaintiffs. During the trail Bannon told of how he threatened Abigail Alling, one of the scientists, with her own five pages of safety concerns: ‘I would ram it down her fucking throat.’² Safety first! Perhaps it’s not surprising to learn that the biospherians were chosen from John Allen’s “The Theater of All Possibilities”, an experimental troupe of improvisational actors based on a ranch near Santa Fe. They remind me of the Shakespearean thespians of Emily St John Mandel’s postapocalyptic novel Station Eleven, and who sought to bridge the growing chasm between man and ecology. Spectacle, amusement, the telling of stories — nothing is real if it is not entertainment it would seem: the television cameras were present in Arizona from the very beginning, much like politics have adopted many of the mannerisms of the circus.³ The idea that we live in a society of spectacle is nothing new and indeed the collapse of life as lived by ordinary people into the spectrum of entertainment came of age with a distinct new art form: reality TV. Arguably there were three major winners from the Biosphere 2 saga: the ants that snuck in and thrived, the cockroaches that proved yet again that they will inherit the world and outlive us all, and a man named John de Mol living in the low lying lands of the Netherlands. A few years after the last closed system experiment in Biosphere 2, de Mol, a television producer, was hanging out with his colleagues after a fruitless brainstorming session for a Catholic radio programme when I imagine the talk turned to Eden or perhaps the Rapture, which led to the Biosphere 2 project popping up. The TV producer then struck upon an idea he wasn’t able to shake: put willing members of the public into a confined space for 100 days and constantly film them, air the results on TV and stream it on the Internet. Not only would the result be entertainment, it would elevate entertainment to a life science. Big Brother was the obvious name for what came out of the top secret project de Mol first called Project X. The name was taken of course from George Orwell’s novel 1984,
which was born from a nightmare inspired by totalitarian societies that had an omniscient hold on their citizens, keeping them in total control and subjugation with an ever watchful eye. The idea that a TV show would not only adopt the name of Orwell’s nightmarish creation but also its central tenet of round-the-clock surveillance sparked outrage and horror, which is something hard to recall now that the show has been exported around the world since it first aired in 1999, going on to be created in over 50 countries with 400 plus seasons. In a sense, the idea is so embedded in contemporary culture it is even hard to imagine it ever being a novelty, let alone being in any way controversial or disturbing. We are all watching Big Brother, nobody is watching Big Brother, Big Brother is watching us, whoever it is that we have become.

Whether or not the show and the format of reality TV has taught us anything worthwhile about humanity could be up for debate. There is a sense that the proliferation of the genre in the first years of the 21st century allowed a kind of mass passiveness and acceptance that the 20th century’s 15 minutes of fame may not be enough, or indeed that we’re such banal and predictable creatures that we’ve got nothing really to hide. Edward Snowden’s revelations did not lead to mass revolts or revolutions of the status quo. The Internet of Things and our connectedness makes us resigned to an all seeing force watching us — and with our individual contributions to Big Data, we can ask if in fact we’re feeding these very same forces ourselves.

The origin of this all seeing eye can be traced to 1786 when the English utilitarian philosopher Jeremy Bentham travelled to White Russia (modern day Belarus) to visit his brother Samuel, a naval engineer and inventor. It is on this and a subsequent trip the following year that the idea for the panopticon is born, an all seeing force housed in an architectural design — which would go on to become both metaphor and synecdoche for a life constantly being observed by an unseeing power. It’s a curious setting but here were two brothers, one employed by Prince Potemkin to initiate ‘various arts of civilization’

4, hanging out far from home with the former writing to their father with excitement about one of Samuel’s constructions. It was a sort of circular building in the centre of a factory compound, from which managers could look on at unskilled workers to mark their progress or lack thereof. Jeremy saw the potential this had for penitentiaries if the guards were out of sight of the prisoners but still theoretically able to observe and watch them at all times. As they would not know when they were being observed, the prisoners would effectively watch themselves, behaving as if they were always being watched. Big Brother is watching you, even when you’re not live on air, even when the TV producer and editor are at home in bed dreaming of sun filled meadows. If you write emails about bomb making materials and suitable targets, you expect to get a knock at the door. The good citizen has nothing to hide.
The idea was a simple and brilliant one, but with technological and architectural limits, it was hard for Bentham to implement in practical terms. But the real success of the panopticon was perhaps as an idea and its effect on the imagination, not least in French philosopher Michel Foucault’s disciplinary theory as expounded in his 1975 work *Discipline and Punish*. Here, Foucault outlined how western society was fundamentally one based on discipline and punishment and was wholly normalised with power structures aimed at subjugation. With the failed seclusion of the *Biosphere 2* in mind, and observational anthropology as a laboratory to understand what it is that makes up human society, it’s worth quoting him at length on another, equally fascinating, aspect of the panopticon:

“But the Panopticon was also a laboratory; it could be used as a machine to carry out experiments, to alter behaviour, to train or correct individuals. To experiment with medicines and monitor their effects. To try out different punishments on prisoners, according to their crimes and character, and to seek the most effective ones. To teach different techniques simultaneously to the workers, to decide which is the best. To try out pedagogical experiments — and in particular to take up once again the well-debated problem of secluded education, by using orphans. One would see what would happen when, in their sixteenth or eighteenth year, they were presented with other boys or girls; one could verify whether, as Helvetius thought, anyone could learn anything; one would follow ‘the genealogy of every observable idea’; one could bring up different children according to different systems of thought, making certain children believe that two and two do not make four or that the moon is a cheese, then put them together when they are twenty or twenty-five years old; one would then have discussions that would be worth a great deal more than the sermons or lectures on which so much money is spent; one would have at least an opportunity of making discoveries in the domain of metaphysics. The Panopticon is a privileged place for experiments on men, and for analysing with complete certainty the transformations that may be obtained from them.”

People suffer transformations — the great certainty, we grow old, we die, entropy consumes us. Jeremy Benthem knew this most of all and at the age of 80, one week before dying, he wrote a very peculiar will in which he donated his body to science (his good friend Dr Thomas Southward Smith dissected his body in public) and asked for his body to be preserved and put on display as an ‘Auto Icon’, to be wheeled out whenever his colleagues got together to remember him. The University of London received the Auto Icon the 1850s and to this day it — or he — sits in a glass cabinet in a foyer at UCL, complete with wax head and walking stick, a macabre, ever-watchful eye. The head that was reattached
Notes

1. Someone who is very eloquent on these and related problems is Kim Stanley Robinson, one of our best sci-fi writers and not at all a proponent of scientism, or the belief that science alone will help us outlive an irreparably damaged planet Earth: ‘Biological problems are harder for humans to solve than physical problems, because biology concerns life, which is extraordinarily complex, and includes emergent properties and other poorly understood behaviours. Ultimately biology is still physics, but it constitutes a more complex set of physical problems, and includes areas we can’t explain.’ Our Generation Ships Will Sink in ‘Boing, Boing’, November 16, 2015.


3. ‘Probably one could say that a lot of contemporary politics is modeled on similar aesthetic forms [to reality TV], starting from Berlesconi’s emergence out of trash television. Certainly Trump is nothing without Celebrity Apprentice. So this was basically bred in the Biosphere as an unforeseen side effect in the wide noosphere. Even if the sphere would have been perfectly sealed, this effect would still have escaped. One wonders what kind of “thing” will “escape” from AI labs, and which unforeseen side effects this will have on the cosmosphere.’ Hito Steyerl, ‘Cosmic Catwalk and the Production of Time’ in Art Without Death, Sternberg Press, Berlin, 2018.


6. “If it should so happen that my personal friends and other disciples should be disposed to meet together on some day or days of the year for the purpose of commemorating the founder of the greatest happiness system of morals and legislation, my executor will from time to time cause to be conveyed to the room in which they meet the said box or case with the contents therein to be stationed in such part of the room as to the assembled company shall ... meet.” Jeremy Bentham, http://www.duhaime.org/LawFun/LawArticle-1279/The-Strange-1832-Last-Will-and-Testament-of-Jeremy-Bentham.aspx, Last accessed June 12, 2018