

Salvation Through Science? Bacon's New Atlantis and Transhumanism

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The interplay between politics and science is certainly not a new phenomenon, but astonishing scientific advances in medicine and technology during the 20th century, and into the first two decades of the 21st, have forced us to reconsider that relationship. While those advances have led to unprecedented wealth and accumulation of material comforts, man's increased control over nature also means he can destroy his fellow man with greater ease. Thus, in addition to penicillin, vaccinations for crippling diseases such as polio and smallpox, the mass production of the automobile, television, the internet and countless other beneficial inventions, the 20th century saw tens of millions die at the hands of their own governments.¹ Atomic energy can provide power for a whole city, but the same technology can also be used to decimate that very city. Natural science gives us incredible power, but it does not provide any guidelines as to how that power should be used. Therefore, a series of questions must be raised as to the proper relationship between science and politics. Should governments control scientific research agendas? Should they determine what inventions to allow? And if so, how can such determinations be made? Who ultimately decides if a scientific advancement is good or bad for society? The answers to such questions go a long way in determining the role of science within a society.

¹ R. J. Rummel has coined the term "democide" to refer to the killing of citizens by their own governments. Democide accounted for far more deaths than war in the 20th century (including 62 million in the Soviet Union alone). See R. J. Rummel. *Death by Government*. (New Jersey: Transaction Publishers, 1994) p.24

The first modern thinker to systematically address the impact of science on society was Francis Bacon. Bacon was *the* partisan for the advancement of science within the early modern period. Although he cannot be credited with a particular scientific achievement,² Bacon helped establish the foundation on which the new science was to be built. He was the first to outline the scientific method, with an emphasis on experimentation and observation.³ And perhaps more importantly, he argued for the adaptation of that method. The benefit of science was not readily apparent to his contemporaries, and it was no small feat to convince them of its utility.

While Bacon can arguably be credited as the founder of the new science and deserves praise for that feat, he also must be held accountable for the deleterious effects of his project.⁴ His dismissal of Plato and Aristotle, along with his seemingly unbounded optimism in regards to the transformative nature of his project, led him to overlook important aspects of political reality. While he was right to criticize the lack of progress within natural philosophy, he too readily dismissed the political and ethical dimensions of ancient and medieval thought.⁵ Bacon substitutes his new science in the place of the natural philosophy of his predecessors, but fails to

² Paolo Rossi. *Francis Bacon: From Magic to Science*. (Chicago: University of Chicago Press, 1968) p. xiii

³ See Lisa Jardine's introduction to Francis Bacon's *The New Organon*. Ed. Jardine and Silverthorne. (Cambridge: Cambridge University Press, 2000) p.xv

⁴ A strong case can be made for Bacon as *the* founder of modernity. He at least deserves equal consideration with the likes of Machiavelli and Hobbes.

⁵ For example, the rejection of Aristotle's physics need not lead to the rejection of his politics. See Alasdair Macintyre. *After Virtue*. 2nd edition (Indiana: Notre Dame Press 1984).

adequately account for politics. This is not to say that he ignores the subject altogether. Instead, he subsumes it under the umbrella of his new science:

It may also be doubted (rather than objected) whether we are speaking of perfecting only Natural Philosophy by our method or also the other sciences, Logic, Ethics and Politics. We certainly mean all that we have said to apply to all of them, and just as common logic, which governs things by means of the syllogism, is applicable not only to the natural sciences but to all the sciences, so also our science, which proceeds by *induction*, covers all.⁶

In other words, his *method* can be applied to every facet of knowledge. The problem with this is at least twofold: man cannot be subjected to experimentation and his nature is not exhausted by sensory perceptions.⁷ The second problem is related to the first in that some of the core questions of man's existence are off limits. The experimental method is designed to explain phenomenal relations and *how* things work. It does not and cannot answer questions of first causes or of "substance." Furthermore, it does not provide guidance as to proper action, or ethics. Bacon explicitly denounces metaphysics and derides moral and ethical philosophy since it deals with the "proud knowledge of good and evil."⁸

A final troubling aspect of his thought is his utopianism. As evident in *New Atlantis*, Bacon essentially foresees no limit to man's ability to control his own fate through the domination of nature. He presents us with a technological society that seemingly knows neither death nor disorder—in other words, heaven on earth. The only precondition for this earthly salvation lies in the adoption of Bacon's new

⁶ The New Organon (Novum Organum) p.98

⁷ Experimentation on humans is especially problematic for two reasons. One is due to epistemological reflexivity. Those being observed know they are being observed and thus may react differently than in "natural" conditions. Secondly, there are serious ethical constraints as to what kind of experimentation can be implemented.

⁸ Francis Bacon. *The Advancement of Learning*. Ed. Kitchin. (London and Melbourne: Dent Publishing, 1973) p.37

science. Thus, man no longer needs to rely on Providence for assistance or pin his hopes on an otherworldly existence. Instead, he can manipulate nature to provide a seemingly endless array of earthly goods.

Bacon's dogmatic emphasis on method (and the postulate that it can be utilized in all areas of knowledge), along with his reductionist account of man and his utopianism, leads me to claim that he was not only the founder of the new science (as he is often credited and rightly so), but also that he serves as the founder of *scientism*. Bacon's vision of a scientific utopia in *New Atlantis*, while interesting, was nothing more than a fantastical dream to his contemporaries and until the last century, was relegated to serving a modest role as inspiration for scientific societies (such as the Royal Society) or educational institutions. However, incredible scientific advances in the last few decades and an accelerating rate of growth in fields such as genetics, nanotechnology, and robotics have made some of Bacon's bolder predictions seem conservative.⁹ Transhumanism has emerged as a logical philosophical heir to Bacon's project and its proponents are arguing for a radical transformation of society in the same revolutionary spirit found in Bacon's philosophy. To demonstrate this compatibility, I will examine Zoltan Istvan's *The Transhumanist Wager* and note the striking similarities to Bacon's *New Atlantis*.¹⁰

⁹ For instance, inventor Ray Kurzweil persuasively argues we are experiencing exponential growth in these areas. His extrapolations lead him to predict sudden, dramatic changes in the near future including the merging of machines and human consciousness. See *The Singularity is Near* (Penguin Books: New York) 2005

¹⁰ Part of the introduction and the section on Bacon are from my full-length study on scientism. See *Maladies of Modernity: Scientism and the Deformation of Political Order*. St. Augustine Press (forthcoming fall 2016).

New Atlantis

Of all Bacon's writings, the *New Atlantis* is arguably the most controversial. This is not surprising considering both the form of the work and its content. The formal incompleteness of the work seemingly has a simple answer: Bacon did not have time to complete it before his death. This is essentially the argument set forth by Rawley, Bacon's secretary who oversaw its publication.¹¹ Yet some, like Jerry Weinberger, argue that the work is not as incomplete as it appears. Weinberger notes:

We must consider that the *New Atlantis* may indeed be the picture of the end of science as anticipated in the sixth part of the plan, and that it is a *complete* picture that appears incomplete because it presents a 'secret and retired' teaching about politics that can be discerned only with difficulty.¹²

Moreover, the *New Atlantis* evokes Plato's story of Atlantis, told in the *Timaeus* and *Critias*.¹³ Plato's story is also formally incomplete as it breaks off before Zeus's speech.¹⁴ This points to an intentional reason for the myth's incompleteness as opposed to it merely being an accident of time and circumstance. And the fact that Bacon went through the trouble to have it published in Latin serves as more evidence of its importance to his project.

While the form is obviously important, the main concern must be with the content. More specifically, I will focus on the political aspects of the myth with a

¹¹ See Weinberger's Introduction. *New Atlantis and The Great Instauration*. Ed. Weinberger. (Illinois: Harlan Davidson, 1989) p.xii

¹² Ibid p.xiii. While this claim may stretch the evidence, Weinberger's overall assertion that the work is crucial to Bacon's project is well founded.

¹³ See Plato. *Timaeus and Critias*. Translated by Jowett. (Scotts Valley, CA: IAP, 2009)

¹⁴ Ibid p.xiv. A speech that presumably would have been about why the Atlantians were to be punished: their lack of moderation.

particular emphasis on its *scientistic* character. I will show how Bacon violates his own principle by publishing “a dream of our imagination as a model of the world.”¹⁵ His seemingly unbounded optimism in the power of science led him to overlook the most pressing issues of human existence. The sobriety found in his earlier writings, in which he constantly warns against forgetting our mortal condition, gave way to an intoxicating dream in his final great work. Bensalem is essentially an earthly paradise, which is insulated from the very things that have plagued every other society in history. The society itself serves as redemption for the human race, and Bacon’s project is the vessel by which it can be accessed. Now, I will turn to the specifics in order to demonstrate exactly why it is indeed “a dream of our imagination” and more importantly, why it is a *dangerous* dream.

The basic plot of the *New Atlantis* sees a group of European sailors land on a mysterious island. They had been lost at sea with little hope of finding their way back and a number of them were sick. Their prayers for land were finally answered, but they were not immediately admitted onto the island. Only after they proclaimed themselves to be Christians and swore that they had not engaged in warfare for the previous forty days, were they allowed onto the island and placed in the Strangers’ House. The opening scene is important for several reasons. The first is that Bacon employs a recurrent theme of navigation.¹⁶ In addition to fitting in with the literature of his time, it serves as a symbol of how Bacon views his own project.

Having likened himself to Columbus, Bacon is offering entrance into a new world.

¹⁵ Francis Bacon. *The New Organon*. Ed. Jardine and Silverthorne. (Cambridge: Cambridge University Press, 2000) p.24

¹⁶ Howard White. *Peace Among the Willows: The Political Philosophy of Francis Bacon*. (Netherlands: Martinus Nijhoff Press, 1968) p.94

While hardships are not entirely absent from the journey to Bensalem, Bacon minimizes their importance. He does not describe deaths of crewmen or terrible storms. The winds had apparently been favorable for the first five months of the trip, but then shifted to where they could no longer sail in their desired direction. This rather peaceful view of the journey can be likened to the transition that will have to occur in society as Bacon's science is accepted. In other words, Bacon holds out hope for a rather peaceful transition even though such transitions throughout history have been riddled with violence.

It is important to note the conditions for coming onto land as well. They both have to do with religion. The sailors are not afraid to profess their Christianity (in light of seeing a cross) and the officials there to receive them are pleased to hear so. Moreover, the oath of "peace" for the previous forty days plays on Christian and Judaic symbolism and further confirms the nature of Bensalem as a peaceful society. The sailors are impressed with the generosity of their hosts and express a desire to stay there permanently after only a short time on the island. Yet the seemingly hospitable nature of the hosts may not be quite what it appears. For it is soon revealed that Bensalem possesses laws of secrecy that forbid guests to visit the island and then impart their knowledge of it upon returning to their homelands. The Governor of the House of Strangers insists that none have been held against their will, but for such laws to be successful, it seems almost necessary that it would have to be done in cases where visitors refused to stay. He claims those returning from the island would not be believed even if they did divulge information upon their

return, but if this is truly the case, then there would be little reason to try to convince visitors to stay in the first place.¹⁷

Nevertheless, in this case, the sailors express a genuine willingness to stay; mainly as a result of their favorable impressions of the Strangers' House during the mandatory three-day stay:

So we spent our three days joyfully, and without care, in expectation what would be done with us when they were expired. During which time, we had every hour joy of the amendment of our sick, who thought themselves cast into some divine pool of healing, they mended so kindly and so fast.¹⁸

Indeed, the emphasis on healing and prolongation of life is one of the primary aims of Solomon's House. While death is not mentioned anywhere in the story, it is important to note that there are fewer chambers for those who have healed than those who are sick. This implies that not everyone will be healed. In other words, it confirms our mortal condition, but Bacon conceals this fact and instead emphasizes the seemingly miraculous recovery of the sick sailors.¹⁹

It is through the governor's speech that we also discover something about the history of Bensalem. The first question asked by the sailors is how the island came to be converted to Christianity. The governor notes that twenty years after Christ's ascension, a great pillar of light appeared off the coast of Renfusa. One of the wise men from Solomon's House was present and after declaring the light to be miraculous, the wise man's boat was allowed to approach closer (all of the other

¹⁷ Weinberger suggests that those unwilling or unfit to stay "must have been restrained by force or killed." P. xvi

¹⁸ Francis Bacon. *Essays and New Atlantis*. Ed. Gordon Haight. (New York: Walter Black Publishing, 1942) p.254

¹⁹ In earlier works, Bacon had often insisted "that we do not place our felicity in knowledge, as we forget our mortality." See *The Advancement of Learning*. Ed. Kitchin. (London and Melbourne: Dent Publishing, 1973) p.6

boats had been stopped within sixty yards of it). As he got close, the pillar of light broke up, but a small chest was left behind. It contained all of the books of the Old and New Testaments, in addition to “some other books of the New Testament, which were not at that time written.”²⁰ The most striking part of the account is that the wise man declared the pillar of light to be a miracle: reason judges revelation. But what could give him such authority to distinguish a miracle from a fraud or a merely natural occurrence? The probable answer is Baconian science since Bensalem was founded well before the coming of Christ.

The fact that Bensalem was established well before Christianity is interesting for several reasons. For one, it shows that Bensalem’s success was not due to Christianity. Solamona, the lawgiver of Bensalem, is described as a “divine instrument” who had a “large heart, inscrutable for good, and was wholly bent to make his kingdom and people happy.”²¹ Considering his wish for continued prosperity, Solamona instituted the laws of secrecy to preserve the exemplary nature of his society. He realized there were “a thousand ways” to make it worse, but “scarce” any way to make it better.²² In other words, Bensalem was good from the start. It did not need anything else to make it better, but had to guard against corrupting influences to insure that it stayed that way.

So why did Bensalem convert to Christianity? First, it should be noted that the claim to conversion is not the same as actual conversion. Christianity has been admitted into Bensalem, but it is not clear how much influence it actually has had in

²⁰ New Atlantis p.260

²¹ Ibid p.268

²² Ibid p.269

the society. Nor is it clear how many citizens are actually Christian. Moreover, there are symbols from Islam, Judaism, and ancient Egypt present, and one of the most prominent characters in the book, Joabin, is Jewish. Secondly, it is important to remember Bacon's audience. He had to win over the churches or at least assure them that his project was not a threat. Thus, making the island compatible with Christianity was of utmost importance. But Bacon's timeline makes it clear that the success of the society did not hinge on Christian revelation; rather it was derived from science.

The religious symbolism found throughout the myth has been the subject of several interesting studies. Howard White and Jerry Weinberger both point to the symbols as being tools of the regime.²³ They serve to promote cohesiveness and order within the society. Stephen McKnight dismisses that claim as cynical and argues that Bacon's religious symbols were the reflection of genuinely held beliefs.²⁴ McKnight notes, "Bacon's vision of reform or instauration is drawn from the Judeo-Christian scriptures, particularly the Genesis account of the Creation and the fall; from apocalyptic expectation of renewal in the Old Testament; and from soteriological themes of the New Testament."²⁵ Moreover, Bacon's work is also influenced by "themes and imagery found in the *prisca theologia*, a highly elastic collection of Neoplatonism, Hermeticism, alchemy, magic, and Jewish esoteric

²³ See White's *Peace Among the Willows* and Weinberger's *Introduction to New Atlantis*

²⁴ Stephen McKnight. *The Religious Foundations of Francis Bacon's Thought*. (Columbia: University of Missouri Press, 2006) p.15

²⁵ Ibid p.3

traditions.”²⁶ Far from being a rejection of Christianity or religion, McKnight argues that Bacon’s project aims to uncover a “truer, deeper level understanding of the scriptures and of God’s saving acts in history.”²⁷ The interpretations, while divergent, both offer valuable insight into Bacon’s project.²⁸ Bacon is not merely trying to create order, although that is indeed a primary concern of his. He is attempting to create an earthly paradise and the religious symbolism is appropriate to his task. Bacon genuinely believes that his project can serve as redemption for mankind. Thus, the appropriation of Christian symbolism serves the dual purpose of propping up the regime *and* of reflecting Bacon’s beliefs about the transformative nature of his science.²⁹

Throughout the work, we are mainly relegated to getting information about Bensalem through its official representatives. An exception is the Feast of the Family, a public ceremony that is given to any man “that shall live to see thirty persons descended of his body alive together, and all above three years old.”³⁰ The cost is incurred by the state. Since there is no mention of any specific virtue of the man, or of any further moral requirements, the feast appears to celebrate “mere

²⁶ Ibid p.3

²⁷ Ibid p.3

²⁸ McKnight is right to emphasize the religious character of Bacon’s work, but the evidence seems to suggest that science, not Christ, is what is to be worshipped. White and Weinberger are justified in questioning Bacon’s fidelity to Christianity, although perhaps not to religion in general.

²⁹ Consider one such passage: “We answered, after we had looked awhile one upon another, admiring this gracious and *parent-like* usage, that we could not tell what to say, for we wanted words to express our thanks; and his noble free offer left us nothing to ask. It seemed to us that we had before us a picture of our *salvation in heaven*.” (emphasis added) see *New Atlantis* pp.255-256

³⁰ Ibid p.274

longevity and fecundity.”³¹ This fits in well with the primary aims of Solomon’s House: prolongation of life and material comfort.

After observing the Feast, the narrator meets one of the most important characters in the myth, Joabin the merchant. Joabin is described as a “wise man, and learned, and of great policy, and excellently seen in the laws and customs of that nation.”³² After the narrator praises the Feast of the Family, he inquires into the nature of marriage within Bensalem. Joabin explains how the laws and customs of marriage are arranged and why they are superior to those of Europe. Joabin claims that Bensalem is “the virgin of the world” and its people are of a chaste mind.³³ Unlike in Europe, marriage is not merely a convenient arrangement designed to quell “unlawful concupiscence.” Instead, it represents a “faithful nuptial union of man and wife.”³⁴ Joabin explains that there is no polygamy and at least a month must pass between the first meeting and marriage. The consent of the parents must be given and if it is not, then the inheritance is greatly diminished. Furthermore, Joabin tells us of the rejection of the idea of letting the married couple see each other naked before the contract. Instead, a friend of the man and a friend of the woman are allowed to watch them bathe in “Adam and Eve pools.” This is a more “civil” solution because it avoids the “scorn to give a refusal after so familiar knowledge.”³⁵

³¹ Weinberger xxiv

³² Ibid p.65

³³ Ibid p.66

³⁴ Ibid pp.66-67

³⁵ Ibid p.68

The rites of marriage tell us more about Bensalem than may be apparent in a cursory reading. It marks one of the only passages where Bacon explicitly criticizes a European institution.³⁶ He is also leveling a critique against Plato and More since both had suggested the idea that married couples could see each other naked before marriage. But why is this distinction important? We could imagine that complications could arise from the arrangement in Bensalem. What if the friends became attracted to the spouses? Would not there be incentive to misrepresent what was seen in the “Adam and Eve” pools? Bacon seemingly ignores the eroticism that is inherent in these situations. As White notes, “the friend would have to overcome the sense of shame, and see them as they were before the fall.”³⁷ McKnight argues that Bacon’s wish is to restore man to his pre-lapsarian condition, and the presence of the Adam and Eve pools could suggest that his science has indeed been able to do that for Bensalem.³⁸ What is apparent is that marriage in Bensalem is not primarily a private good. Free choice is minimized.³⁹ The requirement of parental consent, with a significant inheritance penalty if not followed, and the implementation of the Adam and Eve pools suggest significant regulation of marriage by the regime. Thus, one can conclude that marriage serves a public good and this is reinforced in the aforementioned Feast of the Family, which could not be celebrated without a strong marital institution.

The final scene of the myth is also one of the most important for it allows us to see exactly what Baconian science can achieve. The utopian aim of Bacon’s project is

³⁶ White p.139

³⁷ Ibid p.187

³⁸ McKnight p.9

³⁹ White p.180

to conquer chance. And that is exactly what is done through the workings of the scientists of Solomon's House in Bensalem. While Bacon acknowledges the importance of experiments of light, the true glory lies in the experiments that bear fruit.⁴⁰ Inventors are therefore revered since their works can benefit all of mankind and not just through the span of their respective lives. Their inventions live on well after they have passed.⁴¹ The most important function of Solomon's House is the preservation and prolongation of life and so a great emphasis is placed on medicine.⁴² We know that the medicine serves its function well from the account of the sick sailors who were healed in the "divine pool," presumably by the "Water of Paradise" referenced by one of the fathers of Solomon's House.⁴³ We learn that the scientists of Solomon's House have made all sorts of discoveries and have mastered the ability to manipulate nature to man's needs. They have genetically engineered beasts and birds:

By art likewise we make them greater or taller than their kind is, and contrariwise dwarf them and stay their growth; we make them more fruitful and bearing than their kind is, and contrariwise barren and not generative. We find means to make commixtures and copulations of divers kinds, which have produced many new kinds, and them not barren, as the general opinion is...Neither do we this by chance, but we know beforehand of what matter and commixture, what kind of those creatures will arise.⁴⁴

⁴⁰ Ibid p.106

⁴¹ In *Novum Organum*, Bacon notes that inventors should hold the highest rank in society. They should be placed above political "heroes" since achievements in politics only extend to particular societies whereas inventions can benefit all societies. Furthermore, they bring "benefit without hurt or sorrow to anyone." p.99

⁴² White p.149

⁴³ New Atlantis p.290

⁴⁴ Ibid p.292

In addition to genetic engineering, they have discovered flight and perfected machines that can imitate the motions of living creatures.⁴⁵

Aside from the astonishing advances of Solomon's House, Bacon provides insight into its organizational structure. It is essentially a technological bureaucracy. The Merchants of Light are responsible for travelling, under concealment, to other lands to collect valuable information. The Depredators collect all known experiments from books. The Mystery-men collect experiments of "all mechanical arts, and also of liberal sciences, and also of practices which are not brought into arts." The Pioneers try new experiments as they see fit. The Compilers catalogue the experiments of the Pioneers. The Benefactors look for the practical use in those experiments. After a meeting of "our whole number" the Lamps direct new experiments that delve deeper into nature than the previous experiments did. The Inoculators carry out these experiments and finally, the Interpreters of Nature, "raise the former experiments into greater observations, axioms, and aphorisms."⁴⁶

After the reader is given a glimpse of the hierarchy of Solomon's House, Bacon outlines an additional function:

We have consultations, which of the inventions and experiences which we have discovered shall be published, and which not; and take all an oath of secrecy for the concealing of those which we think fit to keep secret, though some of those we do reveal sometime to the state, and some not.⁴⁷

This is clearly a significant passage for it admits of political necessity. Technology wields great power, and that power can be used for good or bad. Thus, it becomes crucial to distinguish between helpful and potentially harmful discoveries. The

⁴⁵ Ibid p.298

⁴⁶ Ibid p.300

⁴⁷ Ibid p.300

reasons for such concealment are fairly obvious, but Bacon does not tell the reader *how* the decision is made to allow or to conceal inventions. One possible answer would be through *phronesis*, or the practical wisdom of a statesman, but it is unclear that the scientists of Solomon's House would possess it. Bacon does not even list politics as one of the subjects that is studied in Solomon's House so one must wonder from where political wisdom is to be derived.

Finally, the father of Solomon's House explains the most impressive feat of the institution, control of vicissitude:

And we do also declare natural divinations of diseases, plagues, swarms of hurtful creatures, scarcity, tempests, earthquakes, great inundations, comets, temperature of the year, and divers other things; and we give counsel thereupon, what the people shall do for the prevention and remedy of them.⁴⁸

The science of Bensalem has overcome chance and has insulated the society against natural disasters and divine revenge. With that final revelation, the father of Solomon's House gave his blessing to the narrator and gave him permission to publish it "for the good of other nations."⁴⁹ The final line further confirms the contention that Bacon viewed the work as important and sufficient for publication. It also reinforces my characterization of his work; Bacon clearly thought that his project would benefit mankind as a whole and not just his particular society. The universalism of Baconian science transcends cultural and religious divisions (as evident by the harmony in Bensalem) and provides an earthly paradise similar to the one promised by Christianity, only in the afterlife.

⁴⁸ Ibid p.302

⁴⁹ Ibid p.302

The Transhumanist Wager

Writing nearly five hundred years after Bacon, Zoltan Istvan, an avowed transhumanist, offers us a bold look at a not so distant future where transhumanists ultimately overcome seemingly insurmountable obstacles and literally transform the world. The revolutionary character of the work is readily apparent from the start as Istvan outlines the Three Laws of Transhumanism:

1. A transhumanist must safeguard one's own existence above all else.
2. A transhumanist must strive to achieve omnipotence as expediently as possible—so long as one's actions do not conflict with the First Law.
3. A transhumanist must safeguard value in the universe—so long as one's actions do not conflict with the First and Second Laws.⁵⁰

The embrace of atomistic selfishness is unapologetic and is embodied by the protagonist (clearly modeled after the book's author): Jethro Knights.⁵¹ Jethro is accepted to the top philosophy program in the nation on the strength of his entrance essay, which promotes transhumanist values.⁵² His rebellious nature is exemplified in three events while at the university: a near expulsion for hitting a bully with a pool cue, an outburst at a forum on transhumanism (which included the President of the U.S. and other high level governmental officials) and a confrontation with his professor on the final day of his senior year. The town hall forum represented the first sense of disenchantment for Jethro with the government. He had assumed it

⁵⁰ Zoltan Istvan. *The Transhumanist Wager*. (Lexington, KY: Futurity Imagine Media, 2013) p.4

⁵¹ Istvan has worked as a journalist for the National Geographic channel and also took a multi year sailing journey around the world by himself. He brought along 500 books with him. There are numerous other parallels between Jethro and Istvan, giving the story an autobiographical/confessional feel. He wrote the book "hoping to change people's ideas of what a human being is and what it can become." Ibid p.298

⁵² Ibid p.16

would be a no brainer for the government to support life extension science and technology, but it became apparent through the speeches of high-level politicians at the event that no such support would be coming.⁵³ Jethro's patience wore thin and he interrupted the forum with an impromptu speech. "Are all of the politicians here totally insane? Or just plain stupid? Or maybe just cowards?... Can't you see that it was science that made our country great in the first place... Do we really want to remain animals for the rest of our days when we can be so much more?"⁵⁴

Shortly after the town hall forum, Jethro penned *The Rise of the Transhuman Citizen*, which served as his final paper in the senior level philosophy class he was taking. In it, he outlined his new philosophy: Teleological Egocentric Functionalism (TEF). Knights made it clear that the primary goal of the philosophy was immortality. In order for the philosophy to take hold in society at large, a transhuman champion was needed: the omnipotender.⁵⁵ The omnipotender is "an unyielding individual whose central aim is to contend for as much power and advancement as he could achieve, and whose immediate goal is to transcend his human biological limitations in order to reach permanent sentience."⁵⁶ Naturally, Jethro aspired to be the omnipotender. The predictable reaction of his classmates and professor was ridicule and condemnation. The spirit of the work was cold,

⁵³ Ibid p.24

⁵⁴ Ibid pp.27-28

⁵⁵ The Nietzschean influences are clear throughout the work, particularly in the critiques of democracy and mass culture: "The bold code of the transhumanist will rise. It's embedded in the undemocratic nature of technology and our own teleological advancement. It is the future. We are the future. Like it or not... We need to divert the resources to the most gifted and qualified. To the achievers of society... Not the losers of the world, or the mediocre, or the downtrodden, or the fearful. They will only drag us down like they already have." pp. 127-128

⁵⁶ Ibid p.33

calculating, and elitist and exemplified in his response to the professor: “I’m interested in immortality for me and how to reach it. I don’t have a need for a god or faith or books like yours, which philosophize about things that might exist outside of myself. . . it’s a complete waste of my very valuable time.”⁵⁷

Knights was much more concerned with his plan upon graduation: to sail across the world in *Contender*, the vessel he built. The theme of navigation, which was so prominent in *New Atlantis* is likewise featured by Istvan. The solo nature of the journey is consistent with the TEF’s message of self-reliance, and Knights uses his scientific knowledge to construct a vessel, which will prove to be impervious to the vicissitudes of nature.⁵⁸ Knights brings 500 books on his journey; a mix of classics and contemporary works covering an array of subjects such as nuclear physics, anthropology, biology, sociology, chemistry, and economics.⁵⁹ Notably absent are works covering the spiritual dimension of man, which Knights on more than one occasion, makes clear hold little to no value for him. Metaphysical speculation simply has no place in his philosophy, and he cannot comprehend how it could matter to others either.

Knights is able to gain international recognition through articles he writes for *International Geographic* while on his journey. He also crosses paths with his eventual love interest, Zoe Bach, while covering a conflict in Kashmir. Zoe is a trauma surgeon who shares Jethro’s optimism in transhumanism, but also embraces metaphysical questions. Initially, it appears as if Zoe might soften the militant,

⁵⁷ *ibid* p.35

⁵⁸ Knights had the misfortune of sailing in the middle of a Category 5 hurricane, but along with his vessel, managed to survive.

⁵⁹ *Ibid* p.39

calculating outlook on life embraced by Knights, but when he ultimately loses her in a terror attack orchestrated by Reverend Belinas (the chief opponent of transhumanism in America), his approach only hardens. Although Knights is successful in bringing worldwide attention to his cause, the movement in America is crushed by the Reverend and his political allies through a massive new governmental agency: the National Future Security Agency (NFSA). Terrorist attacks carried out against transhumanist scientists and their families along with the stripping of funds associated with transhumanist research force many who are sympathetic with the aims of the movement to bow out. After several years of trying to work within the system and suffering tremendous personal losses along the way, Knights forms a new plan. He will start his own nation, *Transhumania*, and build a technological paradise where scientist and other free thinkers can enjoy unimpeded progress.

Knights is able to secure funds through a sympathetic billionaire whose life had been saved years earlier by Zoe Bach. Vilimich, an oil tycoon and one of the richest men in the world, had coincidentally heard Jethro's speech at the town hall forum years earlier and liked the audaciousness of the young man. Like Jethro, he had also experienced the loss of his wife (and child) at the hands of terrorists, and he was intrigued by the possibility of bringing them back to life through scientific advances. Although Jethro initially refuses the offer due to the reasons for Vilimich's support (the technology he was hoping for was not consistent with the primary goal of TEF to achieve immortality for the living), Vilimich eventually caves in and gives the

money to Jethro without his original conditions attached. With billions of dollars at his disposal, Jethro moves forward with his plans to found a new nation.

After finding current islands to be unsatisfactory due to the proximity to other world powers (all of which fundamentally oppose the transformative science), Jethro decides to build a floating island, modeled after oil platforms, but on a much bigger scale. This would allow him to move if necessary (to avoid natural disasters such as hurricanes) and also give him the protection and neutrality of international waters. After building and launching the *Transhumania*, Knights persuades the top scientists from around the world to inhabit the island, offering them generous salaries, luxurious living conditions, and freedom to pursue their research without restrictions. In exchange, the scientists have to sign contracts vowing to uphold the philosophy of TEF during their five-year appointments. Each scientist is informed of a simple rule governing the society: everyone must be useful. “There were no labor unions allowed. No workers’ compensation. No welfare. No freebies. In short, there was no pity, or even pretense at pity. There was just usefulness-or not.”⁶⁰ After several years, the results of having the best scientists in the world working towards a common goal are staggering. Within five years of the nation’s founding, the average lifespan increases to 120 and we are told within a decade, “death under most circumstances will cease to exist for Transhumanists.”⁶¹ Those who can afford it book trips to *Transhumania* to obtain cures for previously incurable diseases, as well as enhancements to their biological bodies (such as 20/10 vision, artificial organs, robotic hands).

⁶⁰ Ibid 158

⁶¹ Ibid 221

Meanwhile, the A-10 (a political/economic alliance of the 10 most powerful countries) nervously watches the development of Transhumania. The best scientists from the A-10 countries had left and a global recession was making things worse around the world at the same time Transhumania was growing wealthy. Knights dedicates nearly half of the budget to military science, correctly anticipating the world's hostile reaction to the nation's success. In addition to hiring one of the best military strategists in the world, he hires hackers who can access the weaponry of potential enemies and redirect their GPS guided strikes at them. Using the technology uncovered by his top scientists, Knights also builds several pilotless jets, which can fly at speeds three times faster than any munitions fired at them by the A-10 countries.⁶² Knights travels to a summit to offer terms of surrender, but surprises the A-10 when he informs them it is *their* surrender he is there to talk about. Knights also secretly broadcasts the meeting so the world can see that his nation is not the aggressor. After listening to the others, it is apparent that war is inevitable so Knights officially issues a declaration of war and is promptly arrested. He is escorted by guards associated with Belinas to a secret location, and the two finally meet face to face for an extended conversation. Belinas admits to being responsible for the death of Zoe and lets Jethro know he will be next. Naturally, Knights has a plan and the surgically installed tracking chip allows a military robot to quickly track his location and rescue him. Belinas is killed, along with his soldiers, and as Knights flies back to *Transhumania*, he begins preparations for an invasion.

⁶² Ibid p.266

The A-10 countries simultaneously attack, although they target infrastructure and not the population centers of the floating island. They still hold out hope for a semi-peaceful resolution and Knights' surrender. However, the technology developed during *Transhumania's* short existence proves to be too much for the world powers. Embarrassingly, the missiles they fire are redirected and only one of the dozens of munitions fired actually gets through (it got through because the programmers were unfamiliar with the code due to the weapon being extremely outdated). The failed attack emboldens Knights to continue with his plan and shortly after, he launches a series of attacks on major political and religious structures throughout the world. He had outlined the plan at the meeting with the A-10:

"I have come to accept your unconditional surrender, of all your nations and governments as a whole, without any bloodshed. If you do not accept, then my country will forcefully take over your nation and transform them into a greater Transhumania. . .We will begin by destroying every major religious symbol and every major political institution on Earth. If you force us, we will continue our plight until every one of you is left homeless, hungry, abandoned, and disgraced. . .We will send you back into the Dark Ages. If there is still more resistance that deliberately hinders or interferes with the goals of transhumanism, we will eliminate you—each and every one of you who defies us. We will implement a systematic *humanicide*."⁶³

After the destruction of major political and religious structures across the world, including the Vatican, Kabba, White House, and UN headquarters, Knights again broadcasted a worldwide message demanding the surrender of all countries and citizens to Transhumania.⁶⁴ After seeing what Transhumania was capable of, politicians began to step aside and allow transhumanist leaders to take over. After a year of instability across the world, things began to stabilize and quickly improve:

⁶³ Ibid p. 255. Emphasis added

⁶⁴ Ibid p.267

New leaders—all handpicked Transhumanians—coordinated with existing officials of bested countries to create huge, novel industries that jump-started economies. Massive infrastructure projects were initiated. . . Ground was broken on hundreds of gargantuan learning centers, schools, and universities. Taxes across the world were lowered to a straight 15 percent for everyone: rich or poor, healthy or sick, a Transhumania supporter or not. Jethro Knights forced all international borders open on the six populated continents, declaring the whole world ‘Transhumania.’ He initiated a single currency. . . These changes simplified life; people moved wherever they wanted, whenever they saw opportunity and the possibility to prosper.⁶⁵

Shortly thereafter, Knights contracts a rare, incurable disease and decides to undergo cryonic therapy. Despite the fact nobody had been successfully reanimated yet, Knights is confident in the continued advancement of technology. Seven years later, Knights awakes to find a completely transformed planet. “Procreation was now done exclusively in test tubes. Genetic engineering was commonplace. All forms of cancer were fully curable. Mars was an inhabited colony. Artificial intelligence was ubiquitous, even having its own moral systems and consciousness. Reverse-aging enterprises and bionics were some of the biggest fields in science and industry.”⁶⁶ The story ends with Knights satisfactorily looking out from the balcony of the hospital at the new world and thinking to himself: “this is just the beginning of Jethro Knights.”⁶⁷

Just as with Bacon’s *New Atlantis*, the plausibility of the story is of secondary concern to the philosophy underlying the work. Like Bacon, Istvan presents a utopian world transformed by science and technology. In both cases, the proponents of science represent a small minority of the population who separate themselves from the rest of the world in order to succeed (at least initially). Both

⁶⁵ Ibid p.287

⁶⁶ Ibid p.297

⁶⁷ Ibid p.297

nations possess strict codes of secrecy and closely guard their knowledge. They seek to control fate and conquer chance by learning the laws of nature, and a strong emphasis is placed on scientific education as a result. The two works seemingly diverge on two important issues: the role of religion and the methods used to bring about their respective utopias. Yet, those differences are not as great as they might appear on the surface.

Bacon's project is presented as being consistent with Christian principles while Istvan firmly rejects all religion as nothing more than harmful superstition. Knights is openly hostile to religion and makes it clear that it has no place in Transhumania. However, it is important to take into account the respective time periods and historical circumstances. Bacon was writing well before science was accepted in society at large and when churches still held enormous political influence. Therefore, he had to tread carefully when dealing with questions of religion and as noted previously, the history of Bensalem makes clear that the society's greatness derived from its science, not its religion. Istvan's story takes place well after the scientific revolution in a secularized Western world that has already been transformed by technology to an appreciable extent. Hostility to religion is no longer a disqualifying feature, and Istvan's work wholeheartedly embraces the antagonistic view of religion shared by *New Atheists* such as Richard Dawkins, Christopher Hitchens, and Sam Harris. Instead of presenting the movement as consistent with, or at least not antithetical to, religion as Bacon does in *New Atlantis*, Istvan sees religion as one of the primary obstacles to the realization of his vision.

Bacon suggests the transition from his society to the one presented in *New Atlantis* will be relatively smooth and peaceful. Bacon assures us that “the danger of not trying and the danger of not succeeding are not equal since the former risks the loss of a great good, the latter of a little human effort.”⁶⁸ Indeed, that maxim may be considered the key claim of utopian thinkers. Given what occurred in the last century, can such a claim be accepted today? Horrible things can indeed occur in the attempt to transform society regardless of whether the end is ultimately achieved or not and in spite of the “intentions” of the revolutionaries. Tens of millions of people lost their lives at the hands of their own governments during the 20th century. The Holocaust and Gulags were implemented as tools to bring about an ideal society. Marxism promised a world of peace, but the means to getting there was through violent revolution. Likewise, the Nazis used the aforementioned pseudo-scientific race theory to justify the slaughter of millions of Jews, all in the name of progress.

Unlike Bacon, Istvan openly embraces violence as a necessary requirement for the success of his movement. While he would prefer to see a peaceful transition, the odds of such an event occurring are remote. The attempts to change people’s minds through persuasion and ordinary politics fail miserably in the story: violence and fear are the tools that ultimately bring success to the movement.⁶⁹

⁶⁸ Novum Organum p.88

⁶⁹ Just as Marx criticized previous socialists for being utopians for believing society could be transformed peacefully, Istvan criticizes the current transhumanist movement for lacking the backbone necessary to make real changes. Stylistically, the TEF manifesto closely resembles the Communist Manifesto. “The history of the transhumanist is the history of evolution. . . These truths are innate and infallible. . . These truths are the essence of evolution. . . Tranhumanists of the world unite!” p.88

Scientism and a New Science of Politics

After briefly exploring the two works, it is apparent the transhumanist movement, as articulated by Istvan, owes much of its philosophical foundation to Francis Bacon. While there are obvious influences from Marx, Comte, Darwin, and Nietzsche spread throughout the work, transhumanism can best be understood as an extension of Bacon's project. The most important difference is transhumanists are operating in a world, which has already been transformed by science. The prestige of science is virtually unquestioned and technological advancements are seen as natural and desirable. Assuming technology continues to progress exponentially (as it has for at least the last few decades), serious questions will have to be addressed as to the role of science within society. Some, like Ray Kurzweil, see the merging of human and artificial intelligence as inevitable within the next few decades. While Kurzweil thinks the development will be decidedly positive for human civilization, recent history gives us good reasons to question such an optimistic viewpoint. Technology gives man tremendous power and one must ask how power is to be used before celebration ensues. The transhumanist movement suffers from the same fatal flaw as Bacon's philosophy in its failure to account for the potentially destructive effects of technology. Towards the end of Book I of *Novum Organum*, Bacon anticipates a critique of his vision: "if anyone objects that the sciences and arts have been perverted to evil and luxury and such like, the objection should convince no one... Just let man recover the right over nature which belongs to him by God's gift, and give it scope; *right reason* and *sound religion* will

govern its use.”⁷⁰ While this may be true, it must be asked *who* will exhibit right reason and *how* this can be assured. Without a program for political education, it seems dubious that “right reason” will be exhibited. This is why Plato and Aristotle went to great lengths to emphasize the importance of political education. Even if it is assumed that societies like Bensalem and Transhumania can exist, one still must wonder what guides the decisions of the scientists from a political and ethical standpoint. What standard is used to decide whether a particular invention or discovery will be disclosed to the public, or even the state? And who decides how it can be used and by whom? These questions cannot be adequately addressed without some sort of political knowledge, but neither Bacon nor transhumanists give us adequate guidance on the issue.

The fact that science has progressed as far as it has makes a satisfactory political science even more necessary. Our control over nature has vested us with great power. And with that greater power must come greater responsibility. Yet, political science in its current state is unable to offer much guidance. This is because of the deleterious effects of scientism on the social sciences. Too much emphasis has been put on the *method* used to acquire knowledge and certain forms of knowledge, particularly ethical and political, are discounted completely unless they conform to the methodological expectations of positivistic science.⁷¹ This type of attitude has all but erased metaphysics from the curriculum of political education, and the decline of moral philosophy can be traced to the same source. Perhaps “sound

⁷⁰ *Novum Organum* p.101 (emphasis added)

⁷¹ See Voegelin’s critique of positivism in the introduction to *The New Science of Politics*

religion” is the corrective to that decline, but how can we expect to have sound religion when theology has also been degraded? *New Atlantis* points to a civil religion, but Bacon leaves little direction as to how it is to be formed and what principles should guide it. *The Transhumanist Wager* leaves no room for traditional religion and seems to suggest new principles of morality will naturally emerge once the revolution has occurred (without outlining what those principles might look like or how they will be formed). It is clear that Bacon himself possesses a strong moral sense, as his project ultimately aims at the relief of man’s estate and on charitable and beneficial inventions. For the most part, the same “good intentions” can be attributed to transhumanists. Yet, Bacon and transhumanists both deride the moral philosophy of the classics and scholastics while failing to offer a suitable replacement. Science may be able to provide man with the power to control nature, but it does not tell him how to use that power. Only a science of man, freed from scientistic reductionism, can provide us with the wisdom that is necessary to make such decisions. Bacon was prescient in his realization of the magnificent power that could be derived from science, and advances in medicine and technology have indeed helped to relieve man’s estate. However, natural science provides no guidance as to how we should use the power it gives us over nature. Those questions constitute the proper domain of political science.⁷²

⁷² Admittedly, the conclusion I offer here requires a lengthy explanation. I address the issue fully in the aforementioned full length study: *Maladies of Modernity*