

2012

The lost city: examining the relationship between science, philosophy and the Atlantis myth

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THE LOST CITY: EXAMINING THE RELATIONSHIP BETWEEN
SCIENCE, PHILOSOPHY AND THE ATLANTIS MYTH

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
requirements for the degree of
Doctor of Philosophy

in

The Department of Political Science

by

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August 2012

To Lexington

ACKNOWLEDGMENTS

I would first like to thank every professor I have had throughout my undergraduate and graduate education. I would especially like to Eduardo Velasquez for introducing me to the study of political philosophy, and James R. Stoner, Jr. for seeing me through to the end. This dissertation would not have happened without them. Thank you to the members of my dissertation committee for their guidance and insights. I would also like to thank my friends and family for their support. Lastly, thank you to my husband Matt, for countless hours spent convincing me that one day I *would* finish this thing...

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LIST OF ABBREVIATIONS

The following abbreviations will be used throughout the text in reference to Francis Bacon's works:

AL = Advancement of Learning

Essays = The Essays (third edition)

GI = Great Instauration

History = History of the Reign of Henry VII

NA = New Atlantis

NO = Novum Organum (New Organon)

WoA = Wisdom of the Ancients

ABSTRACT

Francis Bacon, long considered a minor figure in the founding of modern political thought, is now recognized as one of its foremost thinkers. Bacon not only championed a new type and method of scientific inquiry, he also developed a plan for how modern society could be re-ordered to accommodate and promote scientific progress. Bacon's scientific writings cannot be wholly understood apart from his political writings, and many of his works combine the two topics so subtly that it is difficult to even place them in a definitive category. My project expands on the previous literature with a detailed analysis of the *New Atlantis*, which marks Bacon's turn to a poetic form in presenting the final image of his new science and the possible political consequences of science's ambition. I examine the place of the *New Atlantis* in Bacon's larger project and Bacon's place in the founding of modern political philosophy, briefly showing the ways his thought relates to Plato, Machiavelli and Hobbes. While the link between modern science and liberalism is not immediately clear, my project demonstrates that a clear thread can be found linking the two. Bacon's demonstration of scientific rule in the *New Atlantis* is not meant as a blueprint for modern society; rather it shows us the dangers of a scientific society devoid of liberty. I begin my project by asking why Bensalem is considered an Atlantis by Bacon. Does it represent a correction of Plato's ancient myth and by extension Plato himself, as has been argued by the leading studies of the matter? Or does it, as I argue, show the limits of science's ability to shape a society without destroying it? By examining what is troubling about the *New Atlantis*, I can explain what problems lead to the emergence of Atlantean societies, i.e. societies that are prosperous, ambitious, and doomed. My project shows that Bacon's portrait of Bensalem may provide the light necessary to guide those of us living in a world shaped by modern science through the dangerous seas.

CHAPTER 1: INTRODUCTION

*From these and all along errors of the way
in which our wandering predecessors went,
And like th' old Hebrews many years did stray
In deserts but of small extent
Bacon, like Moses, led us forth at last.
The barren wilderness he past,
Did on the very border stand
Of the blest promis'd land,
And from the mountain's top of his exalted wit,
Saw it himself and shew'd us it.*

---- Abraham Cowley (1667)¹

Long considered a minor figure in the founding of modern political thought, Francis Bacon (1561-1626) is now recognized as one of its foremost thinkers. Bacon not only championed a new type and method of scientific inquiry, he also developed a plan for how modern society could be re-ordered to accommodate and promote scientific progress. Unlike most political philosophers, Bacon actively engaged in the task of governing. Bacon served as Lord Chancellor under James I from 1618-1621, when he was removed from office amidst accusations of receiving bribes. In fact, Joseph Cropsey maintains that Bacon is “the only philosophic man of first rank to have come so close to regality as in fact to have sat vicegerent while the monarch was absent from the realm.”² Bacon’s tenure as Lord Chancellor is perhaps the closest the world has come to witnessing a philosopher king. It ended with Bacon in disgrace, exiled from court. He continued writing after his dismissal; the *History of the Reign of Henry VII*, the expanded edition of the *Essays*, and the *New Atlantis* were all written during this time, though the *New Atlantis* was not published until after his death. Bacon’s attempt to personally guide the political development of England failed, but his political and philosophical influence resonates throughout the centuries.

Bacon’s scientific writings cannot be wholly understood apart from his political writings, and many of his works combine the two topics so subtly that it is difficult to even place them in a definitive

¹ Cowley, “Ode to the Royal Society”.

² Cropsey, p. 14

category. In recent decades, several exemplary students of political philosophy have turned their attention to Bacon's thought. Their efforts demonstrate the scope and success of Bacon's plan for a new scientific Europe, as well as pointing to the doubts that Bacon himself harbored about such a future. My project expands on their efforts with a detailed analysis of the *New Atlantis*, which marks Bacon's turn to a poetic form to present the final image of his new science and the possible political consequences of science's ambition. I examine the place of the *New Atlantis* in Bacon's larger project and Bacon's place in the founding of modern political philosophy, briefly showing the ways his thought relates to Plato, Machiavelli and Hobbes. While the link between modern science and liberalism is not immediately clear, my project demonstrates that a clear thread can be found linking the two. Bacon's demonstration of scientific rule in the *New Atlantis* is not meant as a blueprint for modern society; rather it shows us the dangers of a scientific society devoid of liberty.

The *New Atlantis* serves as the apex of Bacon's *Great Instauration*, his plan for establishing a modern science that could serve as the basis for a new kind of political society. Unlike his other works, the *New Atlantis* is fiction. It tells of a company of European sailors stranded on a previously unknown island called Bensalem. This island appears to be a land of miraculous technology and wealth. It is ruled by a scientific institute called Salomon's House. The *New Atlantis* initially reads as a utopian tale; it references Plato's Atlantis myth and presents Bensalem as an improvement on the old Atlantean society. Upon closer examination, however, Bacon's portrait of scientific rule becomes more troubling, and further removed from the type of society he advocates elsewhere. His actual proposed society would not differ externally from the traditional one of England, but would be governed internally by scientific principles and be dedicated to furthering man's understanding of the natural world and human nature. The *New Atlantis* presents his vision of where his current course could lead; it expresses both his great hope and his deep reservations. It is not merely a way to make his philosophy palatable to the

public; the poetic form also allows Bacon to show that which must not be told. The *New Atlantis* is above all else a purposeful work, and should be regarded as such.

Bacon's secretary, Rawley, writes in the dedication of the *New Atlantis* that Bacon abandoned the *New Atlantis'* discussion of the best laws or regime for a commonwealth to work on his natural history.³ The *New Atlantis* is left incomplete; Rawley's statement implies that the incompleteness is due to Bacon's low regard for the project. Rawley's argument is certainly suspect; Weinberger argues that the sixth part of Bacon's *Great Instauration*, "to which the rest is subservient and ministrant"⁴, is in fact the *New Atlantis*.⁵ The sixth part of the *Great Instauration* was to present the final development of his philosophy and science. At stake is "no mere felicity of speculation, but the real business and fortunes of the human race, and all power of operation."⁶ Whether it was meant as a beacon or a warning, the *New Atlantis* would have been of utmost importance to Bacon, and his failure to complete it could be because the remainder of the work is either "hard to know" or "not fit to utter".⁷

I begin my project by asking why Bensalem is considered an Atlantis by Bacon. Does it represent a correction of Plato's ancient myth and by extension Plato himself, as has been argued by the leading studies of the matter? Or does it, as I argue, show the limits of science's ability to shape a society without destroying it? Is Bensalem to revolutionize Europe or is Europe to crush Bensalem's isolated, controlled society? What does modern society need to learn from an ancient Platonic myth that required such a subtle presentation?

By examining what is troubling about the *New Atlantis*, I can explain what problems lead to the emergence of Atlantean societies, i.e. societies that are prosperous, ambitious, and doomed. Bacon argues that Christianity and Christian charity have irreversibly changed the world. Science offers a way

³ *NA*, p. 36.

⁴ *GI*, p. 31.

⁵ Weinberger (1989), p. xi.

⁶ *GI*, p. 31.

⁷ *AL*, pp. 207-208.

to channel the charitable compulsions of Christian Europe into a less destructive path. As history has shown, however, the path of charitable science is fraught with peril. The goal of Bacon's science is to prevent Europe from becoming an Atlantis, while at the same time reaping the benefits of modern science. My project shows that Bacon's portrait of Bensalem may provide the light necessary to guide those of us living in a world shaped by modern science through the dangerous seas.

The most prominent studies of Bacon's work are Karl Wallace's *Francis Bacon on the Nature of Man*, Howard White's *Peace Among the Willows*, Paolo Rossi's *Francis Bacon: From Magic to Science*, Jerry Weinberger's *Science, Faith and Politics: Francis Bacon and the Utopian Roots of the Modern Age* (as well as his introduction to the 1989 Crofts Classics edition of *New Atlantis and The Great Instauration*), John C. Briggs' *Francis Bacon and the Rhetoric of Nature*, Stephen A McKnight's *The Religious Foundations of Francis Bacon's Thought*, Richard Kennington's *On Modern Origins*, and Robert K. Faulkner's *Francis Bacon and the Project of Progress*. All of these works provide valuable, nuanced insight into Bacon's motivations, tools, and purpose. They all address Bacon's political teaching, and how that teaching is related to his views on science and rhetoric. I will provide a brief summary of each in order to show where I am building on previous work and where my disagreements with these works originate.

The *New Atlantis* is present throughout these works, but is often used in a supplementary manner or else hovers indistinctly in the background of the argument. After a closer examination of the literature, I have found room for a project with the *New Atlantis* as its primary focus. I will draw upon Bacon's other works as necessary, but I believe a close analysis of the *New Atlantis* reveals Bacon's reservations about the future of modernity in a much clearer way than his more expository works. I also intend to show that what appears to be a re-telling and correcting of Plato's Atlantis myth is quite the opposite. Many commenters have argued that the *New Atlantis* demonstrates how modern science and modern politics will master the gods and nature, preventing destruction on the scale of Atlantis. I argue

instead that the choice of Atlantis does indicate the possibility of this hopeful future, but may also indicate that modern science could easily sink modern society beneath the seas, leaving only a cautionary tale in its wake. Bacon's *New Atlantis* is set in the middle of the Pacific Ocean – Bacon is quite openly indicating the strangeness of his tale.

White argues that, "Like Plato, Bacon clothed his shameless thoughts in modest words."⁸ He posits that Plato and Bacon both recognize the need for moderation, which entails recognizing the realities of politics. It also entails recognition of the extreme situation, in which moderation is useless. Plato's Atlantis did not fall victim to divine wrath and Plato's Athens did not fall to the vicissitudes of time. Both fell because they didn't have Bacon's science, which overcomes god, nature, and man. He asserts that Bacon believes the contemplative life to be the best life, and furthermore, the way Bacon reaches this conclusion is Platonic. The question remains, however, whether contemplation means the same thing to Bacon as it does to Plato. Plato's contemplation is based in wonder, while Bacon's is a lust for the universe.

White further argues that Bacon's philosophy is related to virtue but provides no assurance that the wise will rule over the learned, making it difficult to reconcile the highly controlled society of the *New Atlantis* with Bacon's incipient liberalism, particularly in the realm of commercial freedom. The power of man over man increases with the power of man over nature, a situation not unknown to Bacon. Bacon was afraid that war would hinder science, but science has flourished most in times of war. Political science has to decide who controls the direction of scientific expansion, politicians or scientists. White argues that the *New Atlantis* holds out the possibility of political stability through science. I argue that White underestimates the intentional flaws in Bensalem's society. The scientists of Salomon's House remain isolated from the greater community. They do not participate in the public square. Moreover, Solamona is said to have strived for stasis in forming the political life of Bensalem. Bacon

⁸ White, p. 34

would have been aware of the futility of such a goal. A society dedicated to infinite progress in technology and complete stagnation in policy will find itself unable to control its creations. Moreover, I disagree with White's contention that "The *New Atlantis* is...the only Baconian work...which is directed primarily against Plato."⁹ I argue that the *New Atlantis* is actually, as Weinberger suggests, an acknowledgment of a deep affinity between Plato and Bacon.

Wallace's work analyzes Bacon's understanding of the six psychological elements of human nature. The correct order is: understanding, reason, imagination, memory, appetite and will. These mark the progress from sensory to intellectual, or knowledge to action. Wallace shows how Bacon's science (and later Hobbes' political science) stems from an examination of sense perception. Rossi, on the other hand, argues that Bacon's scientific method and logic are derived from the rhetorical culture of Renaissance Europe. Bacon's method is a thread to guide men through Nature. Rossi also devotes a considerable amount of time to analyzing Bacon's rhetorical techniques and theories. He argues that for Bacon, rhetoric serves to reintroduce reason by freeing men's minds of falsehoods and creating 'visible' images of moral concepts. Eventually, Bacon wants to replace the persuasion of rhetoric with the knowledge of Nature. This conception of nature is the focus of Kennington's *On Modern Origins*, which presents Bacon and Descartes as co-founders of the modern philosophical turn. Kennington focuses on Bacon's scientific writings; he briefly considers the *New Atlantis*, but does not question Bacon's sincerity in presenting Bensalem as a utopia.

Though Bacon is often heralded as one of the founders of modern, secular, rational science, he maintains a concern with the problems and attributes of modern religion (particularly Christianity) through his works. Hans Blumenberg's *The Legitimacy of the Modern Age* and Hiram Caton's *Politics of Progress* both herald Bacon as a forerunner of modern philosophy and the liberal societies it shaped. On the other hand, Stephen McKnight argues in *Religious Foundations of Francis Bacon's Thought* that

⁹ White, p. 112.

Bacon's religious ideas are not rhetorical attempts to reconcile his new science with his surrounding society, but rather are genuine attempts to recapture religious understandings that have been obscured by ecclesiastical dogma. Drawing on the thought of Eric Voegelin, McKnight presents an interesting argument, though one that is not completely convincing. Bacon is undoubtedly interested in reforming the existing structures of Christianity, but I maintain that he wishes to do so in an effort to ease his society's transition into the new scientific world.

Weinberger's *Science, Faith, and Politics* provides a close reading of Bacon's *Advancement of Learning*. I am indebted both to his approach and to his insights regarding Bacon's larger scientific-political project. He argues that the *New Atlantis* reflects on the modern project from the standpoint of ancient utopian political philosophy.¹⁰ The *New Atlantis* shows how Bacon understood the problems of his project and shows how reason can be brought to bear on our own troubled times. The new science frees the productive arts to do the work of the statesman and moral virtue, and frees ancient wisdom from the imprisonment of Christian dogma. Bacon understands the difference between the necessary and the good. Weinberger argues that Bacon, who disguises himself as a utopian, is actually an unflinching realist, going beyond Machiavelli in attempting to understand what men really do and how to manage them. Bacon understands that necessity prohibits perfect justice of any kind, either idealistic or realistic. There is no justification for the tyrant, but the tyrant must somehow be accommodated. Necessity pushes the bounds of any possible justice at times; the new science will ensure that a sort of justice is possible. Weinberger argues that Machiavelli's realism is very unrealistic because the Italian doctor didn't understand the ancient utopians or the comedy of impossible beginnings. Weinberger extensively examines the role of rhetoric in Bacon's new science and asserts that though modern rhetoric must serve a different purpose than ancient rhetoric, Plato and Aristotle were not wrong about

¹⁰ Weinberger (1985), p. 28

its nature. Both the excessive materialism and excessive focus on abstract rights in the modern world are naively utopian and therefore dangerous.¹¹

Faulkner disagrees with Weinberger that Bacon is only using immoral means for a moral end. He argues instead that Bacon's politics is extremely concerned with power. But Faulkner also thinks that liberty, particularly economic liberty is important to Bacon. Faulkner argues that Bacon's quest for knowledge is in the service of helping art triumph over nature, not knowledge for its own sake. The political question, for Bacon, is which type of regime will promote the ends of science? He argues that (for Bensalem and England) the turn to naval power fosters republicanism. The *New Atlantis* does not present a strong, enlightened monarch; Faulkner and White both suggest that Bensalem is governed by a bureaucracy headed by a figure-head monarch. The civil society seems self-regulating. The "state" is said to govern, not the king. The kind of economy and progress that Bacon wants requires a certain degree of liberty, but would a republican regime also threaten the stability of the realm, preventing peace among the willows?

The idea that Bacon's political teaching is ultimately a republican teaching is supremely interesting. Bacon writes during the first stirrings of what will become the Enlightenment and during a time when the memory of religious and political turmoil loomed over England. Faith in progress and fear of political instability are both present in Bacon's works. The only overtly self-governing group seen in the *New Atlantis* is Salomon's House. There, the scientists who are dedicated to learning are capable of living and governing as equals. The general public, on the other hand, is never seen to participate actively in government. Moreover, the state itself is not trusted with all of the fruits of progress known to Salomon's House. My project focuses on explaining the state of things in Bensalem, and how this state might illuminate Bacon's plan for Europe's future. Rather than viewing the *New Atlantis* as an example of what to do, however, I will view it as an example of what *not* to do.

¹¹ Weinberger (1985), p. 331

Bacon's relationship with classical philosophy is also a common theme in Baconian literature; however, the primary focus of most commenters is how Bacon's theories of rhetoric differ from those of Aristotle. Bacon's relationship to Plato is most often framed in a discussion of religion or metaphysics, not science or politics. Two notable exceptions are Studer and Briggs. Studer's articles "Francis Bacon: Philosopher or Ideologue?" and "'Strange Fire at the Altar of the Lord': Francis Bacon on Human Nature" closely examine Bacon's treatment of two ancient myths in his *Wisdom of the Ancients*; she argues that Bacon's understanding of the dangers inherent in modernity can be seen in his analysis of ancient wisdom. Briggs argues that Bacon both admires and undermines Plato and Aristotle. Plato's pagan Atlantis perished, but Bacon's new Atlantis (which has accepted the wisdom of Solomon) has flourished. Briggs agrees with Rossi in suggesting that Bacon is carefully addressing the Timaeic tradition of Renaissance Europe, if not the dialogue itself. He argues that Bacon presents Egyptian learning (natural philosophy) as incompatible with the new science in order to placate King James, who opposed Egyptian learning. Briggs gives a detailed analysis of Plato's teachings on persuasion in the *Phaedrus*, and extensively examines Bacon's relationship to Aristotle's *Rhetoric*. He argues that Bacon preferred to be seen as one who praises and perfects the ancients, rather than a radical reformer. Briggs makes great use of the *Timaeus*, but his work is more concerned with the physics and metaphysics of the dialogue, rather than the politics of Atlantis.

The Atlantis myth is one of the most enduring tales to spring from political philosophy. Its beginning can be traced to Plato's *Timaeus* and *Critias*, but it remains important for those hoping to understand technology's place in the modern world. My project examines Bacon's *New Atlantis*, both as an individual work and as a glimpse into Bacon's larger project. The *New Atlantis* must both be placed into the context of his political/scientific writings and examined in the light of Plato's Atlantis story if his intentions are to be fully discovered. Interestingly, the tale of Atlantis was taken as truth by many readers, and has since gained a cultural presence independent of its philosophical beginnings. Atlantis

has taken root in the Western world's collective imagination as a lost society of fabulous riches, waiting on adventurers to discover its treasure. It is an emblem of the spirit driving explorers and conquerors to depart from the Old World and seek fortune in the New World. Curiously, however, Atlantis is not a new place; rather, it is the re-discovery of something very old. Atlantis is a hidden or lost society. The impulse to find this ancient place rather than to build something new is an interesting facet of the Atlantis myth and of Bacon's choice to invoke it in the pursuit of a new science. His decision to do so must be related to the relationship between Bacon's philosophy and that of Plato. Atlantis is not just a popular myth; it is a story with significant philosophical weight. Therefore, an examination of Plato's Atlantis is a necessary part of my quest to understand Bacon's thought.

Reading a Platonic dialogue is one of the most challenging tasks undertaken by students of political philosophy. Plato himself was concerned about the ability of written speeches or treatises to transmit philosophical wisdom.¹² In the *Phaedrus*, Plato's Socrates expresses this concern, arguing that understanding an argument is very different from memorizing an argument. The one who understands an argument knows when and how to apply his knowledge to practical situations, and also how to transmit this knowledge to others. Understanding is gained through dialectic. As Socrates questions his interlocutors, he exposes their ignorance and hopefully teaches them to think through the consequences of their ideas. As such, Socrates is skeptical of philosophical writing. Plato, on the other hand, evidently believed that the need to preserve philosophy for future generations was paramount. He allayed his uneasiness about writing by preserving his teachings in dialogue form. His dialogues force the reader to actively engage in the search for wisdom. The dialogues rarely reach a satisfactory conclusion, and one cannot assume that Socrates is always right or always truthful. As readers, we must examine each argument carefully in order to see what Plato has concealed. Every aspect of the dialogue

¹² Zuckert, p. 330

must be considered, including the setting, participants, and movement of the dialogue itself. At times, the things left unsaid are as important as the arguments presented.

Leo Strauss makes a strong argument for examining each element of a Platonic dialogue. In his lecture series “The Problem of Socrates”, Strauss argues, “The beginning of understanding of the Platonic dialogues is wonder. Wonder means here not merely admiration of beauty, but also and above all perplexity, recognition of the sphinx-like character of the Platonic dialogues. To begin with, we have no other clue than the outward appearance which one must try to describe.”¹³ Plato wrote dozens of dialogues on various topics. His philosophy is not easily discernible. The dialogues often contradict one another (and themselves), and the reader can never be sure of Socrates’ sincerity. Socrates does not merely serve as a mouthpiece for Plato’s views; he is a character apart from both Plato and the historical Socrates. It is true that Socrates most often takes the part of the philosopher in Plato’s dialogues, but one must always remember Socrates’ irresistible penchant for irony. Strauss asserts that Plato’s myths are not meant to convey revealed knowledge, but rather to communicate with various interlocutors on their own terms. Plato’s chosen format, the dialogue, both communicates and obscures his ideas about philosophy, rhetoric, and the city. In *The City and Man*, Strauss asserts that “If irony is essentially related to the fact that there is a natural order or rank among men it follows that irony consists in speaking differently to different kinds of people.”¹⁴ Socrates is famous for his use of irony, as well as for his dismissal of written works of philosophy. Strauss does not believe that these two characteristics are unrelated for Plato.

Plato would have attempted to correct the deficiencies of writing in his dialogues. Strauss argues, “Writings are essentially defective because they are equally accessible to all who can read...or because they say the same things to everyone. We may conclude that the Platonic dialogue says different things to different people – not accidentally, as every writing does, but that it is so contrived as

¹³ Strauss (1989), p. 152

¹⁴ Strauss (1964), p. 51

to say different things to different people, or that it is radically ironical.”¹⁵ By writing esoterically, Plato is able to conceal dangerous ideas from casual readers.¹⁶ Strauss argues that without this esotericism Plato’s political philosophy would have been incompatible with the city, i.e. Plato would have suffered Socrates’ fate and his teachings may have been lost forever. Combined with Plato’s understandable caution regarding public philosophizing, this makes it very difficult to grasp the true argument of the dialogues. The place, time, action, and characters of the dialogue must be considered before the philosophical arguments can be understood. Strauss’ insights into Plato’s approach to writing revolutionized the way Platonic dialogues are read by modern students. I follow his method of reading, applying it to both Plato’s dialogues and Bacon’s *New Atlantis*. Strauss’s works on Plato, Machiavelli, and Hobbes have been invaluable resources, as have his works on natural right and liberalism in modern political philosophy.

Richard Velkley discusses Strauss’ attempt to move beyond modern philosophy and the deeply flawed post-modern reaction in *Heidegger, Strauss, and the Premises of Philosophy: On Original Forgetting*. Inspired by Heidegger’s radical questioning of the philosophic tradition, Strauss made an attempt to genuinely return to classical philosophy and approach the ancients on their own merits.¹⁷ Velkley, drawing on Strauss’ arguments, maintains that post-modernity failed to overcome modern philosophy because it attempted to overcome even Socrates, an endeavor doomed to failure.¹⁸ Velkley splits his attention between Heidegger and Strauss; I draw primarily upon his chapters focused on Strauss’ thought. He closely examines Strauss’ lecture series “The Problem of Socrates”, paying particular attention to Strauss’ thoughts on the relationship between philosophy and poetry.

Catherine Zuckert builds on Strauss’ approach in *Plato’s Philosophers*, arguing that the Platonic dialogues should be ordered by their dramatic dates rather than their composition dates. She asserts

¹⁵ Strauss (1964), p. 51

¹⁶ Dangerous either to the city or to the writer.

¹⁷ Velkley, p. 6

¹⁸ Velkley, pp. 28, 46

that, “Reading the dialogues as discrete incidents in an ongoing story allows us to preserve the integrity of the individual works of art. By stringing them out in the order of their dramatic dates, we not only get a “through-line” that helps us see the shape of Plato’s corpus as a whole; we also follow Plato’s own indications about the relations of the conversations to one another.”¹⁹ By reading the dialogues in this manner one can come to understand the seeming contradictions present between many dialogues as ongoing elements of the story of Socrates’ life and the development of Plato’s philosophy. She offers a detailed examination of the *Timaeus-Critias*; though my project ultimately does not follow Zuckert’s dramatic placement of the *Timaeus-Critias*, I do build my argument with the aid of her textual analysis.

Several other works provided insight into Plato’s treatment of Atlantis. Peter Kalkavage’s introductory essay to his translation of the *Timaeus* is superb. He illuminates the text of the *Timaeus*, rendering one of Plato’s most difficult dialogues intelligible. Likewise, Welliver’s *Character, Plot, and Thought and in Plato’s Timaeus-Critias* and Lampert and Planeaux’s article “Who’s Who in Plato’s *Timaeus-Critias* and Why” investigate the setting and composition of the dialogues, providing a valuable starting point for serious readers. Focusing specifically on the account of Atlantis found in the *Critias*, Brisson argues that Plato presents a unique understanding of the relationship between myth and philosophy as he stands “balanced on a razor’s edge” between an oral tradition and a written tradition.²⁰ His work emphasizes Plato’s ambivalence regarding written philosophy, highlighting the careful placement of each element of Plato’s written word. Naddaf, who also serves as Brisson’s translator, presents Atlantis as a key element of Plato’s account of the proper ordering of cities. He offers a dramatic ordering of the dialogues different from that proposed by Zuckert; one that reveals Atlantis as a foil for both Athens and Socrates’ just city. Finally, Mark Blitz’s *Plato’s Political Philosophy* offers a broad examination of the most prevalent themes in Plato’s dialogues. His insights are particularly useful for connecting the *Timaeus-Critias* to Plato’s other works.

¹⁹ Zuckert, p. 17

²⁰ Brisson, pp. 38-39.

My project begins with a discussion of Plato's original version of the Atlantis myth in the *Timaeus-Critias* in Chapter 2. Chapter 3 examines Bacon's place as a modern founder in relation to the thought of Machiavelli, and provides a brief account of each of Bacon's major works excepting the *New Atlantis*. I attempt to show where the *New Atlantis* fits into Bacon's larger scientific-philosophical project before moving to a close analysis of the text of the *New Atlantis* in Chapters 4 and 5. Chapter 4 concerns the history, religion, and customs of Bensalem's "civilian" society, while Chapter 5 examines the rule of science in the form of Salomon's House. Chapter 6 will then discuss Bacon's legacy, initially preserved in the thought of Hobbes, later developed throughout the Enlightenment. The emergence of liberalism and natural right theory in the modern world can be partially traced to Bacon's renegotiation of philosophy's relationship to politics and the philosopher's role in the city. Bacon recognized that modern science would irreversibly change political society; the *New Atlantis* shows us what that society could become without a strong commitment to liberal principles and philosophical questioning.

CHAPTER 2: PLATO'S ATLANTIS

In order to understand Bacon's full intentions, it is necessary to return to Plato, the source of the Atlantis myth. This chapter examines Atlantis' origins in Plato's *Timaeus* and *Critias*. I provide a detailed analysis of the myth itself, in the hopes of discovering how Bacon's changes indicate the philosophical differences or sympathies between the two thinkers. Many commenters have assumed that Bacon's choice to incorporate Atlantis into his *New Atlantis* points to an attack on Plato.²¹

Weinberger, on the other hand, reminds us that, "The science of government will always be hard, and good government will always be rare."²² Modern and post-modern philosophy often fails to remember this, and thus becomes dangerously utopian in its excessive focus on either materialism or abstract rights.²³ Bacon understood the difficulty of his project, and thus turned to the ancients, naming his supposed utopia after a place that is notoriously corrupt in its original form. As Velkley argues, post-modern readings of the Greeks remind us that philosophy cannot evade the fundamental questions about the ground and unity of Being.²⁴ Plato cannot be overcome or undone – this is the key to Bacon's affinity for Plato. Bacon and his contemporaries offer a way for philosophy to survive, but Bacon never advocates eliminating the study of the ancients. He may have recognized that Plato offers the best possible answer to the fundamental tension between the philosopher and the city and thus concerned himself with making room for philosophers to live peacefully alongside or amongst scientists.

Plato's *Timaeus* and *Critias* take place at a single gathering and form two parts of one discussion. During the dialogues, Socrates meets with Timaeus, a successful (if imaginary) philosopher from Italian Locri; Critias, an Athenian who helped overthrow the democracy as one of the Thirty Tyrants; and Hermocrates, the Syracusan statesmen whose efforts contributed significantly to the defeat of Athens'

²¹ White, p. 112

²² Weinberger (1985), p. 331

²³ Weinberger (1985), p. 331

²⁴ Velkley, p. 42

Sicilian expedition.²⁵ The three interlocutors reveal that they, along with an unnamed fourth person, met with Socrates the previous evening to hear a speech. They have met again in order to repay Socrates with speeches of their own. Catherine Zuckert suggests that perhaps the reader is being shown a conspiracy in action.²⁶ The three interlocutors are known enemies of democracy, and Socrates himself has just endorsed a decidedly undemocratic regime as the best hope for a just city.²⁷ They meet at night to discuss the possibility of Socrates' city as a real political entity.

The *Timaeus* is a strange dialogue in several respects. It does not consist of Socrates' questioning of an interlocutor; the participants instead agree to take turns presenting long speeches for Socrates' entertainment. Socrates is not portrayed as an outsider or a misfit. He is the honored guest and never enters into open conflict with another participant. The speeches are so long that each participant is to be given a separate dialogue. In fact however, Timaeus and Critias each have namesake dialogues while Hermocrates' speech is never seen. Critias gives a speech about an old tale relating ancient Athens' defeat of Atlantis, a lost city. He begins his speech in the *Timaeus*, but then pauses for Timaeus to give a speech about the origin and nature of the cosmos. Critias then resumes his speech in the *Critias*; his speech concerns the structure and regime of the city of Atlantis, he never actually describes the war between the two cities. Historically, Timaeus' speech has attracted far more commentary than that of Critias. Though his account of the nature of the cosmos and the nature of man is undoubtedly important, for the purposes of this study I will largely limit my discussion to Critias' speech(es). Before any discussion, however, Hermocrates' silence must be addressed.

²⁵ The identity of Critias has been disputed in recent years. Lampert and Planeaux (1997) argue that the Critias of the dialogue is actually the famous tyrant's grandfather of the same name. Their argument for this assertion relies primarily on the impossibility of the tyrant Critias attending a gathering in 421B.C., when the dialogue is allegedly set. Given that Plato does not hesitate to play with timelines in order to facilitate a meeting between relevant parties, and that Timaeus is a fictional construct, I think Lampert and Planeaux's argument is flawed. I believe the character is meant to invoke the tyrant Critias.

²⁶ Zuckert, p. 429

²⁷ Socrates' earlier speech seems to have been similar to the one given in the *Republic*.

Given his historical role in the battle between Athens and his native Sicily, it is plausible that Hermocrates would have given a speech attuned to the political realities of war, a speech that would invoke Thucydides' role in classical thought.²⁸ Kalkavage supports this view in his introductory essay, noting that the *Timaeus* takes place right before the Sicilian expedition. Athens, once the champion of political liberty against old Atlantis, is becoming imperial.²⁹ Classical Athens, the Athens of the interlocutors, has more in common with Atlantis than with ancient Athens. In fact, ancient Athens' defeat of Atlantis closely parallels classical Athens' defeat of Persia.³⁰ Thucydides notably argues that stasis is impossible in politics – a sensibility that permeates the *Timaeus*, a dialogue intensely concerned with motion.³¹ Yet Hermocrates does not speak. Perhaps his is a truth not fit to utter?

Before examining the dialogues themselves, one must ascertain where the *Timaeus-Critias* fits into the Platonic canon. Zuckert convincingly argues that the larger picture of Plato's intentions can only be grasped by considering the dialogues according to their dramatic dates, rather than their order of composition.³² She offers an order for the dialogues that shows the rise of Socratic philosophy, its maturation, and its limits. The *Timaeus* and *Critias* are traditionally considered part of the following sequence of dialogues: *Republic*, *Timaeus*, *Critias*, *Hermocrates* (missing). While Zuckert and Naddaf agree that this order is likely correct, a disagreement arises between them regarding the placement of the *Laws*.

While Zuckert argues that the *Laws* forms the beginning of Plato's narrative by showing why Socratic philosophy is needed in the city, Naddaf argues that the true order of the dialogues may be: *Republic*, *Timaeus*, *Critias*, *Laws*, with the *Laws* fulfilling the requirements of Hermocrates' speech.³³ Both arguments are strong, and have serious implications for Platonic study. If Naddaf is correct, the

²⁸ Strauss (1964), pp. 140-141

²⁹ Kalkavage, p. 7

³⁰ Zuckert, p. 434

³¹ Kalkavage, p. 9

³² Zuckert, p. 7

³³ Zuckert, p. 9; Naddaf, p. 202

role of Atlantis in Plato's thought becomes clearer. In this case, the *Timaeus* and *Critias*, the dialogues containing the myth of Atlantis, are necessary for Plato to move from the imagined city of the *Republic* to the second best city of the *Laws*. Lampert and Planeaux argue that this movement is key to Bacon's understanding of Plato, as Bacon understood Plato's imperial politics. The *Timaeus-Critias* gives a new cosmology for the actions of the greatest city, replacing Homer.³⁴ Plato is changing the horizon and showing philosophy how to adapt to political reality in a way that allows it to shape political reality. Bacon's Atlantis follows Plato's philosophical imperialism, not Plato's Atlantis. Nevertheless, Atlantis is a key piece of this transition. I will examine the *Timaeus'* and the *Critias'* accounts of Atlantis and hopefully understand the role of the lost city in the movement from philosophical perfection to political reality.

TIMAEUS

The *Timaeus* begins with Socrates' recounting of his speech given the previous day. The speech concerned the form of the best possible regime, and resembled the *Republic* in many respects. Notably however, Socrates' speech does not include the idea of the city as man writ large; the proper ordering of the soul is never discussed. Philosophical virtue is ignored in favor of discussing political virtue. Socrates acknowledges the absence of these aspects of the *Republic* by asking Timaeus if his political blueprint is sufficient, or if they are "still yearning for something further in what was said".³⁵ Timaeus blithely responds that Socrates' account of his earlier speech is complete. Socrates questions Timaeus' *eros* for philosophical learning and Timaeus reveals himself not to be a true philosopher. As Kalkavage notes, Socrates praises Timaeus for being successful in philosophy, not for being wise.³⁶ Timaeus has mastered the art of knowing, but he does not possess the erotic yearning towards truth that marks

³⁴ Lampert and Planeaux, p. 122

³⁵ *Timaeus*, 19a-b

³⁶ Kalkavage, p. 5

Socrates' philosophy. Zuckert notes that Timaeus' speech does not give philosophers a compelling reason to return to the cave of political society after enlightenment.³⁷ Timaeus' cosmology does not admit failings on the part of nature or its god; human beings do not need to live in society and philosophers do not need to seek the society of others to improve their understanding. Timaeus gives no indication that philosophy is either dangerous or necessary for the city; philosophers should thus be able to live in peace in any society. Timaeus lacks Socrates' *eros*, which is a longing for eternal truths that will forever be beyond his reach. Timaeus is harmonious with the city, while Socrates could never stop his questioning.

Socrates expresses a desire to hear speeches describing his city in motion.³⁸ Already the progression from *Republic* to *Laws* is indicated. The best city can only maintain its pristine virtue in an isolated environment. Contact with other cities will necessarily introduce change, a fact which is addressed in the *Republic's* discussion of corruption and degeneration. The ideal city will likely be less robust than the second best city, and it is this city that Socrates foreshadows with his request. Socrates also notes that his current companions are ideally suited for this task, as they are all intricately tied to the political lives of their cities. Socrates laments that he has never been able to praise adequately Athens or its men.³⁹ His inability to do so is tied with his philosophic nature; Socrates sees injustice too clearly to be a successful statesman. He also claims that poets lack the imagination to see accurately how men would act in war and sophists would not praise the city accurately because they lack loyalty to any one place.⁴⁰ These criticisms are exceedingly strange, but do point to the necessity of historians. The best way to predict how a city *would* behave in wartime is to examine how other cities *have* behaved in wartime. As Welliver notes, Critias is a citizen of flawed Athens and admittedly intends to

³⁷ Zuckert, p. 467

³⁸ *Timaeus*, 19c

³⁹ *Timaeus*, 19d

⁴⁰ *Timaeus*, 19e

recite a poetic tale of Solon. He is no more qualified to set Socrates' city in motion than a poet would be.⁴¹ Socrates needs Thucydides.

However, Thucydides is not present. Instead, Critias introduces a tale passed down through his family from Solon.⁴² He claims that the ancient city described in Solon's story so closely resembles the city in Socrates' speech that they merely have to recall the story to see Socrates' city in motion. Critias embodies the love of one's own that makes the *Republic's* city impossible. Wisdom becomes identified with the memory of one's own past, rather than philosophical striving.⁴³ Critias displays contempt for myth and presents his story as lost history.⁴⁴ He explicitly identifies the good with the old, while emphasizing the antiquity of his own family.⁴⁵ This tale of Solon, whose name and function resembles both Solomon and Solamona, has remained unknown to the majority of Athenians until now. Its secrecy is strange. Just as Bensalem's history of the world is more accurate than Europe's, Egypt's history of Athens is more accurate than Athens' own. The answer to this mystery may be found in the elder Critias' description of Solon. He is said to be both wise and the noblest of poets.⁴⁶ The old man laments that Solon treated poetry as a "side-job" and was prevented from finishing his tale by his political responsibilities. Solon's tale, the one presented by Critias as history, is here described as poetry. Solon, the consummate statesman, does not disparage poetry. He recognizes that some things must be told in poetic form. Plato condemns poets while writing philosophic poetry. Thucydides supplemented historical facts with fictionalized accounts of debates and speeches. Poetry is extremely powerful, especially when woven with reason and truth. Bacon would come to understand this very well in a later time.

⁴¹ Welliver, p. 29

⁴² *Timaeus*, 20d-e

⁴³ Kalkavage, pp. 11-12

⁴⁴ Kalkavage, p. 13

⁴⁵ Zuckert, p. 431

⁴⁶ *Timaeus*, 21c

Critias tells of a meeting between Solon and a group of Egyptian priests. The Saiitic priests claim to be related to the Athenians because Athena founded their city.⁴⁷ They have a religion bearing the same name as Athens, but their traditions and beliefs are very different. Solon tries to impress the learned priests by reciting the events and genealogy of human beings after a devastating flood.⁴⁸ The priests respond with “You Greeks are always children!”⁴⁹ The Greeks are always young because of the myriad of natural disasters that erase vestiges of ancient ways. The youth of Greece means that they are innovative. It also means that they need myths to teach them piety and prudence. The priests cite scientific explanations for Greek myths and lament that the Greeks lack ancient wisdom.

The priests explain away myths with science without first explaining the function of the myth to Solon. Brisson maintains that Plato’s description of myth and use of myth point to a strong belief in myth’s value. Myth is used to educate children and adults who have not fully developed reason.⁵⁰ Only those few who are both naturally inclined towards philosophy and willing to work tirelessly to gain philosophic understanding will ever attain reason powerful enough to dominate sufficiently the appetitive part of the soul. Everyone else is at least partially reliant on myth for moral guidance. Zuckert argues that this demonstrates why poets will have to be readmitted to Socrates’ just city. Human beings cannot comprehend or achieve political order simply by controlling their passions through reason. Rather, “Human passion must be attached to appropriate goals...philosophers, like Socrates, have to surpass the poets in learning what human beings really desire.”⁵¹ Plato understands this; political philosophers must employ myth if they are to educate the city. They must learn from the poets and teach the poets to use their knowledge wisely. The Egyptian priests do not value myth because they are not tasked with cultivating virtue in a young people.

⁴⁷ *Timaeus*, 21e

⁴⁸ *Timaeus*, 22b

⁴⁹ *Timaeus*, 22c

⁵⁰ Brisson, p. 75

⁵¹ Zuckert, pp. 475-476

Kalkavage argues that the Egyptians view themselves as experts on the old because their wisdom can be written down. Wisdom is knowledge of the historical past and truth is pure facts.⁵² The Egyptian priests explain the myth of Phaethon using scientific accounts of the movement of heavenly bodies and the periodic outbreak of wildfires, while completely missing the lesson of the myth: those who seek to rule to prove their wisdom and excellence will cause the destruction of themselves and their societies. The Egyptian priests are opposites of the *Republic's* Guardians. The Guardians perpetuate noble lies in order to educate the city to virtue. The priests disseminate scientific knowledge, but fail to educate Solon about political life.

Both of these groups would be opposed to the scientists of Bacon's Salomon's House, who use their scientific understanding to create myths and miracles. The scientists are not interested in educating their citizens, however. They are interested in control. There is no possibility of philosophic education in Bensalem. Brisson notes that myth constitutes the means by which the common knowledge and beliefs of a community are passed from generation to generation.⁵³ Myth is meant to convey this information to children, information which is later challenged or confirmed by objective learning. If philosophic or scientific understanding never surpasses belief in myths, the society can never grow old, or grow up. Plato rejects the priests' scientific analysis of myth both because it ignores the larger truth conveyed by the myth and because scientific-philosophical discourse is devoted to discovering truth, and thus should not be used in the service of interpreting myths.⁵⁴ The literal truth or falsity of a myth is irrelevant; one should only consider whether or not the myth is helpful or harmful to the young.

⁵² Kalkavage, pp. 13-14

⁵³ Brisson, p. 116

⁵⁴ Brisson, p. 127

The priest praises the ancient Athenians as the best and most beautiful race of men, but says that their deeds (and example) have been lost because the Athenians do not write down their history.⁵⁵ This once again points to Plato's tense relationship with writing and persuasion. Plato ultimately favors writing as a means for passing on knowledge, but his manner of writing strongly suggests that written philosophy must take pains to avoid simplification and dogmatism. The war between Athens and Atlantis took place 1,000 years before the founding of his city. The priest does not say how the information got passed down to the priests. He also notes that ancient Athens was ruled by a class of priests, not philosophers.⁵⁶ The philosophers in the *Republic* control religion, but they are not priests. The scientists of Salomon's House, on the other hand, are both scientists and priests. Bacon's innovation presents rulers that do not merely regulate religion, they actively create it.

Plato's Atlantis is far out in the Atlantic Ocean and is a threat to both Europe and Asia.⁵⁷ Howland notes that "Timaeus unfolds his likely story in a context that emphasizes war and the struggle of man against nature."⁵⁸ Atlantis does not just work to extend its power over Nature; it is imperial in politics as well as science. The Egyptian priest claims that navigation was far superior in ancient times, a detail that will be repeated in Bacon's tale. Maritime rule is one of the hallmarks of both the Athenian and the British Empire. Navigation enables islands to rule, but it also prevents isolation to a great degree. Naddaf argues that Atlantis must find a way to balance its stable and unstable elements, both human and physical.⁵⁹ The tension between liberty and stability forms the central problems of political life, and if balance cannot be achieved, both will be destroyed.

Critias does not here present a detailed account of either Atlantis' or ancient Athens' government or culture. Atlantis seems to be an alliance of kings who rule over a wide-spread empire.

⁵⁵ *Timaeus*, 23e

⁵⁶ *Timaeus*, 24b

⁵⁷ *Timaeus*, 24e

⁵⁸ Howland, p. 18

⁵⁹ Naddaf, p. 200

Athens sometimes leads the other Greek cities and sometimes fights alone against Atlantis, but the two are constantly opposed.⁶⁰ Athens is said to have liberated all the islands from Atlantis, but was destroyed by the same catastrophes that sunk Atlantis into the sea. The priest describes the earthquakes and floods that destroy the Athenian army and the island of Atlantis as purely natural occurrences: vicissitudes of time, not divine retribution.⁶¹ Later, Critias will seemingly change his tale into one of Zeus' revenge against the arrogant Atlanteans. If the earthquakes and floods were indeed intended as revenge against Atlantis, then the destruction of ancient Athens indicates something more troubling about the god's justness.

Vidal-Naquet argues that other-ness is omnipresent in Critias' description of Atlantis.⁶² But as Welliver correctly notes, the motion of Atlantis bears a striking resemblance to the movement of Athens from city to empire.⁶³ After the Persian War, Athens becomes a maritime empire, eventually adopting the ambition and arrogance of their former enemies. Sparta fills the role vacated by Athens, that of the small land power struggling against imperial aggressors; the history of the Persian War would soon be repeated in the Peloponnesian. The *Critias* is Plato's way of analyzing and criticizing classical Athens, which is a mixture of Atlantis and ancient Athens. Plato uses Critias, who helped overthrow the Athenian democracy, to describe an ancient aristocracy brought down by either its hubris or its constant warring. The relationship between philosophy and the tyrant is clear in Socrates' relationship with Critias. Socrates' earlier speech reminded Critias of Solon's tale and he spent the night remembering it.⁶⁴ It is possible that he is adapting Solon's speech to fit his own purposes – one of the consequences of unwritten history. Critias' motivation seems twofold. He is trying to legitimize Socrates' best regime by showing that not only could it exist, but a form of it has existed in the past. He is also trying to gain

⁶⁰ *Timaeus*, 25d

⁶¹ *Timaeus*, 26d

⁶² Naddaf, p. 11

⁶³ Welliver, p. 42

⁶⁴ *Timaeus*, 26b

glory for Athens by showing that their ancestors were brave and virtuous, and also had the best possible regime.⁶⁵ Critias intends to give Timaeus' first men Athenian citizenship.⁶⁶

Critias' attempt to link the best city with ancient Athens points to the central impossibility of the best city. In his earlier speech, Socrates proposed communal marriage and child-rearing.⁶⁷ By holding wives and children in common, Socrates is actually not trying to eliminate *eros*. He is trying to eliminate the possessive exclusivity of *eros* by making all citizens into possible family members. Of course, this does not work. We love our families both because they are our own and because of our resemblances and shared memories. The *Republic* acknowledges this facet of human nature, and marks the desire to give preferential treatment to one's children as a portal for corruption to enter the city. Critias wants to glorify Athens, and will corrupt Socrates' city in order to do so.

Though the topic of Atlantis is introduced and briefly discussed at the beginning of the *Timaeus*, Critias' speech about the battle between Atlantis and ancient Athens is postponed in favor of a speech about the origin of the cosmos. Timaeus' speech accounts for the creation of the cosmos by giving a mathematical/scientific account of creation. The actions of the craftsman and star-gods are explained in great detail. Above all, Timaeus wants his audience to understand the secrets of Nature. Even if those secrets can't be replicated. In comparison, the scientists of Salomon's House want to unlock the secrets of nature, but also believe that they can replicate and improve on those secrets. The *Timaeus* takes beginnings as its ultimate topic, while the *New Atlantis* focuses on the ends of science. Timaeus differentiates between the things that are always coming into being and the things that always are. As Kalkavage argues, the craftsman is the god we "ought to believe in".⁶⁸ It is the god that is best for the best society. The craftsman always acts for the common good, bestowing his intelligence on the world as a divine gift. He is charitable. Timaeus subtly warns Socrates that he must be content with likely

⁶⁵ Kalkavage, p. 12

⁶⁶ *Timaeus*, 27b

⁶⁷ *Timaeus*, 18d

⁶⁸ Kalkavage, p. 17

stories about origins and the gods.⁶⁹ Like Socrates' account of the best city, Timaeus' account of the craftsman is at least partially rhetoric. The hubris of philosophy is not helpful for his purpose.

According to Timaeus' speech, all mortal things are constantly coming into being, and must determine how they relate to the eternal things.⁷⁰ This search forms the basis of classical philosophy, an erotic longing for wisdom and truth. It informs every aspect of human life, from metaphysics to politics. In the modern world, it will be reinterpreted as man's quest to dominate unchanging Nature. Plato anticipates the connection between the eternal and mathematical science by showing the beauty and grace of Nature as the result of measurable ratios and equations. The likely story purports to be a myth that is also scientific explanation.⁷¹ Creation is the ordering of the universe; the scientific-mathematical nature of the universe makes it possible. As in Bensalem, miracles are explained by science.

Timaeus' speech is not only an account of the beginning of the whole. It is also an account of human nature. The climax of his speech relates the gods' invention of sex.⁷² *Eros* is the fundamental aspect of human beings that cannot be overcome by reason. Throughout his speech, Timaeus has tried to ground the cosmos in art rather than sex. He tries to contain the madness of *eros*, by arguing that love of sex was created out of pure necessity. It is not given spiritual meaning.⁷³ Timaeus asserts that all things come into being through either necessity or the divine. The divine is the cause of all good things; the necessary is to be sought in service of the divine things. Intellect, a product of the gods, is said to have persuaded necessity to lead things to the best, enabling the universe to function.⁷⁴ As Kalkavage notes, this means that "the world is in effect held together, constituted, by a kind of cosmic rhetoric."⁷⁵ Woman is created out of the souls of degenerated men in order to facilitate reproduction. She is

⁶⁹ Kalkavage, p. 18

⁷⁰ *Timaeus*, 28a-29b

⁷¹ Kalkavage, p. 42

⁷² Kalkavage, p. 39

⁷³ *Timaeus*, 91a

⁷⁴ *Timaeus*, 48a

⁷⁵ Kalkavage, p. 28

necessary, and though *eros* can be destructive, it can also be used in the service of the best things. The cosmos is only completed by the introduction of degeneration.⁷⁶ A perfect, static universe is not possible. The catastrophes of nature are built into the nature of the cosmos. Degeneration is part of the whole, as insurmountable as Nature.

CRITIAS

The *Critias* begins immediately after the close of the *Timaeus*. Timaeus asks the gods for justice; he wants the gods to correct him if he spoke wrongly about the gods' origin. He asks to be granted understanding, rather than punishment.⁷⁷ Critias sympathizes with Timaeus, but claims that his own topic of speech (the war between Athens and Atlantis) is more difficult than that of Timaeus (the origin of the cosmos).⁷⁸ Critias argues that because we are familiar with human beings, we criticize those who represent them in speech and art more harshly than those who represent the gods. His argument is dubious, perhaps even blatantly untrue. Heresy and impiety are punished by death, while inaccurate portrayals of men are merely punished by ridicule. Critias invokes Mnemosyne, the goddess of memory, saying that his success or failure lies with her.⁷⁹ Again, Critias highlights the benefits and drawbacks of unwritten history. He claims the Atlantis/Athens war took place 9,000 years before Solon heard of it, and trusts both Solon's memory and his own to recall the tale accurately. On the other hand, if Atlantis is meant to be a morality tale, then its unwritten form will allow the speaker to alter details to better persuade his audience. Critias persists in framing his tale as historical fact, however.⁸⁰ He claims that Atlantis was completely destroyed by earthquakes, producing the vast sea of mud that makes that part of the ocean unnavigable in their own time.

⁷⁶ *Timaeus*, 92c

⁷⁷ *Critias*, 106a-b

⁷⁸ *Critias*, 107b

⁷⁹ *Critias*, 108d

⁸⁰ Zuckert argues on p. 431 that the inconsistencies in Critias' two speeches indicate that his entire tale is fabricated.

Critias promises to describe the respective power and constitutions of Athens and Atlantis, but cautions that pride of place must go to Athens. In the beginning of civilization, the gods portioned off the land without strife, because “to claim that gods did not recognize what was proper to each would not be fitting”.⁸¹ The gods know what justice is and would never act unjustly. Critias is giving an account of the divine at odds with Homeric myth but consistent with Socrates’ wishes as expressed in the *Republic*.⁸² In Critias’ speech, the gods guided human behavior through persuasion rather than coercion. Human beings are always aware of the power imbalance with the gods, however. Coercion is implied, but not explicitly shown. The gods sought to improve nature and human society. Athena and Hephaestus both received Athens in the lot, and created men from the earth. Critias repeats this Athenian myth and says that the gods gave the men “a conception of how to govern their society”.⁸³ He also claims that the names of these original people were preserved, but their deeds were lost. The advice of the gods is presumably also lost. Though Zuckert argues that that Critias shifts the source of Athenian virtue from correct division of labor to piety⁸⁴, it seems to me that Critias instead identifies good government as the recovery of lost divine wisdom. The gods’ advice seems to have formed the large principles of government, but Critias does not claim that the gods laid down specific laws. The task of uncovering the best manner of governing still falls to philosophers and statesmen.

Critias claims that though present Athens is still fertile and abundant, it is merely a vestige of ancient Athens. Ancient Athens produced such abundant crops and animals that it could support a large army that did not work the land. Thousands of years of floods washed the soil down off the mountains and into the ocean, leaving present Athens as a skeleton revealed by some wasting disease. This invokes not only the idea of glorious pasts, but also political degeneration. Critias displays a thorough

⁸¹ *Critias*, 109b

⁸² The traditional myth of Athens’ origin includes a fight between Poseidon and Athena over the land where the city would be built. Socrates argues that tales of injustice or strife between the gods should be forbidden in the *Republic*, 377e-383d.

⁸³ *Critias*, 109d

⁸⁴ Zuckert, p. 433

knowledge of geography and biology, but supplements his scientific knowledge with piety by claiming that the rains that produced the crops were sent by Zeus.

Critias next begins to connect ancient Athens to Socrates' best city. After the catastrophes, the only men left were illiterate mountain people who knew nothing but the ancestors' names.

Nevertheless, they glorified the ancestors, naming their children after them. The mountain people had to pay attention to their physical needs and did not work to preserve or discover the truth. Classical Athens has only the names of their ancestors and certain ideas about the gods. For instance, Athena is represented as armed to reflect the ancient tradition of training both men and women for war.⁸⁵ Athens had manufacturing and farming classes. It also had a warrior class set apart by "god-like men" that lived separately and had no private possessions.⁸⁶

Not long after this assertion, Critias contradicts his claim. The guardians and the priests are now said to have lived in the acropolis, isolated from the rest of the city. Though they were originally said to live communally, Critias now claims that, "In pursuing a mean between ostentation and servility, they build for themselves tasteful houses and they grew old in them in the company of their children and grand-children."⁸⁷ Critias has not only contradicted himself, he has revealed that ancient Athens bears little resemblance to Socrates' city. The most important trait of Socrates' guardians is their inability to know their own offspring. It is this part of their lifestyle that points to the extreme difficulty of placing civic virtue above love of one's own. Communal wives and children are also the aspect of Socrates' city that is most un-natural. Blitz posits that Plato views the natural as "one's own or what is most completely one's own."⁸⁸ This understanding of the natural could refer to inward traits such as moderation, courage, or philosophical yearning. But outwardly, the thing that is most completely our own is our children. Love of one's children is undoubtedly natural, and likely an essential aspect of

⁸⁵ *Critias*, 110b

⁸⁶ *Critias*, 110c

⁸⁷ *Critias*, 112c

⁸⁸ Blitz, p. 121

human nature. Any attempt to overcome this love is not just an attempt to overcome nature. It is an attempt to alter human nature to the point that human beings themselves become something new.

Critias insists that the rest of the Greek world followed the Athenians willingly.⁸⁹ The guardians are not presented as a conquering force. Critias does not explain how the city progressed from mountain families to organized classes or who the god-like men were. The presence of god-like men suggests the existence of philosophers, who know the eternal things. Yet the guardians are not said to be philosophers, statesmen, or even priests. They are a warrior class. The Greeks may have followed Athens willingly because Athens was possessed of a vastly superior military. The threat of coercion may have been enough to secure cooperation. This dynamic will be evident in the *New Atlantis*, as well. Salomon's House appears to be wholly benevolent, but no one on the island is unaware that the scientists could slaughter them with ease.

In order to understand the battle between Athens and Atlantis, it is important to understand Atlantis' structure and history. In both the *Critias* and the *New Atlantis* it is important to understand how regimes come to their final states. Unlike cities created in speech, real cities are always informed by the history of their people. Critias admits that Solon's account is somewhat poeticized. The Egyptian priests translated the Atlantean names into Egyptian according to their meanings. Solon in turn translated the names into Greek according to their original definitions.⁹⁰ Solon engages in a bit of poetic license to make the story more appealing to Greek audiences. He increases the persuasive capacity of the tale at the expense of accurate details. Critias also reveals that he has a copy of Solon's manuscripts. He is not relying entirely on memory for his tale, as he previously claimed. The presence of written history is an important detail. Critias' speech contains several such contradictions. One cannot assume that he is purposefully deceiving his companions; otherwise, he would presumably be more cautious about revealing these discrepancies. Rather, I think Critias' failings are the result of over-

⁸⁹ *Critias*, 112d

⁹⁰ *Critias*, 113a

eagerness to glorify ancient Athens and lack of rigor in his thinking. Critias is not a philosopher, and his inability to grasp the importance of certain ideas illuminates how a man inclined to politics and open to philosophy can become a tyrant.

The kings of Atlantis are the offspring of Poseidon and a mortal woman, Kleito.⁹¹ Kleito is the daughter of one of the *autochthones* of Atlantis; both Athens and Atlantis were populated by people sprung from the earth. In the case of Atlantis, however, Poseidon intervened with the development of the city by fathering children with this woman and setting them up to rule. Athena taught her people how to rule; Poseidon imposed the rule of presumably superior demi-god kings. To keep Kleito safe, Poseidon broke the island of Atlantis into five circles, two comprised of land and three comprised of water, surrounding her hillside home. Poseidon lived there with her and fathered five sets of twin sons. Unlike other gods, he seems to have actively raised his mortal children. Poseidon then divided the land into ten districts for his sons to rule. The firstborn was king over the others, who were called *archontes*.⁹² At several points, Critias connects Atlantis' society to that of classical Athens, allowing Plato to call his readers' attention to the troubling aspects of both societies.

Atlantis was a hereditary monarchy. The Atlas kings were extremely prosperous, amassing a tremendous amount of wealth and expanding their rule.⁹³ The island was extremely abundant and almost self-sufficient. Atlantis had two harvests, both plentiful. The one in the winter was dependent on Zeus-sent rains, but the one in the summer was the result of water stored in the Atlanteans' irrigation system. Their dedication to technological advancement ensured that they were twice as prosperous as if they had relied on the gods or nature alone. Of course, modern readers also know that two harvests per year mean that the soil will be depleted twice as quickly.

⁹¹ *Critias*, 133d

⁹² *Archontes* also refers to the nine chief magistrates of classical Athens. *Critias*, footnote 58.

⁹³ *Critias*, 114a. Atlas is the name of Poseidon and Kleito's oldest son; his descendants are called the Atlas kings. The Atlas kings are charged with ruling over the other kings.

Critias next describes the flora, fauna, and minerals of Atlantis.⁹⁴ Atlantis was home to both familiar and exotic species, including elephants. Later, Bacon will mirror these speeches in the *New Atlantis* as the narrator learns about Bensalem. First the history of the island is given, then the wealth and technology of the society. There is no discussion of marriage rites in the *Critias* beyond the Atlanteans' origin in divine eros. The original kings of Atlantis would have been god-like men, but they were not able to establish long-lasting laws and customs to prevent degeneration amongst their descendants.

The Atlas kings were relentlessly progressive. They each sought to improve upon their predecessors, especially the realm of construction.⁹⁵ They built a rectangular grid on the main plain of the capital. They built bridges across each ring of sea out from the palace and dug canals through each land ring. They also constructed a magnificent palace in the ancient home of the god. They did not seek stasis, unlike Bacon's Solamona. The Atlas kings sought to constantly improve upon both nature and the work of Poseidon. In fact, the bridges and canals overcome the original purpose of the god's construction of the island. All parts of Atlantis are accessible thanks to the work of the kings. Perhaps this is the arrogance which ostensibly leads to their destruction. The Atlanteans worshipped Poseidon and Kleito along with the original kings. Their temples are described as barbaric in nature. The Atlanteans are advanced technologically but primitive in their religious practices. Though they worship gods shared by the Greeks, they also worship their own ancestors equally.

The kings of Atlantis also prepared extensively for war. They built stone walls around the inner island and each land ring, harvesting the stone from beneath the center island. The Atlanteans demonstrate self-sufficiency and advanced technology, but this detail could also provide an explanation for the island sinking into the sea. The kings' clever construction may have fatally weakened the island's foundation. Atlantis was densely populated, especially in the capital and along the waterways. They

⁹⁴ *Critias*, 114e-115b

⁹⁵ *Critias*, 115d

also divided their soldiers according to rank and stationed the best ones on the center island. The capital was bordered by the rectangular plain, which was in turn surrounded by mountains. The island was oriented to the south. The great plain was formed by nature, but improved and expanded by the kings. It is said to be their greatest construction project.

Critias next describes the political ordering of Atlantis. Within their districts, the ten kings acted as absolute sovereigns. They could punish and put to death whomever they wished. But when conflicts arose between them or they needed to act as a unified kingdom, the kings were bound by the laws of Poseidon passed down from tradition and inscribed by the first kings.⁹⁶ Every fifth or sixth year, the ten kings would gather in the sanctuary of Poseidon and decide whether any of them had broken the laws and what the punishment should be. To aid their judgment, they would capture one of the bulls running free in the sanctuary and sacrifice it on the stele where the laws were inscribed. In addition to the laws, the stele also contained a terrible curse on those who broke the laws. After the sacrifice, the kings would pour the bull's blood over each of their heads. They were bound by blood and belief to follow their laws.

During the night, the kings would don blue robes and inscribe their judgments on a golden tablet.⁹⁷ At dawn the tablet and robes are dedicated as a memorial offering. It is not clear if the memorial offering is preserved in the sanctuary or destroyed in the sacrificial fire. It is interesting that the events of these meetings are revealed in such detail. The meeting of the kings bears some resemblance to the Nocturnal Council of the *Laws*. They meet at night to decide the fate of the kingdom. Unlike the Nocturnal Council, however, the Atlantean rulers are bound by a religion not of their own making. The most important laws forbid the kings to bear arms against each other, require them to always help a fellow king facing a rebellion, require them to deliberate together but always cede leadership in war to Atlas' family, and specify that Atlas' king could not put any kinsmen to death

⁹⁶ *Critias*, 119c-120d

⁹⁷ *Critias*, 120b

without the approval of the majority of the ten kings. Atlas' line is called the royal family; the ten kings together are called the divine family.

Critias asserts that:

For many generations and as long as enough of their divine nature survived, they were obedient unto their laws and they were well disposed to the divinity they were kin to...except for virtue, they held all else in disdain and thought their present good fortune of no consequence...they saw that both wealth and concord decline as possessions become pursued and honored. And virtue perishes with them as well.⁹⁸

The kings bore their wealth like it was a burden, and did not become intoxicated with luxury. Critias reveals that even in their sober judgment the kings could see that their wealth increased along with their amity and its accompanying virtue. Though the Atlanteans are said to value virtue above all else, wealth was not despised by the kings. They surely recognized that a rich kingdom is more pleasant and secure than a poor kingdom. But wealth was not their goal; rather, it was a side effect of their virtue. And their virtue was related to their divine nature. According to Critias' argument, human nature is not oriented to virtue, it is oriented to luxury. As generations of mortal *eros* diluted the kings' divine blood, the Atlanteans came to value possessions. If human beings are to avoid the decline of virtue, they must seek to move closer to the divine. Contemplation of the divine entails eschewing material luxury; though the kings were virtuous, they saw the value of wealth to their kingdom. Political leaders do not have the luxury of closing their eyes to the physical needs of their cities. A place must be found for philosophy in the city so that philosophers can advise and educate statesmen, but philosophers are ill-equipped to rule practically.

Critias closes his speech by declaring that "To whomever had eyes to see [philosophers] the kings appeared hideous because they were losing their most treasured possessions. But to those who were blind to the true way of life oriented to happiness it was at this time that they gave the semblance of being supremely beautiful and blessed. Yet inwardly they were filled with an unjust lust for

⁹⁸ Critias, 120e-121a

possessions and power.”⁹⁹ This occurred at the moment their human nature gained ascendancy over their divine nature. Here Critias demonstrates a capacity for philosophic understanding. He is not completely unjust or seized with lust for power. Once again, Plato demonstrates the dangers of a little bit of philosophy. Critias possesses an incomplete understanding of the role of the philosopher and philosophy in the city. As Zuckert rightly notes, Critias moves beyond Timaeus by acknowledging that human beings need some level of physical comfort and political stability in order to pursue knowledge, but he fails to address the possibility of a regime that can cultivate virtue in the people.¹⁰⁰ He seeks to be virtuous, but does not understand how virtue is achieved in political society.

Zeus, “god of the gods”, resolves to punish the kings for their corruption.¹⁰¹ Critias’ phrasing is strange, as it recalls Timaeus’ description of the demiurge’s creation of the gods in his earlier speech.¹⁰² Zeus is certainly one of the created gods; perhaps this is additional proof that Critias does not really understand either Socrates or Timaeus. Zeus’ punishment is meant to make the Atlanteans “more careful and harmonious as a result of their chastisement.”¹⁰³ The Atlanteans were once a noble race, and kinsmen of the gods. The gods love their own, as well. As we know from Critias’ speech in the *Timaeus*, however, Zeus’ punishment destroys them completely, making reform impossible. Either Critias is wrong about Zeus’ intent or Zeus is unable to control his own power. Divine wrath is not necessarily just, and punishing a people in order to show them the true way would not be justice. Zeus’ error would point to the inability of gods to be perfectly just. If Zeus does not believe that wiping out both Atlantis and ancient Athens is a punishment too harsh for the crime of degeneration, he is an imperfect god. Such a god is not supposed to exist in Socrates’ best city.

⁹⁹ *Critias*, 121b

¹⁰⁰ Zuckert, pp. 474-475

¹⁰¹ *Critias*, 121b

¹⁰² *Timaeus*, 41a

¹⁰³ *Critias*, 121c

Curiously, the *Critias* ends before Zeus can pronounce his punishment.¹⁰⁴ Zeus calls all the gods to their most honored abode at the center of the universe and looks down upon “all that has a share in generation”, a phrase recalling Timaeus’ distinction between that that is always coming into being and that which exists forever.¹⁰⁵ Once Zeus assembles the gods, the dialogue ends with the words “he said...”. Zeus’ words are not shown, as that would entail Critias claiming specific knowledge of a god’s actions and thoughts. Despite his earlier argument about the relative ease of speaking about the gods, Critias does not take this step. Zeus’ words remain mysterious, as does the fate of Atlantis.

In the *Timaeus*, Critias claims that ancient Athens and Atlantis were destroyed by a barrage of natural disasters; they are not said to perish from divine wrath. Critias’ failure to reveal how Zeus punished Atlantis has led to a general belief that Zeus was the cause of these disasters. That is never articulated in the text, however. Zeus’ punishment could have been mild, even effective, allowing the Atlanteans to continue for many more generations before succumbing to natural disaster. After all, the war between Atlantis and Athens is never described in the *Critias*. Both cities are described, but they do not interact. Socrates does not get to see a city in motion. And the reader does not learn whether divine punishment is just or whether the degeneration of a society can be reversed. The abrupt ending of the dialogue indicates that these questions are too difficult to answer easily.

CONCLUSION

If one views the *Timaeus-Critias* as Plato’s bridge between the best city and the best city possible, i.e. between the *Republic* and the *Laws*, then the relationship between Plato’s Atlantis and Bacon’s Atlantis becomes much more interesting than previously assumed. Bacon is traditionally

¹⁰⁴ Of course, one can argue that the rest of the dialogue has simply been lost or was accidentally left unfinished. The approach to reading Platonic dialogues that I have taken requires me to consider the significance of each element of the dialogue as though it were purposeful. If a philosophic or rhetorical meaning behind the incompleteness of the dialogue can be found, then it behooves me to discuss that possibility.

¹⁰⁵ *Critias*, 121c; Footnote 72

thought to object to Plato's elevation of contemplation over action, theory over practice. The *New Atlantis* is viewed in this tradition as Bacon's attempt to correct Plato's warning against technological progress.¹⁰⁶ The dialogues I have examined reveal a different Plato. Plato certainly valued contemplation, and probably believed the contemplative life to be the best life. But he also recognized that philosophic wisdom must be used in the service of political life; philosophers must live in political society, after all. Plato does not argue that men are political animals; men form political associations because nature does not fulfill all their needs.¹⁰⁷ Bacon's attempt to overcome nature in the service of human progress is merely an extension of this idea. Plato understood the necessity of concealing certain truths from casual observers, a necessity that Bacon also grasped. Bacon's decision to write the *New Atlantis* in a poetic form demonstrates his sympathy with Plato on this point and also with regard to Atlantis' importance.

White argues that Plato's Atlantis was not destroyed by divine revenge and Plato's Athens wasn't destroyed by the vicissitudes of time. Both fell because they didn't have Bacon's science, which overcomes god, nature, and man.¹⁰⁸ His argument rests on the assumption that Zeus actually destroys Atlantis in his wrath; however, Plato purposefully conceals Zeus' punishment of the Atlanteans from his readers. Plato's Atlantis was likely destroyed by the same natural disasters that claimed ancient Athens. The great Atlantis in Bacon's tale, on the other hand, had embraced advanced technologies though it was never as advanced as Bensalem.¹⁰⁹ Bacon's great Atlantis perished despite their technology; in fact, their technological achievements served only to prolong the people's suffering.¹¹⁰ The technology of

¹⁰⁶ Welliver, p. 61

¹⁰⁷ Zuckert, p. 477

¹⁰⁸ White, p. 133

¹⁰⁹ NA, pp. 52-53. Bacon's "great Atlantis" is not meant to be Plato's Atlantis. The *New Atlantis* identifies the great Atlantis as America and describes Plato's account as "poetical and fabulous".

¹¹⁰ NA, p. 54

Salomon's House has advanced to the point where the scientists can cause natural disasters; it follows that they would be equally capable of preventing them.¹¹¹

Bensalem is not safe from political degeneration, however. Plato's Atlantis provoked Zeus' wrath by ignoring their divine nature and pursuing power and possessions. They did not raise themselves up to challenge the gods, as the scientists of Salomon's House intend. The arrogance of the Atlanteans was not thinking that they were equal to gods. Their arrogance was thinking that human things were more important than divine things, and that they did not need the divine things to be prosperous and happy. This arrogance is extremely important for understanding Bacon's intent. Bacon does not argue that the human things are more important than the divine things. He argues that the human things *are* the divine things. Specifically, that the eternal laws of Nature, God's will manifested, are not only open to human discovery but are actually open to manipulation and improvement by human beings. Certainly some pursuits are higher than others for Bacon, but all efforts of body and mind, including philosophy, are human pursuits. Whether Plato's work supports this view is unclear, but the *Timaeus* and *Critias* certainly leave room for this argument. The ideal city of the *Republic* will always be misunderstood and corrupted by political men seeking to glorify themselves or their cities. Philosophers are always in danger of aiding tyrants; but a political philosophy that understands these dangers and seeks to counter them can be found in both Plato's and Bacon's accounts of Atlantis.

¹¹¹ See Ch. 5 for further discussion.

CHAPTER 3: BACON'S PROJECT: THE *NEW ATLANTIS* IN CONTEXT

To properly understand the role of Atlantis in Bacon's thought, it is next necessary to place the *New Atlantis* in the context of his other writings. As I argue in my first chapter, most of Bacon's writings are not exclusively scientific or political. Usually they are both – the *New Atlantis* is the culmination of both aspects of Bacon's project. Like all new ideas, Bacon's project holds the potential for both greatness and disaster. Bacon is acutely aware of this reality, and shrewdly conceals the worst dangers from all but the most careful reader. Yet, he does ensure that the careful reader will be duly warned about the pitfalls of modernity.

Building on Machiavelli, Bacon attempts a re-founding of philosophy and a re-negotiation of the relationship between philosophy and political society. Neither Machiavelli nor Bacon simply accepts Plato's formulation of the *Republic*; neither accepts that the philosopher is doomed to be in the city without being of the city. Plato's philosopher is never safe in the cave, yet he is compelled to return there. Bacon follows Machiavelli in attempting to reinvigorate philosophy and find a place for bold philosophers to exist in political society. But Bacon goes beyond Machiavelli, by elevating science and co-opting Christianity as its aid. Bacon renegotiates the relationship between philosophy and religion; Bacon's philosopher will no longer fear the priests because he will ally with the priests. Bacon not only rejects Machiavelli's contention that Christianity must be overcome; he viewed the Christian compulsion towards universal charity to be absolutely essential for the acceptance of modern science by the public. Though Machiavelli rejected Christianity's worth, his treatment did teach Bacon that "unarmed prophets, if armed with the right doctrines, can succeed."¹¹² Bacon and Machiavelli have much in common; their differences may be a matter of means rather than ends.

Bacon's England is poised on the brink of a new era. The Renaissance has reinvigorated philosophy, art, and science, while the Reformation brought new religious possibilities to light. England

¹¹² Kennington, p. 13

itself has survived a period of religious persecution and political instability, the horrors of which are freshly emblazoned in the public's memory. It is no longer attached to the Catholic Church; and while the Church of England retains many vestiges of the old religion, English Christians are no longer tied to an authority outside the state. The British Empire is in its nascent state, with England beginning to fully embrace maritime power. These religious and economic changes are tied to the emergence of modern republicanism amongst English thinkers.¹¹³ In short, Bacon's England is as well-prepared for dramatic change as any philosopher-statesman could hope. With this change comes a vitality that can be channeled to greatness if properly guided. Bacon strongly advocates the Enlightenment principle that the ends of philosophy and the ends of political society do not necessarily conflict.¹¹⁴ If the two could be made to live harmoniously, the capacity for human achievement would increase exponentially.

In the *Advancement of Learning*, Bacon comments that "But men must know that in this theater of man's life it is reserved only for God and angels to be lookers on."¹¹⁵ Farrington further notes that Bacon believed that "the future history of mankind" would complete the sixth part of his *Instauration*.¹¹⁶ Given that the technically incomplete *New Atlantis* is commonly regarded as the sixth part of Bacon's *Great Instauration*, it is safe to conclude that mankind's choices were meant to determine the end of the story. I believe that Bacon hoped to preserve the emerging liberal vitality while converting England to a scientific society. This would both allow for the greatest creativity and freedom for scientists and ensure that scientists did not indulge any tyrannical inclinations the accumulation of technological power might inspire.

The end of the *New Atlantis* shows Bensalem on a collision course with Europe. Most commenters assume that Europe will be conquered by Bensalem culturally and perhaps militarily. The overwhelming force of Bensalem's military and the allure of their advanced health and luxury oriented

¹¹³ See Ch. 6 for further discussion.

¹¹⁴ Kennington, p. 68

¹¹⁵ *AL*, p. 160

¹¹⁶ Farrington, p. 91

technologies would certainly indicate the likelihood of that outcome. If Europe's populace is unable to resist surrendering their freedom for the luxury and safety of Salomon's House's rule, then Europe will certainly be conquered. However, I believe evidence can be found in Bacon's writings that suggests an alternative ending. Blumenberg writes extensively of Bacon's attempted "recovery of paradise".¹¹⁷ He uses this term in the context of the *New Atlantis* being a utopian tale, but his phrasing supports my alternative suggestion equally well. The Garden of Eden was a physical paradise with no knowledge of good and evil. Man didn't make moral choices or govern himself. As I will show, this description could just as easily apply to Bensalem. The people know only what Salomon's House reveals to them. They are entirely at the mercy of the scientists, and if disobedience were to occur to them, then they would probably be expelled (killed). This particular paradise is contingent on obedience.

In order to investigate this claim, the *New Atlantis* must be placed in the context of Bacon's more thoroughly examined works. This chapter begins with a discussion of how Bacon's thought relates to that of Machiavelli, then provides a glimpse into how each of Bacon's major works fits into the whole of his project. The purpose of the *New Atlantis* in the founding of modern political philosophy can be found in their midst.

MACHIAVELLI AND BACON

The divide between ancient and modern political philosophy can superficially be viewed as a change from idealism to realism. This argument is erroneous on both counts; or rather, it is incomplete. It is true that in the *Prince* Machiavelli boldly states, "[Since] my intent is to write something useful to whoever understands it, it has appeared to me more fitting to go directly to the effectual truth of the thing than to the imagination of it...he who lets go of what is done for what should be done learns his

¹¹⁷ Blumenberg, p. 106

ruin rather than his preservation.”¹¹⁸ This is widely regarded as one of the most significant statements in Machiavelli’s work. As Mansfield notes in his introductory essay, Machiavelli’s condemnation of imagined republics carries a denial that cosmic moral rules must be followed, or even exist. Cosmic justice is not forthcoming; man is left with harsh necessity. Mansfield concludes that in Machiavelli’s work, “The rules or laws that exist are those made by governments or other powers acting under necessity, and they must be obeyed out of the same necessity.”¹¹⁹ It is also true that Bacon declares, “As for the philosophers, they make imaginary laws for imaginary commonwealths, and their discourses are as the stars, which give little light because they are so high.”¹²⁰ Bacon’s remark does not deny or affirm the truth of the philosophers’ discourses, but it does cast aspersions on their usefulness to those attempting to legislate for real societies.

One must [always] doubt Bacon’s sincerity, however. It is true that the stars do not remove the shadows from the world. But they are not entirely useless either. The stars make navigation possible for sailors; they allow the sailors of the *New Atlantis* to find their way to Bensalem.¹²¹ The stars lend themselves to scientific analysis; they cannot be controlled or manipulated, but they can be used in the service of science. Moreover, Bacon himself is a master of subtlety and states repeatedly that the harsh light of truth is not necessarily the best policy. In “Of Truth” he writes, “This same truth is a naked and open daylight that doth not show the masques and mummeries and triumphs of the world half so stately and daintily as candlelights. Truth may perhaps come to the price of a pearl, that showeth best by day; but it will not rise to the price of a diamond or carbuncle, that showeth best in varied lights.”¹²²

¹¹⁸ *Prince*, p. 61

¹¹⁹ Mansfield (1998), p. xi

¹²⁰ *AL*, p. 210

¹²¹ Granted, the sailors did not find Bensalem on purpose. They were able to successfully navigate from Spain to Peru. *NA*, p. 37.

¹²² *Essays*, “Of Truth”, p. 61.

Bacon goes on to defend the value of truth, but his defense is not half so poetic, and not given in his own words.¹²³ It seems that shadows may be as essential as light for governing.

The discourses of the ancient political philosophers may not serve as legislative blueprints, but they will serve as guiding points for those attempting to navigate the seas of modern political philosophy. Bacon turns from writing scientific treatises to fictional travel accounts and Machiavelli's *Discourses on Livy* often draw on highly colored interpretations of historical texts. The Rome of his teachings is quite different at times from the historical Rome. As Mansfield argues, "[Machiavelli] praises ancient virtue in order to improve on it...Ancient virtue, it turns out, needs a Machiavellian interpretation to ensure that it is reported correctly."¹²⁴ While he does not found imaginary cities in word, Machiavelli does reinterpret recorded Roman history to suit his philosophical ends. Both Bacon and Machiavelli advocate realism while appealing to unrealistic societies.

Machiavelli famously argues that political philosophers must turn away from imaginary republics and focus their attention on the way men actually behave in society.¹²⁵ This is an obvious attack on ancient philosophy, particularly Plato. Rather than constructing a theoretical best city, Machiavelli intends to teach princes how to rule and republics how to survive. As Strauss notes,

Machiavelli is the first philosopher who believes that the coincidence of philosophy and political power can be brought about by propaganda which wins over ever larger multitudes to the new modes and orders and thus transforms the thought of one or a few into the opinion of the public and therewith into public power. Machiavelli breaks with the Great Tradition and initiates the Enlightenment. We shall have to consider whether that Enlightenment deserves its name or whether its true name is Obfuscation.¹²⁶

By turning philosophy into a tool of political power, Machiavelli sparks the Enlightenment and forms the basis of liberalism in the modern age. Philosophy will ally with rhetoric to mold society into a shape best suited to philosophic rule. He will not shy away from the worst impulses of human beings, turning their

¹²³ Bacon paraphrases part of the Roman poet Lucretius' *On the Nature of Things*.

¹²⁴ Mansfield (1996), p. xix

¹²⁵ *The Prince*, p. 61

¹²⁶ Strauss (1958), p. 173

instincts for secrecy and dominance into weapons of political rule. However, if one looks at Plato's dialogues carefully it becomes apparent that there is no depravity known to Machiavelli that was not known equally to Plato. It is true that Plato advocated for the possibility of virtue, and seemed to believe that men could become more virtuous through education and effort. However, he did not believe all men to be equally capable of virtue and was not squeamish about the steps necessary to deal with those who proved destructive to society. Moreover, Machiavelli illustrates his hard-nosed teachings with examples from a highly-colored version of Roman history. He regularly interprets events and motivations to suit his purposes. It seems that not only is Plato less than idealistic, but Machiavelli is not entirely wedded to harsh realism.

Plato is as aware as Machiavelli and Bacon that necessity cannot be overcome in the pursuit of justice. The *Republic* traces how justice could come to be in a city, yet even in speech Socrates' imagined city must constantly accommodate necessity. Though the city strives to reduce the sphere of the necessary, it will never be completely successful. He ultimately concludes that unless "political power and philosophy coincide in the same place, while the many natures now making their way to either apart from the other are by necessity excluded, there is no rest from ills for the cities."¹²⁷ While one may argue that the rule of philosophers is just, the (presumably violent) expulsion of those inclined exclusively to either philosophy or politics cannot be attributed to anything but necessity. As long as imagined cities are constructed using correct teachings regarding human nature, perfect justice will not be possible. In this instance, the difference between ancient and modern thought is not a difference in content, it is a difference in presentation. Machiavelli boldly proclaims necessity to be the bedrock of society, while Plato tempers his argument by holding out the possibility of perfect justice. Reading Plato, one senses that justice may be impossible but it is worthwhile to try; Machiavelli's realism forces

¹²⁷ *Republic*, 472d

the reader to confront the ugliness of political life. Bacon, on the other hand, fluctuates between the two but ultimately seems to take a stand on the side of Plato.

Bacon shares Machiavelli's reluctance to mix metaphysics with political philosophy, but he believes that existing metaphysical doctrines can be used in the service of the new science. Bacon's arguments are by no means straightforward, but his use of fiction allows him to show rather than tell. This can clearly be seen in Bacon's treatment of Machiavelli. Robert Faulkner argues that much of Bacon's thought is indeed built on the foundation of a "teacher of evil"¹²⁸, but that Bacon ultimately surpasses Machiavelli. In the *Essays*, Bacon introduces Machiavelli as a theological expert. He writes, "And one of the doctors of Italy, Nicholas Machiavel, had the confidence to put in writing, almost in plain terms, that *the Christian faith had given up good men in prey to those that are tyrannical and unjust.*"¹²⁹ Faulkner argues that this move on Bacon's part "barely glosses – in fact, it accentuates – an indictment of Christianity."¹³⁰ Bacon follows his reference to Machiavelli with an explanation that Christians are simply too good for their own sake. He argues that this "inclination to goodness is imprinted deeply in the nature of man"¹³¹ and if not channeled properly, can lead to the types of errors that Machiavelli condemns. Bacon does not disparage the Christian virtue of charity; he rather reinterprets it to support a much more robust, self-interested Christianity. For example, Bacon dispenses with Christianity's emphasis on humility by explaining that "[God] doth not rain wealth nor shine honour and virtues upon men equally. Common benefits are to be communicate with all, but peculiar benefits with choice."¹³² Likewise, readers are instructed to focus on loving themselves long before they can love their neighbors. Bacon never offers an open critique of Christianity, but the Christianity he praises is only tangentially related to the one condemned by Machiavelli.

¹²⁸ Strauss (1958), p. 9

¹²⁹ *Essays*, "Of Goodness and Goodness of Nature", p. 97

¹³⁰ Faulkner, p. 62

¹³¹ *Essays*, "Of Goodness and Goodness of Nature", p. 96

¹³² *Essays*, "Of Goodness and Goodness of Nature", p. 97

Though Bacon openly praises Christianity throughout his works, his praise is invariably backhanded or dubiously phrased. Like many English thinkers, Bacon disapproves of an autonomous, international Christianity (such as one dominated by the Catholic Church) but tentatively approves of a Christianity that is molded to serve the best interests of the political state. Machiavelli seeks to break Christianity's stranglehold on the modern world. As Strauss notes, "Machiavelli needed much more urgently than did even Hobbes a detailed discussion revealing the harmony between his political teaching and the teaching of the Bible. Yet unlike Hobbes he failed to give such a discussion...he silently makes superficial readers oblivious of the Biblical teaching."¹³³ By largely ignoring the Biblical tradition, Machiavelli makes his position on the matter clear while maintaining a sort of "plausible deniability". Bacon, on the other hand, seems to think that he can salvage the benefits of a Christian England and slowly dispense with the religion's undesirable effects. He takes Machiavelli's lead in not confronting Christianity directly, yet his treatment of Christianity is even more insidious than that of the Italian doctor.

As he demonstrates in the *New Atlantis*, Bacon has no intention of ridding his society of Christianity. However, he does intend to gut and remodel Christianity to better serve a new scientific society. Bacon's vision of a scientific society is not idle theorizing; he fully intends to move England towards a scientific future. This facet of his thinking must be understood if one is to understand his attitude towards religion in general and Christianity in particular. Like Plato's Athenian Stranger, Bacon recognizes that even if he were to found a new society, he must do so with people already shaped by the traditions, beliefs, and institutions of the old societies.¹³⁴ Though the *New Atlantis* presents a new, foreign society, it does so through the eyes of lost, adventuresome Europeans. The laws and culture of Bensalem must not fundamentally conflict with those of Europe if the sailors are to be persuaded as to the former's superiority, yet as sailors and explorers the men are presumably amenable to seeking the

¹³³ Strauss (1958), p. 176

¹³⁴ *Laws*, 707e-709b

unknown. Faulkner argues that though Machiavelli greatly respected the power of custom, unlike Bacon “Machiavelli erred about the force of devotion, and therefore about the power of custom, a consequence of his error about the force of hope...The problem is how to institute suitable customs, and Bacon’s solution is society. It was a problem that Machiavelli had not solved.”¹³⁵ Bacon recognized that same devotion men showed towards religion could be transferred to science. By slowly, patiently shifting the customs of society, Bacon could reinforce support for his project. The shell of the old society must be maintained, though the foundation will be entirely replaced by the progress of science.

Weinberger argues that in order to see exactly where Bacon surpasses Machiavelli, one must examine not only their treatment of religion, but more specifically how Christianity relates to empire. Machiavelli recognized that the desire for acquisition is an unconquerable drive in human nature. Consequently, the drive for empire is necessary for the functioning of political societies. However, actually achieving empire usually served only to foster corruption; with no one left to conquer, factions turn their ambition towards one another. The problem of empire concerns both Machiavelli and Bacon. Weinberger argues that Bacon comes closer to solving this problem. He writes, “Bacon thinks Machiavelli cannot conquer the Christian empire, because he believes that Machiavelli underestimated the power of Christian belief and Christian egalitarianism... The solution to the problem of the Christian empire may not be political, as Machiavelli had hoped; it may rather depend on a more universal promise of the new learning.”¹³⁶

Bacon also surpasses Machiavelli in the scope of his imperial ambitions. As Kennington notes, Machiavelli teaches that *fortuna* presents the greatest danger to man. The Prince must strive to conquer *fortuna*, taking control over the course of events as much as possible. Machiavelli’s conception of *fortuna* includes both random acts of nature and calculated acts of man, but only the acts of man can be foreseen and manipulated. Bacon, believing that nature was far more dangerous than other men,

¹³⁵ Faulkner, p. 71

¹³⁶ Weinberger (1985), p. 128

sought to eliminate chance from the nature of things. Kennington argues that Bacon's is "a project Machiavelli might well have regarded as mad."¹³⁷ Machiavelli did not possess the same vision of modern science that drove Bacon. It is still unclear, however, if Bacon was truly advocating the complete domination of man over Nature, or if he merely believed that course of events to be inevitable and sought to give philosophic direction to an imperial science.

As we have seen, Machiavelli and Bacon's differing attitudes towards Christianity and custom indicate a deeper divide between their overtly political recommendations. White argues:

The difference in the immediate ends of Machiavelli to Bacon is clear. Machiavelli speaks of radical innovation, either in the establishment of a new regime, or in an established republic. Bacon speaks of a monarchy in which he chose to innovate but slowly...The advancement of learning, Bacon's greatest concern, could be achieved in an atmosphere of civil peace.¹³⁸

Machiavelli teaches that tyrants are necessary for founding regimes, but legislators are wise to move towards republicanism as soon as possible. Moreover, it should be a republic that respects the power of the common people. He writes, "So those who prudently order laws...chose one that shared in all, judging it firmer and more stable; for the one guards the other, since in one and the same city there are the principality, the aristocrats, and the popular government."¹³⁹ The prince must always be prepared to step in during extreme situations, but a mixed constitution is best suited to governing prosperous cities once the initial legislation has been accepted.

Bacon, on the other hand, presents himself as a strong advocate of monarchy. He maintains a very careful façade of monarchism. Faulkner argues that the type of scientific progress Bacon envisions requires a robust, dynamic economy the likes of which are usually accompanied by political liberation.¹⁴⁰ Bacon does not fully endorse republican government, however. Like Plato, Bacon teaches that virtue is best developed in a highly structured class society, and like Plato Bacon envisions philosophers as the

¹³⁷ Kennington, p. 13

¹³⁸ White, p. 37

¹³⁹ *Discourses on Livy*, p. 13

¹⁴⁰ Faulkner, pp. 50, 176

educators and advisors of princes. Science is by its nature undemocratic. Only those with the intellect and discipline for extended study can hope to master its rules and truly make sense of its discoveries. Though many people may benefit from the technologies developed by scientists, the beneficiaries of science are not required to understand the work behind the technology. In fact, it is often better that the public remains ignorant of scientific research until such a time as it can produce tangible benefits to the layperson. By ensuring the continuance of England's monarchy, Bacon not only preserves a valued structure of society, he also reduces the number of people that must be convinced of his nascent science's worth.

Moreover, Faulkner agrees that Bacon is supremely interested in expanding England's empire.¹⁴¹ The empire of a technologically advanced, maritime nation would likely be founded in international trade. The *New Atlantis* shows a society intending to expand its influence, but with a citizenry completely unprepared for contact with foreign societies. England will not encounter this problem. Bacon depends on the unifying force of religion, and shapes the Christian impulse towards universal charity and the Christian promise of eternal peace into realizable scientific goals. As Faulkner notes, Bacon understands the power of Christian utopian thinking much more acutely than Machiavelli, and co-opts it for his own devices. He writes, "Like Machiavelli, [Bacon] traces the success [of Christianity] to Christ's promise of satisfaction, a promise of immortality. Unlike Machiavelli, Bacon can supply an analogous vision of future satisfaction."¹⁴² Whereas Christianity promises security and freedom from want in the afterlife, Bacon's science promises these things during temporal life. He shifts the focus of Christianity to the pursuit of contentment on earth. Rather than condemning Christianity for weakening Europeans, Bacon intends to learn from Christianity's methods in order to cement his influence.

Bacon uses the poetic form of the *New Atlantis* as another means of showing what cannot be told. In the *Advancement of Learning*, Bacon famously states, "Concerning government, it is a part of

¹⁴¹ Faulkner, p. 120

¹⁴² Faulkner, p. 65

knowledge secret and retired in both these respects in which things are deemed secret; for some things are secret because they are hard to know, and some because they are not fit to utter.”¹⁴³ In both respects, however, the nature and tools of government only remain secret to those who do not properly investigate. Only those willing and able to dedicate their lives to careful, extensive study will likely be able to uncover secrets that are hard to know. Such an investigation is also required for secrets not fit to utter, with the additional caveat that once one has learned these secrets, there can be no discussion of them except perhaps privately with equals.

The question becomes, how does one recognize another who has learned the secrets of government? After all, if no discussion amongst colleagues occurs, then progress will be hindered. Both dialectic arguments and scientific experiments build on what has come before. Plato’s dialogues, unquestionably the most valuable examples of written dialectic, show both the dangers and benefits of open discussion. Socrates is consistently shown demonstrating the ignorance of his interlocutors before an audience. He shows how rhetoric can be turned to sophistry and he shows how dangerous some truths can be. After all, Socrates’ refusal to abandon public discussion led to his arrest and execution. Plato cleverly uses Socrates’ character to highlight the difference between public and private discourse. Private discourse, such as a discussion between two intellectual and philosophic equals, should be a place where no topic is off-limits and no idea is too shameful to be discussed. Public discourse, however, must be edited to conceal certain truths and avoid disrupting the normal functioning of a working society. Philosophers wishing to shape society are subsequently faced with an extremely delicate task. Bacon’s turn to fiction provides a means for him to engage in public discourse while shading his teachings in enough ambiguity to avoid overt blame for their revolutionary nature.

¹⁴³ AL, pp. 208-209

BACON'S PROJECT

Machiavelli is undoubtedly a master at blending subtlety and boldness in his writing. As one studies Bacon's writings as a whole, it becomes clear that he matches the Italian doctor's skill. In this section, I will briefly examine each of Bacon's major works apart from the *New Atlantis*. Moving from Bacon's most political work to his most scientific work, this section demonstrates Bacon's grasp of rhetoric as he employs the best arguments suited for each targeted audience. I treat the texts in order of subject, rather than order of publishing date. The *New Atlantis* was Bacon's last work, published posthumously by his secretary. He seems to have worked on most of his major works simultaneously or intermittently, often publishing dramatically expanded revisions or additions years later. One thing is clear, however: each work is meant to be part of a whole.

THE ESSAYS

Bacon first published a version of the *Essays* in 1597, while out of favor with Queen Elizabeth. He published revised and expanded editions in 1612 while serving as Solicitor-General and in 1625 shortly before his death. The *Essays* are Bacon's least scientific work. They take political life as their subject, rarely mentioning the modern scientific project. To be popular, a science must appeal to common desires, and political wisdom is necessary for understanding these desires. The *Essays* provide a guide for political, or rather civilizational revolution.¹⁴⁴ In the *New Atlantis*, Christian Europeans are seen converting to a new faith in a land of progress. Bacon persuades by images directed to common passions; his science is not opposed to the common religion, and that religion is in turn unopposed to economic prosperity.¹⁴⁵

¹⁴⁴ Faulkner, p. 28

¹⁴⁵ Faulkner, p. 50. Faulkner argues that Bacon's republican sympathies are revealed in his portrayal of Henry VII as a king with a republicanized reign (Faulkner, p. 176.). In his *History of the Reign of King Henry VII*, Bacon appeals to England's recent past as the prototype for its future. Henry VII won his crown through military victory, but he eschewed the title of conqueror in the interest of preserving peace and unity in England (*History*, p. 315). Bacon

Faulkner argues that England's embrace of naval power will lead to a republicanized government and a liberated economy. This in turn will foster the growth of new technologies. Faulkner maintains that liberty is extremely important to Bacon; after all, the kind of economy and progress that Bacon aspires to requires a certain degree of liberty. In order to see Bacon's larger political intention, it is necessary to consider the picture of political life presented in the *Essays*. Keeping in mind Bacon's assertion that science is always a public matter, his argument comparing truth to a pearl that will never be as valued as the diamond that reflects the shadowy flickers of candlelight becomes very interesting.¹⁴⁶ The masques, mummeries, and triumphs of the world are cultivated attempts to disguise the reality of things in order to entertain and to release forbidden impulses. Behind a mask, civilized human beings can purge their Dionysian impulses in a controlled environment.¹⁴⁷ In the same vein, poetry (a product of imagination) is best suited to make the harsh truths of political life palatable to society. The *New Atlantis* shows a society transformed by science and untempered by republican liberty. Diamonds are both more valuable and more durable than pearls. The truth is valuable, but it may not endure in a world beset by dishonest and ignorant men.

This discussion is taken up again in Bacon's essay "Of Simulation and Dissimulation". At first glance, Bacon condemns dissimulation as "but a faint kind of policy or wisdom".¹⁴⁸ Yet he does acknowledge that it is a kind of wisdom. Dissimulation is revealed to be a wise policy for mediocre politicians. General secrecy is a better way of operating than general openness. On the other hand, those who "have that penetration of judgement as he can discern what things are to be laid open, and

calls Henry VII "this Solomon of England", indicating that he is wise and that, like Solomon, he was "too heavy upon his people in exactions (*History*, p. 381)." Though Faulkner asserts that Bacon's portrayal of Henry VII is that of a republicanized monarch, Bacon's priority clearly seems to be economic liberty rather than political liberty. It is unclear if Bacon thought one would necessarily lead to the other.

¹⁴⁶ *Essays*, "Of Truth", p. 61

¹⁴⁷ Ancient Greek playwrights emphasize this necessity particularly well.

¹⁴⁸ *Essays*, "Of Simulation and Dissimulation", p. 76

what to be secreted, and what to be showed at half-lights, and to whom, and when” are lowered by a policy of dissimulation.¹⁴⁹ Dissimulation is a tool of the wise politician, not a general policy.

“Of Atheism” appears to condemn atheists, while actually defending philosophers against the charge of atheism and opening the way for Bacon’s radical alteration of established religion. Bacon is as adept at practicing his rhetorical arts as he is at describing how rhetoric should be employed. Bacon connects every religion, essentially collapsing any religion’s claim to ultimate truth. Atheists are condemned as unreasonable self-deceivers, and the beauty of nature is held up as proof of God’s work.

“Of the Vicissitude of Things” begins by connecting Plato’s thought to that of Solomon. Plato is said to have had an “imagination”, while Solomon gives sentences and speeches.¹⁵⁰ Bacon affirms that floods and earthquakes leave behind only mountain people who are unable to keep accurate histories. This is the same argument given by the Egyptian priests in the *Timaeus-Critias*. Bacon mentions the Atlantis tale, but does not connect his argument to Plato’s thought, instead treating Solon’s tale as historical in nature. Bacon takes the metaphysical frame of the *Timaeus* and applies it to political life, making explicit what was only implied by Plato. Bacon also argues that war is necessary when a state becomes overpopulated.¹⁵¹ This is one of the key difficulties with Bensalem’s society. Where do their people go?

In “Of Seditions and Troubles”, Bacon warns against “want and poverty” as the material root of sedition.¹⁵² As a remedy, he recommends “the opening and well-balancing of trade; the cherishing of manufactures; the banishing of idleness; the repressing of waste and excess by sumptuary laws...and the like.”¹⁵³ Here one finds a strong support of free trade and the beginnings of republican spirit. He especially targets idle nobility; Bacon was no advocate for the common man against the nobles, but he

¹⁴⁹ *Essays*, “Of Simulation and Dissimulation”. p. 76

¹⁵⁰ *Essays*, “Of the Vicissitude of Things”, p. 228

¹⁵¹ *Essays*, “Of the Vicissitude of Things”, p. 232

¹⁵² *Essays*, “Of Seditions and Troubles”, p. 104

¹⁵³ *Essays*, “Of Seditions and Troubles”, p. 104

wanted active, industrious nobility who would value learning and understand technological advances. The common man may be the consumer of technology, but the nobles would be largely responsible for securing the scientist's freedom to create. Bacon argues that "money is like muck, not good except it be spread."¹⁵⁴ Merchants are the backbone of a vital economy. Bacon, following Plato's *Laws*, elevates merchants to a place of honor.¹⁵⁵ In Bensalem, Joabin the merchant is identified as a wise man, and the scientists term themselves *Merchants of Light*. Bacon recognizes that the fruits of modern science will quickly become commodities; he also recognizes the emerging power of international trade. International trading will lead to the dissemination of information. A vital populace (both noble and common) will be necessary if a state is to remain strong in the face of constant interaction with foreign ideas. Liberated merchants will ensure the health of his state's monetary life; Bacon must ensure the health of its political life.

The importance of merchants is again pressed in "Of Empire", which tells of the many woes of kings. Bacon argues that if merchants do not flourish, "a kingdom may have good limbs, but will have empty veins and nourish little."¹⁵⁶ Likewise, kings who depress their nobles are condemned as short-sighted. Though downtrodden nobles will be easier to manage in the short run, they will be of little help during crises and the kingdom will be thrown into chaos during the next generation, as evidenced by the life and death of Henry VII. "Of Empire" leads the reader to mistrust kings. These arguments are repeated in "Of the True Greatness of Kingdoms and Estates". Bacon argues in favor of liberal naturalization policies; advocating the easy acceptance of conquered peoples into military, economic, and political society.¹⁵⁷ Bacon also strongly endorses naval power as the key to past and future greatness. He also laments that though it is possible to guide a kingdom to greatness, these things are usually left to chance.

¹⁵⁴ *Essays*, "Of Seditions and Troubles", p. 105

¹⁵⁵ See Ch. 4 for further discussion.

¹⁵⁶ *Essays*, "Of Empire", p. 119

¹⁵⁷ *Essays*, "Of the True Greatness of Kingdoms and Estates", p. 151

Velkley's argument that the moderns sought to use politics to make philosophy permanently safe is essential for understanding Bacon's intention in the *Essays*.¹⁵⁸ Velkley builds on Strauss' contention that the political emancipation of the individual is based on the philosophic liberation of the human from natural teleology and from all ways of thinking that measure the human by some superhuman standard.¹⁵⁹ In *Natural Right and History*, Strauss maintains that the quarrel of the ancients and the moderns concerns eventually, and perhaps even from the beginning, the status of individuality.¹⁶⁰ He presents ancient philosophers as seeking freedom as individuals from opinion and modern philosophers as engaged in a massive effort to transform the opinions of everyone using rationalism.¹⁶¹ This seems at odds with Strauss' contention that the moderns are both poetic and Socratic in their approach. Perhaps this is why Bacon's *Essays* are the official tract of his political project, while the *New Atlantis* is consciously minimized by form, length, and style.

ADVANCEMENT OF LEARNING

The Advancement of Learning provides an account of the state of learning in Bacon's time and a glimpse into how Bacon would alter the scope and focus of future learning. He published the *Advancement of Learning* in 1605, shortly after his appointment as King's Counsel. For the first time, Bacon found himself in a position of real political power. He does not limit himself to scientific learning, but includes subjects such as rhetoric and politics as well. Bacon's treatise is fairly systematic, but is itself a rhetorical effort. Of course, Bacon never posits the existence of "value-free" science; all scientific writing serves a rhetorical purpose. In later years, Strauss would criticize the Enlightenment for subordinating philosophy to practice, thus obscuring the eternal problem of unknowability under the

¹⁵⁸ Velkley, p. 135

¹⁵⁹ Velkley, p. 136

¹⁶⁰ Strauss (1953), p. 323

¹⁶¹ Velkley, p. 44

veil of progress.¹⁶² At the same time, Strauss affirms Plato's assertion of the political as the beginning point for philosophical inquiry; after all, intellectually radical philosophers have a vested interest in maintaining a moderate, tolerant political society.¹⁶³ Bacon's scientific project must therefore be framed by a political project. Bacon's scientist-philosophers cannot hope to practice their art in a society that has not been politically and culturally prepared to accept them.

In order to create something new, one must either eradicate or overcome the memory of what came before. Tradition is a powerful enemy to innovators. Though Strauss ultimately sides with the ancients, Velkley believes he treats modern philosophy as a serious alternative to classical philosophy. He argues that the intent and premises of modern philosophy have been as obscured by tradition and doctrine as those of classical philosophy.¹⁶⁴ In turn, Velkley also argues that Strauss purposively "overstates the philosophical decline inherent in the modern turn."¹⁶⁵ Strauss understands modernity to be a flawed attempt to save philosophy from being obscured by revelation, an attempt that Socrates would have highly valued. By making the ends of philosophy practical and beneficial to the city, the moderns carved out a place for philosophical freedom.

As Blumenberg argues, the early moderns made a sort of Socratic return.¹⁶⁶ Bacon and his intellectual contemporaries criticized medieval scholars for thinking that knowledge of man and nature were as complete as they could or should be. The early moderns, particularly Bacon, rejected the idea that God's works must remain mysterious, revealed only through revelation, and pled ignorance about truth. Blumenberg notes that "In their acknowledgement of ignorance, Bacon et al return to a Socratic way of thinking, even if they pursue knowledge through experimentation instead of dialectic."¹⁶⁷ Briggs

¹⁶² Velkley, p. 11

¹⁶³ Velkley, p. 9

¹⁶⁴ Velkley, p. 18

¹⁶⁵ Velkley, p. 13

¹⁶⁶ Blumenberg, p. 494

¹⁶⁷ Blumenberg, p. 494

notes that Bacon preferred to be seen as one who praises and perfects the ancients, rather than a radical reformer.¹⁶⁸

One can also see evidence of this argument in Bacon's treatment of religion. Weinberger argues that the most pressing problem of the modern age, technology, begins with Bacon's science. Science promises boundless liberty and self-reliance, but has led to materialism and determinism.¹⁶⁹ If all ends are human, then the divine becomes merely a means. If religion could be made to accurately reflect the idea that all things, including the moral virtues, are products of earthly passions and needs, then a perfect justice could be found with liberated desire and physical satisfaction.¹⁷⁰ Weinberger identifies the belief that injustice is caused by scarcity as a fundamental delusion of modern political thought. Certainly Bacon believed that the problem of privation was science's best inroad to political power. The need to ease the suffering of God's children formed the basis of Bacon's appeal. However, one cannot doubt that Bacon had a much more ambitious plan for science.

Bacon never strays from his strategy of presenting science as an eminently Christian undertaking. For example, Bacon argues that "Martin Luther, conducted (no doubt) by a higher providence, but in discourse of reason...being no ways aided by the opinions of his own time, was enforced to awake all antiquity...to make a party against the present time."¹⁷¹ Martin Luther, regarded as a hero of the Reformation that led to England's freedom from Rome (as well as its religious upheaval), is presented as a man who recognized the flaws of current thinking, and sought ancient wisdom for modern problems. Luther overthrew traditional authority, linking Biblical text to individual reason. Bacon seems to be attempting to use Luther as a precedent. Bacon's new scientific project is not radical; it is a continuation of Luther's religious project.

¹⁶⁸ Briggs, p. 213

¹⁶⁹ Weinberger (1985), p. 18

¹⁷⁰ Weinberger (1985), p. 24

¹⁷¹ AL, p. 25

This rhetorical strategy not only outwardly moderates Bacon's project, it also indicates that his condemnation of the ancients is not wholly heartfelt. Certainly Bacon opposes the work of the ancients' medieval interpreters, but much as the Reformation allowed individuals to read biblical texts for themselves, those truly seeking ancient knowledge must turn directly to the ancient texts. As Velkley notes, the ancients did not have to dismantle a previous tradition in order to write something new.¹⁷² If one is able to view Plato and Aristotle with fresh eyes, then one may discover wisdom long buried by traditional interpretation. Bacon signals this intent by endorsing the sort of noble lie that results in practical benefits for society¹⁷³, and by invoking Atlantis in his final work – rather than correcting Plato, he may be attempting to show his sympathy with a thinker whose intent has been so badly corrupted by later generations.

Bacon's thoughts on the relationship between imagination and reason provide great insight into his decision to write the *New Atlantis* in poetic form. Though he criticizes imagination in scientific contexts, it is useful when navigating political life. He writes, "For we see that, in matters of faith and religion, we raise our imagination above our reason...in all persuasions that are wrought by eloquence, and other impressions of like nature, which do paint and disguise the true appearance of things, the chief recommendation unto reason is from imagination."¹⁷⁴ There is much to be gleaned from this statement. Bacon never offers concrete definitions of these slippery terms, but the Oxford English dictionary defines imagination as "the ability to form ideas or images in the mind". Reason is defined as "the power to think, understand, and draw conclusions logically". In matters of faith and religion, reason will only be so useful. Revelation is not subject to logic. If Bacon, or any philosopher, is to influence religion, he must do so through imagination. He must find a way for imagination to lead the audience to the same conclusions as would be produced by reason. He does this by painting a mental

¹⁷² Velkley, p. 3

¹⁷³ AL, p. 31

¹⁷⁴ AL, p. 125

image of scientific society. Rhetoric, the “art of eloquence, a science excellent” forms the link between imagination and reason. Bacon writes that “the duty and office of rhetoric is to apply reason to imagination for the better moving of the will.”¹⁷⁵ Rhetoric must be both an art and a science. Aristotle analyzes it scientifically, but Plato uses it to great philosophical effect.

In *What Is Political Philosophy?*, Strauss indicates that the early moderns turn to poetry as they introduce the idea of the modern individual, implying further that classical poetry lies at the roots of liberalism.¹⁷⁶ Velkley expands on this argument with the contention that “The limitation of the political is felt by everyone. Philosophy, revelation, and liberalism all offer something transpolitical that gives meaning to political society. The politicization of philosophy by the moderns may be a response to this deficiency, not a glorification of politics.”¹⁷⁷ Velkley notes that Strauss quietly points to poetry as a viable alternative to philosophy for those seeking an explanation of human nature. By focusing on the quarrel between philosophy and revelation, Strauss perhaps intentionally obscures the larger problem of defending philosophy against poetry. Greek poetry advocated the pleasures of private family life as the most natural; the just and noble city is only pleasurable to a philosopher.¹⁷⁸ And what of the quarrel between poetry and revelation? Neither takes reason as its foundation, and poets (especially classical poets) are quick to claim divine inspiration for their works. However, poetry is an immanently human undertaking; its truth is a human truth. Bacon condemns imagination in the *Advancement of Learning* – it has no place in the new science. However, political philosophers and statesmen must possess qualities that scientists do not. Poetry, when grounded in solid reason and utilized by careful philosophers, can be a powerful aid to science.

Just as science and magic are indistinguishable at the highest levels to an unlearned observer, it seems the line between philosophy and poetry becomes outwardly blurred at the highest levels of

¹⁷⁵ AL, p. 149

¹⁷⁶ Strauss (1988), p. 50

¹⁷⁷ Velkley, p. 147

¹⁷⁸ Velkley. p. 152

thought. Strauss argues that the subject matter and treatment are fundamentally of the same character in poetry and philosophy; both bring to light what the law forbids. Strauss argues that the primary problem with modern philosophy is that it has forgotten the duality of the human being between law and *eros*, the city and man.¹⁷⁹ Yet Strauss also shows that modern philosophy harbors echoes of ancient themes of human duality in its treatments of individuality and poetry. Strauss revives the duality by reviving the original quarrel of philosophy and poetry. Velkley concludes that poetry's failing is that it presents only inferior ways of life, not the philosophic life as the best life.¹⁸⁰ Indeed, if this is philosophy's best defense against poetry's claim to primacy, perhaps Strauss' strategy of avoidance should be emulated.

As Rossi notes, Bacon's *Advancement of Learning* serves to present poetry and philosophy as co-conspirators rather than rivals. Bacon argues that fables contain ideas that aren't yet able to be expressed by philosophy, not that fables are devised to teach already completely worked out ideas.¹⁸¹ Bacon asserts that philosophers shouldn't separate art from nature; art is merely man applied to nature. Man can only affect nature by combining or manipulating natural bodies.¹⁸² Bacon's method is a thread to guide men through Nature.

Bacon notes in a previous passage that all imaginative persuasions disguise the true appearance of things. Imagination is particularly susceptible to varying interpretations, allowing one to hide unpalatable truths. Rhetoric badly employed will not convey the subtleties of the imagination. It will not allow those in possession of reason to find the guideposts. Imagination divorced from reason is not only useless for scientific advancement; it is dangerous for political life. As previously noted, the *Advancement of Learning* contains Bacon's most famous statement on governance: "Concerning government, it is a part of knowledge secret and retired in both thee respects in which things are

¹⁷⁹ Velkley, p. 23

¹⁸⁰ Velkley, p. 154

¹⁸¹ Rossi, p. 85

¹⁸² Rossi, p. 26

deemed secret; for some things are secret because they are hard to know, and some because they are not fit to utter.”¹⁸³ Bacon compares civil government with God’s government over the world and the soul’s government over the body. The governors are unseen, yet undoubtedly more powerful than the governed. The governors are also dependent on the governed for obedience, gained through appeals to reason, emotion, and physical force. Government must use rhetoric to turn the public’s imagination towards reason, and it must hide its intentions as best as possible. The domains of imagination (rhetoric and poetry) are tools of reason if the governors are also master rhetoricians.

Bacon includes a passage near the end of the *Advancement of Learning* similar in both theme and language to a passage from Plato’s *Timaeus*. Bacon claims that laws, the public part of governance, are deficient because thus far they have been written of by philosophers or lawyers, rather than statesmen.¹⁸⁴ Philosophers devise imaginary laws for imaginary commonwealths, while lawyers write only the received laws of their own states. One is too lofty, the other too provincial. Bacon argues that the true test of a lawmaker’s worth lies in his ability to make laws that are not only just, but also long-lasting and effective. Socrates introduces a similar idea at the beginning of the *Timaeus*. He argues that sophists and poets are incapable of accurately portraying the way a city would react to war. Socrates concludes that a person with attributes of a philosopher, a statesman, and a historian would be necessary to achieve this goal.¹⁸⁵ Perhaps Bacon would have been this person.

From Plato and Aristotle Bacon learned that the ambition of technology to create a perfect society populated by perfect human beings is the ultimate source of dogmatism.¹⁸⁶ Weinberger notes that classical thinkers understood that society, “as an order of productive arts, always produces unrealistic or naive utopianism leading to tyranny. Society is dependent on the artful pursuit of perfect freedom and justice, a dangerous delusion... By comparison, the founders of the modern scientific

¹⁸³ AL, pp. 208-209

¹⁸⁴ AL, p. 210

¹⁸⁵ I discuss this passage fully in Chapter 2.

¹⁸⁶ Weinberger (1985), p. 21

project are more like dogmatic partisans - or at least more like practical founders with axes to grind - than like questioning, ironic political philosophers."¹⁸⁷ Bacon agrees with Plato that it is dangerous to inquire into perfect, impossible beginnings. He accepts the framework of Christianity, not offering an alternative account of man's beginnings. Bacon investigates human nature, but his concern is with how man can overcome nature rather than harmonize with nature. Bacon understands the difference between the necessary and the good; necessity prohibits perfect justice of any kind, either idealistic or realistic. Weinberger argues that necessity pushes the bounds of any possible justice at times; the new science will ensure that a sort of justice is possible.¹⁸⁸ Bacon understands the ancient utopians and the purpose of impossible perfection. Wisdom without rhetorical skill is useless for those engaged in public life. As Wallace argues, the study of natural science requires man to abandon previous ways of thinking, including previous ways of using language. Imagination has no place in scientific discovery, but it is vitally important when scientists must interact with the public.¹⁸⁹

WISDOM OF THE ANCIENTS

The *Wisdom of the Ancients* (originally published in 1609) is a collection of ancient myths interpreted by Bacon. Bacon's choice of a title may be ironic. Studer argues that Bacon is either indicating that the ancients were wise not to promote technology or that the ancients were not wise at all.¹⁹⁰ A few of these myths are particularly relevant to this investigation. Bacon is aware of the potential problems of science, and thinks that many of these problems can be solved by dispensing with the notion of human equality and properly ranking human beings. Studer argues that the Socratic question "What is the best life for a human being?" is compounded in Bacon by the additional question

¹⁸⁷ Weinberger (1985), p. 23

¹⁸⁸ Weinberger (1985), p. 225

¹⁸⁹ Wallace, pp. 161-163

¹⁹⁰ Studer (1998), p. 234

"What is a human being capable of?"¹⁹¹ As she points out, man is the only animal capable of overcoming nature in a significant way. If the idea of *telos* is abandoned, man's potential pathways multiply exponentially.

Studer focuses on Bacon's arguments about whether or not man was created by providence or coincidence. If man is the center of the universe, then all things were made for man's use. On the other hand, providential creation gives man responsibilities to use nature wisely. If man was created by random chance, then there is no moral law but self-preservation.¹⁹² Providence, for Bacon, may not be religious. Providence may be man's ability to mimic God's power and manipulate natural law to the point of altering human nature. Bacon warns about applying ancient wisdom to modern times, lest he "bring strange fire to the altar of the Lord". Yet that is exactly what he does. Ancient wisdom is essential to Bacon's project, though his project maintains a Christian façade.

"Daedalus, or Mechanic" tells of a man capable of great creativity and workmanship in building. Daedalus uses his skill to wreak mischief, including inventing the monster Minotaur.¹⁹³ Bacon notes that "Concerning the use of mechanical arts...the life of man is much beholding to them, seeing many things conducing to the ornament of religion, to the grace of civil discipline, and the beautifying of all human-kind are extracted out of their treasuries; and yet, notwithstanding, from the same magazine or storehouse are produced instruments both of lust and death."¹⁹⁴ Bacon goes on to argue that all mechanical arts can be used for either good or ill, and the consequences of these arts cannot be fully anticipated or controlled by those who use them. Moreover, once these arts have been introduced to a society, they cannot be easily extracted. Even if certain practices are condemned and prohibited, the knowledge will be retained and passed on secretly. As Studer points out, Bacon collapses the ancient distinction between *techne* and wisdom. Aristotle's "theoretical wisdom" does not exist in Bacon's

¹⁹¹ Studer (2003), p. 211

¹⁹² Studer (2003), p. 218

¹⁹³ *WoA*, p. 245

¹⁹⁴ *WoA*, p. 246

teaching separate from practical knowledge.¹⁹⁵ She further argues that Bacon may be right in his failure to distinguish the two, even though it makes science more dangerous. Once a science is known, it will inevitably become technology. Science aims to discover; things that are known cannot be unknown.

Studer argues that the motivations of scientists are of utmost importance to Bacon.¹⁹⁶ The *New Atlantis* presumes that there can be fellowship among scientists; the fellows of Salomon's House make political and scientific decisions as equals. The tale of Daedalus argues, on the other hand, that envy can be neither controlled nor exploited in the service of progress. Scientists will be consumed by this base emotion.¹⁹⁷ The conclusion of the *New Atlantis* seems to be the true one. The ambition of scientists is largely based in recognition for their accomplishments, and scientists rarely value the esteem of non-scientists in this regard. Not only is experimental science dependent on verification, it can only be understood by experts at the highest levels. True, scientists may aspire to wealth and fame, but if their experiments are not rooted in sound science, their ascendancy will be short-lived.

The ambiguous nature of science is further reinforced in the myth of "Sphynx, or Science". The Sphynx is a creature composed of elements of many other creatures; it is both wise and dangerous. Whether a person receives wisdom or death from the Sphynx depends entirely on the person's ability to interpret its riddles. The Sphynx is overcome by a man who is forced to approach it slowly.¹⁹⁸ Likewise, Bacon often cautions against men attempting to advance science too quickly, without fully understanding the power they wield.

The fable of "Atalanta" is particularly relevant for a discussion of the *New Atlantis*. Atalanta, though far swifter than her opponent in a footrace, is distracted by the appearance of golden apples along the course and thus loses the race and her freedom. Bacon presents this fable as a conflict

¹⁹⁵ Studer (1998), p. 231

¹⁹⁶ Studer (1998), p. 225

¹⁹⁷ Studer (1998), p. 227

¹⁹⁸ *WoA*, p. 275

between art (Atalanta) and nature (Hippomanes).¹⁹⁹ If left unhindered, art is far swifter than nature at attaining its ends. This is true in cases ranging from the production of bricks from clay to the attainment of wisdom through dedicated philosophical inquiry. Yet art is constantly distracted from its goal. Bacon writes, “[T]here is not any one art or science which constantly perseveres in a true and lawful course till it come to the proposed end or mark: but ever and anon makes stops after good beginnings, leaves the race, and turns aside to profit and commodity.”²⁰⁰ While this argument rings true, Bacon does not explain nature’s role in this fable. The golden apples are a ruse by Hippomanes; is Bacon suggesting that nature purposefully tries to thwart art?

The tale of Atalanta is notable for several reasons. The similarity in name of Atalanta and Atlantis instantly brings the latter to mind. Like Atalanta, Atlantis is meant to represent technological advancement, i.e. art. Atlantis is destroyed by its inability to fully conquer nature through technology. Bensalem seems to have fully conquered nature, even natural disasters. Has the end of science been reached there? Weinberger argues that the new learning combines the hope and belief in invisible things (a perfect future) that marks Christianity with the realism aspired to by the Enlightenment.²⁰¹ The desire to collapse theory and practice into a thing capable of solving mankind’s troubles is born of the desire to make philosophy safe. Unfortunately, many of Bacon’s intellectual heirs failed to recognize that this dream is impossible, but necessary, for science to function in the modern world.²⁰²

NOVUM ORGANUM

The *Novum Organum* (*New Organon*) is Bacon’s most scientific work; he may have regarded it as his most vital. The *New Organon* was intended to be the first part of Bacon’s *Great Instauration*, of which only the planned outline remains. The *Great Instauration* was planned as a means of organizing

¹⁹⁹ *WoA*, p. 258

²⁰⁰ *WoA*, p. 258

²⁰¹ Weinberger (1985), p. 164

²⁰² Weinberger (1985), p. 230

all scientific thought and replacing ancient science with modern science. Bacon originally published the Latin *Novum Organum* in 1620, during his tenure as Lord Chancellor. Distributed at the height of his political power, it is considered a serious attempt to introduce the idea of experimental science as an alternative to Aristotelian science. As Caton argues, Bacon was not a great experimental scientist, but is regarded as a founder of modern science because he was able to comprehend the larger picture of what science could be and how it could shape society.²⁰³ Like that of Aristotle, Bacon's science encompasses physical science and political science. Bacon explains that the two are inextricably linked because, "There may be many kinds of political state, but there is only one state of the sciences, and it is a popular state and always will be...This is surely why the greatest geniuses in every age have suffered violence."²⁰⁴ Science, a wholly undemocratic enterprise, is forever beholden to the public for support and resources. Public opinion matters in scientific research; therefore, it is essential that scientists study the public.

In this work Bacon gives an explanation for his attacks on the ancient thinkers, though he does not explicitly link this argument with his rhetorical strategy. He bemoans the current state of learning, saying that even those who are dedicated to learning are too afraid of innovation to contribute significantly to scientific progress. Bacon argues, "For you can hardly admire an author and at the same time go beyond him."²⁰⁵ So long as philosophy and science are mired in medieval tradition, progress will be stymied. If Bacon is to go beyond the tradition, he must attack its foundations. Yet he also takes care to preserve the wisdom of the ancients in several places. Bacon argues that the "unhappy divorce" of man's empirical and rational faculties have caused all of mankind's troubles.²⁰⁶ This divide is traditionally attributed to Plato, necessitating an attack on Plato's methods (even if Plato's responsibility for this divide was exaggerated by his interpreters).

²⁰³ Caton, p. 32

²⁰⁴ *NO*, p. 8

²⁰⁵ *NO*, p. 9

²⁰⁶ *NO*, p. 12

As previously noted, Bacon repeatedly attempts to collapse the distinction between theoretical and practical knowledge. He writes, “Human knowledge and human power come to the same thing.”²⁰⁷ If human beings possess knowledge of an art or science, that knowledge *will* be used in some way. Even knowledge that seems entirely theoretical will come to have practical applications. The history of modern science has proven this argument correct, at least in terms of natural science. The *Novum Organum* contains Bacon’s most comprehensive argument in favor of replacing dialectic with induction. Bacon implies that his philosophy cannot coexist with sophistic philosophy, by which I believe he means dialectic. Yet it is not clear if these two methods cannot coexist because they are fundamentally different (i.e. one is fundamentally correct and the other flawed) or because the human mind is not able to tolerate two competing philosophical doctrines.

Dialectic, most famously employed in the Socratic dialogues, relies on the use of reasoned argument to reach conclusions drawn from logic. So long as the discussion is between two fairly equal parties, dialectic forms the basis of philosophical discourse. As Socrates repeatedly demonstrates, however, if the two parties possess disparate intelligence, wit, skill, or motivation, dialectic can be a tool of manipulation. Induction, the foundation of the modern scientific method, uses specific experiences or experiments to reach general conclusions. Bacon argues that man’s mind naturally tends toward dialectic, because it can easily reach general conclusions; induction, on the other hand, requires careful, slow inquiries at each level.²⁰⁸ Moreover, Bacon’s science allows genuine knowledge to be obtained without knowledge of first principles.²⁰⁹ Each level of understanding, from empirical observation to law of nature, carries genuine knowledge. Though man may only become proficient at induction with difficulty, the conclusions reached by inductive experiments will be more certain.

²⁰⁷ *NO*, p. 33

²⁰⁸ *NO*, p. 36

²⁰⁹ Kennington, pp. 23-24

Of course, induction carries the risk of incomplete information being accepted with scientific certainty. Currently, all knowledge is subject to emotion and the will, for “man prefers to believe what he wants to be true. He rejects what is difficult because he is too impatient to make the investigation.”²¹⁰ The question remains, however: will human beings ever be patient enough to make Bacon’s vision a reality? Or will science’s aims always be corrupted and bent towards Atalanta’s golden apples? After all, one of Bacon’s clearest warnings about science’s danger also comes from the *Novum Organum*. He writes:

We already conceive and foresee that, if ever men take heed of our advice and seriously devote themselves to experience (having said goodbye to the sophistic doctrines), then this philosophy will at last be genuinely dangerous, because of the mind’s premature and precipitate haste, and its leaping or flying to general statements and the principles of things; even now we should be facing this problem.²¹¹

Because empirical philosophy is based in experiment, its conclusions seem unassailable. If lesser men engage in such experiments, they are apt to draw general conclusions about nature without sufficient evidence to support their claim. Bacon’s scientific reforms were an alternative to magic. Briggs argues that his inductive method at first resembles prayer and revelation - the scientist must labor strenuously with no real conception of his purpose, until the truths of the universe become apparent.²¹² As such, inductive science would contain the same pitfalls as revelatory visions. Namely, how does one distinguish truth from vivid hallucinations? Scientific theories are continuously disproven as more thorough experiments are devised. However, laymen are often reluctant to adapt to the new information and accept previous “facts” as false. Science promises truth, but one must still be cautious about false promises.

²¹⁰ *NO*, p. 44

²¹¹ *NO*, p. 52

²¹² Briggs, p. 168

One can see Hobbes' *Leviathan* foreshadowed in Bacon's assessment of rhetoric and reason. Though men believe that "their reason controls words", the opposite is often true.²¹³ This is why philosophic debate often ends in disputes about definitions and the names of things. Bacon recommends beginning with definitions and names, then proceeding from common understandings. Hobbes does this to great effect in the *Leviathan*. He begins by establishing definitions for common philosophical and political terms. By doing so he not only makes his argument clear, he also controls how those words are used from that point forward.²¹⁴

White argues that the *Novum Organum* is also for political things; once the scientific has become accepted by the political, science will shape politics.²¹⁵ White views the *New Atlantis* as a utopia, and therefore finds it difficult to reconcile the highly controlled society of the *New Atlantis* with Bacon's incipient liberalism, particularly in the realm of commercial freedom. He argues that Bacon surely recognized that the power of man over man increases with the power of man over nature, making it easy to see the connection between idealism and ruthlessness in hindsight.²¹⁶ I argue that Bacon unquestionably recognized the potential for science to become tyrannical, and provided a visual example of scientific tyranny in the form of Bensalem. White correctly discerns that Bacon would have considered Hobbes' effort premature, as natural science had not progressed far enough to attempt a political science. Though natural science has now progressed exponentially, the task of developing a political science remains as difficult as ever. The task of modern political philosophy is to prevent decisions by default, to guide the direction of political and scientific development as far as possible.²¹⁷ Bacon's vision shows us, however, that modernity must be constantly vigilant; science can be tempered by republican liberty, but a tendency towards despotism may be unavoidable.

²¹³ *NO*, p. 48

²¹⁴ This point is discussed fully in Chapter 6.

²¹⁵ White, p. 16

²¹⁶ White, p. 249

²¹⁷ White, p. 259

CONCLUSION

The post-modern reaction against the early modern philosophers emphasizes the grinding, oppressive, proletarian aspect of technology. That aspect is present in Bacon's work, particularly the *New Atlantis* - the citizens of Bensalem are not enlightened, though they may be comfortable. However, in his other works Bacon focuses more on the soaring heights of the scientist's mind. Science, like philosophy, has the power to connect one to the eternal. Post-modern critics object that science cannot be popularized safely. But many of the most prominent critics would also suggest that philosophy can't be popularized safely either. One cannot make a nation of philosophers or a metaphysical folk. Greatness is rare, but necessary for philosophers.

According to Velkley, Strauss argues that contemporary politics is universal, and therefore more philosophical than ever.²¹⁸ Yet he doubts if modern philosophy can answer the challenge. Modern political philosophy is more practical than ever; while post-modern philosophy has become divorced of purpose. The dominance of positivism and existentialism has resulted in political marginalization.²¹⁹ Even Bacon's appeal to charity has failed. As Briggs notes, charity is a way of overcoming natural affiliations.²²⁰ By universalizing concern, Bacon weakened particular concerns. And as Plato indicates in the *Republic*, any attempt to overcome erotic attachment to one's own is doomed to failure.

Strauss argues that a solution can nevertheless be found in Socratic thought.²²¹ Socrates sought knowledge of the questions, not the answers. By identifying the most fundamental questions, philosophers indicate the correct answers for society. Most of the questions don't have certain answers, so philosophy is always necessary. I maintain that this possibility is not unknown to Bacon. Bacon cannot be responsible for our own failure to appreciate his warning. Modern science and the resulting technology are continuing to progress; an adjustment to the reality of Bacon's project is the

²¹⁸ Velkley, p. 110

²¹⁹ Velkley, p. 112

²²⁰ Briggs, p. 237

²²¹ Strauss (1989), p. 262

only hope for political philosophy. The only way through this apparent crisis is to reclaim our contemplative philosophy by engaging in contemplative philosophy. Political society is never going to endorse and praise Socrates, a fact Socrates understood extremely well. Bacon tried to balance his love of wisdom with a desire to be accepted by a society shaped to his own ends. Philosophers are no longer in danger of hemlock in modern society. But one must ask if they have taken up Bacon's call to continue unfettered questioning in the privacy of their own minds?

CHAPTER 4: THE MIND AND THE BODY: CRITIQUING THE SOCIETY OF BENSALEM

I will now turn to a close examination of the text of the *New Atlantis*. Faulkner argues that Bacon's *New Atlantis* shows us how to make a science popular.²²² He presents Bensalem as the first future-oriented utopia that depends on the products of methodical research. The scientists achieve immortality (both metaphorical and perhaps literal) through their works. Glory is the key to immortality. Bacon certainly dangles this possibility in front of his readers. The careful reader, however, will question exactly how immortality functions in a political society, especially when all members of that society are not equally valued. Bacon's revolution may have humanitarian aims, but it is not humanitarian at its core. Though I disagree that Bensalem is utopian, Faulkner is certainly correct about the persuasive power of a future without privation. Bacon uses the poetic form of the *New Atlantis* to communicate his vast plan for turning traditional opinions into enlightened opinions while disguising the transformation. Poetry, as Bacon understands it, is rhetoric.²²³

This chapter will discuss the “civilian” culture of Bensalem; the following chapter will discuss the structure and working of the ruling institution of Salomon’s House. By investigating how the two aspects of Bensalem’s society function, I reveal how they relate to one another and possibly how they will relate to outsiders. The history and customs of Bensalem are essential to any understanding of the ways that Bacon’s science will shape a society. If I am correct in surmising that Bacon wishes to indicate Bensalem as a dystopia rather than a utopia, then the evidence must be present in the life of Bensalem’s citizens. After all, Bacon’s science is conducted *for* society, not independent of society. Bacon does not intend for scientists to live as ascetics or to hoard their findings. The innovations of Salomon’s House must be reflected in the culture and politics of the city. The state of the city’s culture and politics must

²²² Faulkner, p. 11

²²³ Faulkner, p. 238

in turn reflect how well the scientists understand political rule and how capable they are of shaping a robust regime.

The *New Atlantis* is told from the point of view of a stranded European sailor. He and his company encountered unexpected (and probably manufactured) bad weather and were turned off course. They arrived at the island of Bensalem, a previously unknown society. They were welcomed into the Strangers' House and given food, shelter, and medical treatment. While there, the sailors converse with the governor of the Strangers' House, a government official charged with their care. He tells them about the political and religious history of Bensalem during their quarantine. After they are released into the city, the sailors mingle with the citizens of Bensalem; the narrator befriends a wise merchant called Joabin who reveals much about Bensalem's marriage customs. The tale ends with a visit from a Father of Salomon's House, who reveals the power and structure of Salomon's House to the narrator before instructing him to relate the information to all of Europe. I begin my analysis with the sailors' discussions with the governor of the Strangers' House, but will refer to the events preceding their quarantine as needed.

After the European sailors have resided in Bensalem for nine days, the narrator tells the governor that his speeches cause the sailors to forget "both dangers past and fears to come".²²⁴ This apparent compliment actually holds a possible warning. Much like Odysseus' men in the land of the Lotus Eaters, the sailors are forgetting where they came from and where they must go. The narrator later speaks of being so impressed by the citizens of Bensalem that the sailors forget everything that was dear in their own countries.²²⁵ The forgetting is crucial to the success of Bensalem. The new society can only succeed if the old one is forgotten. The sailors are not only forgetting their cultural heritage, however, they are also forgetting their personal ties to Europe. The sailors never mention families left behind, but one must assume that at least a few of the men have them. These ties, which are

²²⁴ NA, p. 50

²²⁵ NA, p. 60

celebrated by the Bensalemites as more natural than all others, are not enough to overcome the allure of the prosperity and progress made possible by modern science. Bensalem is not timeless; the sailors do mark the passage of time. But it is a world entirely devoid of outside stimuli. It is unwise for the sailors to forget either the dangers of their past or the dangers that they currently face. The sailors say they would trade years of their former lives for an hour with the governor. They seem to be seeking oblivion. Oblivion is not a characteristic state of a thoughtful, self-reliant human being. If the Bensalemites are living in a state of oblivion, their society will be stable, but it will also be devoid of any individual liberty or classical virtue.

While discussing how Bensalem is able to know so much about Europe without being detected by European explorers, the narrator remarks that the Bensalemites' ability "to be hidden and unseen to others, and yet to have others open and as in a light to them"²²⁶ makes them godlike. God's power is not just to know everything; it is also to remain invisible to mankind despite man's constant efforts to know Him. Knowledge is power, but if one is visible, then the ability to use this power is compromised. God can act in mysterious ways because God does not have to account for His motives and actions. The parallels to government should be clear. The exchange recalls Bacon's argument that government "is a part of knowledge secret and retired in both these respects in which things are deemed secret; for some things are deemed secret because they are hard to know, and some because they are not fit to utter."²²⁷ Here one sees that Bacon's argument is applicable both to the government of man over society and the government of God over the world. Scientists are tasked with uncovering the mechanics of God's government; who is to do the same with the government of man? Political scientists are needed to discover which laws and policies produce the best results. Of course, the question then becomes: What is the end of government? Possible ends include stability, power, and individual liberty. The best society will likely combine all three. If Bacon is to be taken seriously as a political thinker, one must

²²⁶ NA, p. 51

²²⁷ AL, pp. 208-209

assume that his perfect society would strive towards this elusive balance. It is clear that Bensalem falls short.

The governor claims that visitors to foreign lands know more by observation than those that remain at home will know by the stories of the traveler.²²⁸ This statement is significant in several respects. It indicates that the narrator's account of Bensalem is suspect, or at least incomplete. His experience of Bensalem is colored by his existing beliefs and experiences, those of a European sailor. It also hints at the reason for Bacon's choice of literary expression. Philosophers will never be able to give sufficiently appealing accounts of just regimes or revolutionized societies through treatise or dialectic alone. Plato's philosopher was destroyed when he returned to the cave and attempted to describe truth to those in chains.²²⁹ By painting a poetic picture of Bensalem, Bacon shows his reader that which his reader may not be ready to accept or understand.

The *New Atlantis* is a more effective argument about the power of science to transform society than a philosopher's description about the potential of science or the nature of technology. Bacon calls his reader to travel into the unknown future; we will never know the potential of science until we follow its path. The truth about scientific society can only be seen by transforming England into a scientific society. Bacon's description of rhetoric's task, "to apply reason to imagination for the better moving of the will"²³⁰, provides insight into Bacon's intention for the *New Atlantis*. Poetry provides the candlelight that makes Bacon's thought palatable to the public.²³¹ According to Bacon, truth is always harsh and rarely useful in its unvarnished form. Poetry casts shadows where flaws can be concealed from all those who are not carefully looking.

²²⁸ *NA*, p. 51

²²⁹ *Republic*, 514a-521c

²³⁰ *AL*, p. 149

²³¹ *Essays*. "Of Truth", p. 61

POLITICAL HISTORY OF BENSALEM

Other parts of the world are said to have lost their navigation skills through war or the natural revolution of time. War is easily understood as a cause of regression; if nations are destroyed or impoverished, then great voyages will cease. The natural revolution of time is more problematic. The phrase implies that history is not progressive, but either cyclical or chaotic. Must all things that rise eventually fall? Or is it possible to move forward in a permanent way? The phrase “main accident of time”²³² implies that if nature and man are left to pursue their own courses, then no real progress will be made. Technology allows man to master the ordinary dangers of nature; one day it may allow man to overcome the enduring catastrophes of nature. The great Atlantis had progressed to the point of building tall buildings – their technology only prolonged their suffering after the catastrophic flood. More, better technology is required to stop the flood or to stop death. This is the lesson that the new Atlantis has learned from the old.

The governor implies that the Bensalemites did not consciously choose isolation; the course of events surrounding the flood chose it for them. The nations of the Americas were Bensalem’s greatest trading partners; combined with the loss of navigation in Europe and Asia, Atlantis’ destruction naturally led to Bensalem’s isolation. This explanation does not account for why Bensalem stopped freely travelling to other nations, however. That was a deliberate choice. Bensalem would seem to have been the most powerful nation on earth after the destruction of Atlantis. Yet they did not seek to conquer other nations, even to teach them a better way of life. Bensalem became a nation apart from an increasingly international world. Modernity has shown that as the world became larger, it also became smaller. Information about the entire planet is accessible to relatively ordinary human beings, meaning that true isolation is impossible. Rather than embrace this change and try to guide its progress, Bensalem chose political stasis. That choice was made by their most celebrated king, Solamona.

²³² NA, p. 55

Around 288 BC (1900 years before the writing of the *New Atlantis*) King Solamona ruled Bensalem. His memory they “most adore; not superstitiously, but as a divine instrument, though a mortal man”.²³³ Bensalem does not worship its kings as living gods or divinize them after death. Solamona is revered as a wise ruler, but he is not a prophet, saint, or messiah. Solamona is said to have had a large heart, inscrutable for good, and was wholly bent to make his kingdom and people happy, a description Weinberger identifies as an allusion to the biblical Solomon.²³⁴ During his reign, King Solamona decided his island kingdom could be self-sufficient.²³⁵ Solamona is considered to be the lawgiver of Bensalem; he plays a role in their collective memory akin to Solomon of the Hebrews and Solon of the Greeks. Amongst his foundational laws were the interdicts and prohibitions concerning the entrance of strangers. At the time, visitors were frequent on the island, but Solamona doubted novelties and commixture of manners, so he expelled foreigners.

The governor argues that Bensalem’s laws concerning strangers were an attempt “to join humanity and policy together”.²³⁶ Humanity would not permit the wholesale slaughter of foreigners, but policy would not permit allowing foreigners to disclose the secrets of Bensalem to other nations. Some part of this conflict can be alleviated through the generous treatment of visitors and offer of permanent residency. A life of luxury in a prosperous kingdom would be very persuasive to most sailors. The governor claims that no ship has opted to return and that only thirteen individuals have chosen to return in the bottoms of Bensalemites ships. It is later revealed that only fellows of Salomon’s House are allowed to travel abroad, so anyone who wished to return would have to wait until a voyage was leaving and would have to disembark wherever the scientists land. Since these returned individuals have never spoken of Bensalem, one can infer that they do not survive the journey. The governor

²³³ NA, p. 56

²³⁴ NA, Footnote 129.

²³⁵ The island is 5600 miles in circuit and very fertile; shipping could be used for fishing and trade between cities. The governor also reveals that Bensalem controls several nearby islands; it is not clear if they are part of Bensalem or tribute states.

²³⁶ NA, p. 57

suggests that no one would believe the tales of the returned men, and that is why Bensalem remains undiscovered. But this seems doubtful; surely some European monarch would be interested in a tale of a wealthy island. Here, the needs of humanity and policy surely conflict. The narrator's tale up to this point clearly indicates that when the two are at odds, policy is given primary consideration.

Solamona's suspicion of strangers is reminiscent of the Athenian Stranger's recommendations concerning foreign visitors in Plato's *Laws*.²³⁷ Travel to and from Megara was to be tightly controlled. Citizens would only be allowed to leave the city with permission of the Nocturnal Council. Upon returning, travelers would be thoroughly examined. If they learned any beneficial foreign customs, they would receive praise. If they seemed corrupted by foreign innovations, they would be silenced. These men would be allowed to live as private men, but like those convicted of publicly speaking impieties, any who failed to meet the Council's requirements were to be executed. Foreign visitors were to be received graciously in public, but watched carefully in private. The Stranger's intent is to prevent harmful ideas about the gods from taking root in the city. Impiety is considered extremely dangerous to the peace of the city, and the commixture of cultures ensures that the claims of a religion will be weakened. A reader of the *New Atlantis* must likewise consider what Solamona hoped to accomplish by isolating Bensalem. He could be protecting Salomon's House; the works of the scientists would surely inspire envy in foreign governments. Or he could be preserving the sanctity of Bensalem's beliefs. A third possibility also exists, one that I believe to be likely. Salomon's House reveals an express interest in discovering the truth about every aspect of the world, including the nature and limits of human beings. A scientific examination of politics is a logical consequence of this effort. Bensalem, given its isolation, could serve as an approximation of a laboratory. In this scenario, uncontrolled elements in the society would render such studies useless. The Athenian Stranger's recommendations indicate the

²³⁷ *Laws*, 951d-953e.

difficulty of isolating a society that requires foreign trade. It also hints at the improbability of citizens traveling abroad and returning unchanged.

It is interesting that Solamona is said to not have sought to improve his kingdom, yet he is the founder of Salomon's House, an institution dedication to conquering nature in the name of improving human life. He thought that the kingdom was at its pinnacle, and only sought "to give perpetuity to that which was in his time so happily established".²³⁸ This is hardly the thinking of a wise ruler, much less a man of science. Stasis is not possible in politics; thinkers ranging from Thucydides to Montesquieu to Madison have affirmed that societies can decline or progress, but they cannot remain unchanged. Furthermore, an institution such as Salomon's House would be absolutely dedicated to progress. Wise men may recognize that the rate of change must be regulated in any society; but change itself is irresistible.

Solamona founded Salomon's House, the lantern of the kingdom.²³⁹ Salomon's House brings light to the kingdom, but it also casts shadows. Knowledge is accumulated by the scientists, but all of their knowledge is not shared with the populace or with the government. The choice of Salomon for the name of the institution is therefore strange. The governor believes that Salomon is a reference to Solomon, not a corruption of Solamona, though he acknowledges that many of his own people believe the latter.²⁴⁰ The governor claims that the Bensalemites have Solomon's works on Natural History, which are unknown to the Europeans. Solomon is said to have written a comprehensive catalogue of all plants and animals, a project similar to the one that Bacon was to have undertaken as part of the *Great Instauration*.²⁴¹ He thought that scientists needed to have a comprehensive knowledge of nature as it is before they can change nature into what they want it to be. Solomon is famous for his wisdom, and for

²³⁸ NA, p. 56

²³⁹ NA, p. 58

²⁴⁰ NA, p. 58

²⁴¹ GI, pp. 7-9.

his sin. He oversaw the building of the Temple, and arguably instigated the downfall of Israel.

Solomon's wisdom was not sufficient to build a lasting empire.

In ancient texts Salomon's House is sometimes called the College of the Six Days Works, indicating Salomon's House's dedication to finding out the true nature of all things in order to glorify God and better use his works. The idea that God's glory will be increased once human beings understand the laws of nature is intriguing. The majesty and incomprehensibility of the universe is often invoked as proof of God's power. Any concerted effort to uncover how nature works might be seen as an effort to place God within the confines of physics. The governor argues, however, that if human beings truly understand the complexity and intricacy of the universe, they will reverence God even more. Knowledge would not lead to atheism, but rather to respect.

This argument presents a clear challenge to the idea that revelation is the only means of communicating with the divine. If science can unravel the workings of the universe, then scientists (not priests) will most clearly understand God's works. An elite class is still needed to interpret God's works for the larger public, but this elite class will be composed of scientists who are capable of verifying truth empirically and using their knowledge for the alleviation of physical deprivation. In Bacon's view, European priests have used their special status to amass power and discourage progress in learning. Bacon's new priests will use their knowledge to create heaven on earth. This marks a significant redefinition of philosophy and the philosopher's role in the city. Bacon does not intend for philosophy or science to be a stronghold of reason in a society dominated by irrational factions. Religion, revelation, poetry – all will be incorporated into the new philosophy. A philosophy that is based in empirical science.

This attempt to force a static politics and conquering science to coexist is a powerful indication that Bensalem's project will ultimately fail. They have created a sort of peace, but not harmony. The true structure of government in Bensalem is unclear. Many commenters have argued that Salomon's

House effectively rules, but an independent, obscure government is consistently cited throughout the text. Moreover, a Salomon's House that acts with logical consistency should never tolerate the sort of inertia that Solamona advocates. Two scenarios seem likely. White and Faulkner argue that the governance of Bensalem indicates a large, self-regulating bureaucratic state led by a figurehead monarch.²⁴² Salomon's House operates in a separate sphere and does not concern itself with the everyday workings of the city. The second possibility is derived from the scenario I posited earlier, wherein Bensalem is the subject of experiments in political science conducted by the scientists. During his speech, the Father of Salomon's House reveals their capacity to create "natural" disasters and their practice of touring the cities to teach citizens how to prevent and remedy their effects.²⁴³ It is not implausible that the scientists create havoc to see how the cities react to different stimuli.

The latter scenario is both more nefarious and more problematic with regard to the decision by the Father of Salomon's House to reveal the institute and the island to Europe. Such a decision indicates that the scientists are ready to see how the city they built interacts with foreign civilizations, mirroring the divide between the *Republic* and the *Critias*. The *Republic* described an ideal city; the *Critias* describes a city in motion. The city of the *Critias*, ancient Athens, only superficially resembles the city of the *Republic* because the ideal city cannot survive uncorrupted when faced with political realities such as war. The ending of the *New Atlantis* points towards a different story. The general consensus of Bacon scholars is that Bensalem's society will conquer that of Europe. The narrator will return home and spread the news of his travels. Europe will adopt the practices of Bensalem and either move forward into a prosperous, scientific future or into a technological dystopia. The goodness of Bensalem may be in doubt, but its ability to conquer Europe is not. I contend, however, that Bacon would not have identified Bensalem as an Atlantis if he thought it would survive a clash of civilizations with Europe.

²⁴² Faulkner, p. 255

²⁴³ *NA*, p. 83

The survival of Bensalem is dependent on the veracity of the first scenario. Faulkner consistently argues that Bacon is extremely concerned with establishing and protecting economic liberty. If modern science is well established, then technological progress will be extraordinarily difficult to control. Political power will guide it somewhat, but profit is generally a more powerful motivator than fear or patriotism. Science that operates in a controlled economy will not be as quick or innovative as science that allows scientists to compete openly for success. It is true that in the modern world much scientific research is funded by government institutions; but it is also true that these government institutions prefer to subcontract with private firms rather than hiring scientists as public employees. Of course, scientists do not prefer the private sector solely for the economic benefits; liberty is also an issue. Government funded science is managed by non-scientists and in democracies it is subject even to the vagaries of public opinion. Since government must exercise some sort of control over science, the task of political theorists and scientists becomes determining what sort of regime and policy is best suited to promote scientific progress while preserving the sovereignty of the government.

Faulkner argues that republican government is best suited for this purpose. He also argues that republican government is a necessary prerequisite for the economic liberty necessary to maintain an international maritime trade empire. My disagreement comes with Faulkner's assertion that Bensalem is Bacon's model for this type of society. If Faulkner's argument is correct, then Bensalem will display both the capacity for republicanism and a free economy. I believe that a close analysis of the text shows that neither is present in Bensalem. The question remains: why not?

The scientists of Salomon's House appear to live largely as equals. Though they are divided into several occupations, they are said to make decisions about the allocation of resources and course of experimentation as a group.²⁴⁴ The only possibility for self-government is found in the equality amongst the fellows of Salomon's House. Of course, these are not people possessed of greatly varying

²⁴⁴ NA, p. 81

intelligence, education, wealth, or status. They are the elite scientists of the kingdom. They can self-govern because they are all effectually equal. Naturally, some are more talented than others and these are rewarded through honors and statues.²⁴⁵ The galleries containing these honors are not public, however. The scientists may recognize a hierarchy amongst themselves, but to the ordinary citizens of Bensalem, they are equals. The possibility of self-government in this situation does not necessarily translate to the possibility of republican government, however. The scientists have the freedom to leave the island and possess knowledge of other ways of life. Their mission requires the ability to innovate and operate independently of higher authority. In short, the scientists require liberty to function. It remains to be seen if the same can be said of Bensalem at large.

CHRISTIANITY OF BENSALEM

One must keep in mind that the *New Atlantis* is narrated by a European sailor who was part of a voyage to the New World. Several questions are raised about the character of these sailors in the first paragraph of the text. The sailors had been in Peru for a year before attempting a return voyage. Were they colonists? Pirates? Their mission is never addressed, but the narrator does reveal that though the sailors took a year's worth of rations with them, they were destitute after about six months.²⁴⁶ Either the sailors are poor planners or lack sufficient self-control. Both characteristics would likely render them easily impressed by an affluent, accommodating society. The narrator relates that the winds from the east were "soft and weak", but they were consistent.²⁴⁷ They were progressing in such a manner when a strong, insistent wind from the west forced the ship to change course. The winds of change next arise from the south, forcing the sailors directly into the path of Bensalem.

²⁴⁵ NA, p. 82

²⁴⁶ NA, p. 37

²⁴⁷ NA, p. 37

Caton argues that the *New Atlantis* is particularly interesting in the context of the Catholic Church's residual resistance to the existence of antipodes and the idea of a spherical earth.²⁴⁸ Bensalem would be not only antipodal to Europe, but also possessed of a divergent, secret Christian revelation. The narrator's knowledge of Christian scripture is quickly revealed. He frequently makes reference to biblical passages; an examination of when and why he does so seems warranted. At the moment when the sailors have accepted their death, they pray to God "who showeth his wonders in the deep."²⁴⁹ *Psalm 107* tells of God manipulating nature to inspire devotion in his followers. God brought a tempest to threaten the lives of the Israelites who had taken to sailing. The tempest did not abate until the sailors cried out for God to save them, at which time God calmed the seas and guided the sailors into a safe haven. The God of the *Old Testament* is to be feared because He has absolute control over nature and will use that power to awe and to punish.²⁵⁰ If man is to imitate God, as the scientists of Salomon's House intend, he must have similar power.

The narrator speaks of God "discovering" or "uncovering" the material world at the beginning of time.²⁵¹ This is different from God creating the material world. The implication being that the universe was already in place; God just discovered it, assembled the parts, and gave His creations purpose. God may be able to manipulate Nature as He likes, but the substance of Nature is a thing beyond God. The God presented in this passage is more ancient than biblical. The discovery of Bensalem by the sailors is compared to the discovery of dry land by God. Bensalem is a new world. It is not a place to extend the Old World (unlike Peru); rather, it is a wholly new thing. The island appears to be located in the

²⁴⁸ Caton. p. 35

²⁴⁹ NA, p. 37; NIV, *Psalm 107*: 23-32

²⁵⁰ The vast majority of Biblical references in the *New Atlantis* are from the Old Testament, though the benevolence of Christianity is touted in conversations between the characters. It seems that both the sailors and the Bensalemites adopt the trappings of Christianity, but have retained Old Testament sensibilities.

²⁵¹ NA. p. 37

northern Pacific Ocean, perhaps near the Hawaiian Islands.²⁵² Its isolation is more easily explained by a location in the Pacific Ocean than the Atlantic Ocean, which was becoming well-explored in Bacon's time. The Pacific is also the bridge between the East and West. Bensalem culture borrows from Europe and Asia while carefully maintaining its otherness.

Bensalem is not the New World, it is the new Atlantis. The sailors land in a port city. It is not large, but is well-built. Despite everyone's claims that visitors are rare, the people of Bensalem are remarkably unfazed by the occurrence. They proceed to the shore in an orderly fashion and silently ward off the sailors. The people are armed with identical weapons – truncheons (batons). They appear to be a well-trained citizen militia. This level of organization speaks either to military discipline or unquestioning obedience. A welcoming party of eight then approaches the sailors' ship. The luxury and foreignness of the Bensalemites' technology is immediately apparent in their parchment.²⁵³ The sailors are presented with documents written in ancient Hebrew, ancient Greek, Latin, and Spanish. These languages were not chosen randomly. Hebrew is the language of revealed religion, just as Greek is the language of philosophy. Latin can be said to represent ancient empire, while Spain led the effort to create a modern empire through navigation and colonization.

The official first asks if the sailors are Christians, then he thanks God upon receiving an affirmative answer. The gesture used to thank God is to lift the right hand towards heaven, then bring it to the mouth. This gesture is peculiar, and seems to imitate bringing God into oneself. The sailors are asked to swear by the "merits of the Savior" not the name of the Savior or the grace of the Savior that they are not pirates and have not shed blood either legally or illegally for forty days.²⁵⁴ This is the first

²⁵² Though the first confirmed contact between Europeans and Hawaiians occurred with Captain James Cook's expedition in 1778, an expedition piloted by a Spanish sailor named Juan Gaetano reported contact with islands resembling either the Hawaiian or Marshall Islands in 1555.

²⁵³ *NA*, p. 38.

²⁵⁴ *NA*, p. 40

indication that the Christianity of Bensalem is a practical Christianity. It also serves as a reminder that Christianity, unlike paganism, insists on the superior *goodness* of its deity.

The official's inquiry indicates not just a concern for the safety of Bensalem, but also a concern with purification. The Bensalemites are afraid of foreign germs. A Conservator of Health is the first government official named. They are also concerned with ritual purity. Forty is a significant number in the Bible; God purified the earth through a forty day flood, the Israelites wandered the desert for forty years to atone for their sins, and Jesus spent forty days in the desert prior to the beginning of his ministry. Strangers are clearly regarded with suspicion by the Bensalem official, both for their foreign germs and foreign ideas.

The notary refuses a tip, saying he must not be "twice paid".²⁵⁵ The narrator says he learns later that government officials are forbidden by custom from taking additional compensation. This would seem to discourage corruption amongst government officials, though the benefits of working for the government would have to be generous for this custom to develop. It is a way of marking state officials as separate; though they are surrounded by luxury, they do not openly display greed. It is a curious addition to Bensalem culture – one that pointedly demonstrates the compatibility of virtue and luxury.

The official who escorts the sailors to the Strangers' House informs them that they will be quarantined for three days. This confinement could serve several purposes. Of course, it gives many diseases that the sailors may be carrying time to manifest. It also gives the state officials time to search the strangers' ship thoroughly. The narrator himself posits that the company is likely being observed, and their fate may depend on their behavior during the quarantine period. It is worth noting that the official always speaks of customs, never of laws. Custom carries the force of law in Bensalem, but is custom separate from law? Political thinkers have long recognized that good laws must simultaneously reflect and shape custom. A law that is inherently opposed to the customs or mores of a people will be

²⁵⁵ NA, p. 41

a law that is not obeyed willingly. A government formed by such laws will have a difficult time maintaining order without the liberal use of force. The use of the term “custom” to describe the mandates of the Bensalem government may be a way to soften the sailors’ feeling of imprisonment. Or it may be a reflection of the perfect harmony between Bensalem mores and Bensalem laws.

The sailors proclaim that “God is surely manifested in this land.”²⁵⁶ At this point, the sailors definitely ingest Bensalemite food and drink. They are given three drinks (wine, ale, and cider) and a red-orange fruit as a remedy for sickness taken at sea.²⁵⁷ The sick men are also given gray-white pills to take every night before bed to hasten recovery. Wine is the drink of Dionysus; it allows the irrational and the divine to enter into man. And while the fruit is described as similar to an orange rather than an apple, the eating of foreign fruit is a familiar precursor to the uncovering of secret wisdom. In addition to the possible symbolic meaning of this incident, the careful reader is now forced to question everything that occurs from this point forward. During the later account of the powers of Salomon’s House, it is made quite clear that the food and drink of Bensalem can contain perception-altering substances. Of course, it is a pointless exercise to assume that the narrator is hallucinating his experience; if that is the case then the *New Atlantis* cannot be studied in a meaningful way. However, it is important to consider this possibility and be aware that the narrator may not be a completely reliable interpreter of the things he witnesses.

The third day of the story begins with the narrator calling for the company to “know ourselves.”²⁵⁸ I do not believe that the narrator is meant to be a Greek scholar; however, the reader should take this as an indication that Socrates and Plato are in the background of Bacon’s story. The sailors come from the Old World, a world partially shaped by Greek philosophy. Though Bacon views the Scholastic interpretation of Greek philosophy as corrupt, the Scholastics are the dominant

²⁵⁶ NA, p. 43

²⁵⁷ Presumably scurvy.

²⁵⁸ NA, p. 43

philosophical voice of the time. I argue that Bacon objects not only to the Scholastic interpretation of Aristotle, but also to their preference for Aristotle over Plato. Bacon expresses a clear hostility to Aristotle, even if Bacon only attacks Aristotle so viciously in order to undo the work of his later interpreters. On the other hand, Bacon rarely references Plato directly, but subtly alludes to his dialogues rather frequently.

The narrator compares his company to Jonas²⁵⁹, who is saved from death when God caused the whale that had swallowed him to vomit him onto dry land.²⁶⁰ But one should remember that Jonas only found himself in the whale's belly because God brought forth a storm that threatened to destroy his ship. God wanted Jonas to spread his messages to misguided cities,²⁶¹ Jonas refuses, and is punished for his defiance. After Jonas is rescued, he consents to do God's bidding. The mercy of God is once again balanced by His willingness to use his power to punish and threaten. Jonas is a reluctant messenger of an omnipotent, but ultimately concerned, God. The narrator's comparison serves to further the parallel between God and the scientists of Salomon's House. The sailors were saved by the scientists, but they were also likely imperiled by the scientists. And, as the narrator later learns, he has been brought to the island for the express purpose of spreading the scientists' message to Europe. Like the *Old Testament*, the *New Atlantis* emphasizes that power determines morality.

The narrator stresses, "We are but between death and life; for we are beyond both the old world and the new."²⁶² The realm between death and life is the realm of dreams, madness, and revelation. This is a strange characterization for a land based in scientific principles. Just as a poetic narrative is a strange choice for a presentation of the virtues of scientific society. There is an element of

²⁵⁹ Jonah.

²⁶⁰ NIV, *Jonah*: 1-4

²⁶¹ NIV, *Jonah*: 1-4. One can extrapolate that the cities are misguided rather than inherently wicked from God's later forgiveness of one of the cities.

²⁶² NA, p. 43

something inexpressible in science. After all, at its highest levels it is in turns indistinguishable from magic, religion, and philosophy.

Moreover, the sailors themselves do not wholly belong to one world. The narrator proclaims that it is a “kind of miracle” that brought them to Bensalem, and a similar miracle will be needed for them to leave and return to Europe.²⁶³ For all their claims of gratitude and awe, the sailors do not entirely trust the Bensalemites. They are grateful for the help, but recognize that something may be wrong. The narrator instructs the men to reform their ways. Despite their apparent devotion to the Christian religion, the men are sailors, and given to European vice. Each man should be especially aware of their unknown circumstances. It seems at first as though the narrator hopes to not only survive the quarantine, but be allowed to leave. Yet almost immediately the sailors abandon their intention to return to their homeland in favor of staying in Bensalem, once again recalling Homer’s *Odyssey*.²⁶⁴ Their conviction is not because they understand scientific principles or are dedicated to the pursuit of scientific truth. They see Bensalem as a dream land of peace and prosperity. They are beyond all known worlds. This is not just a new place - it is a wholly different place.

The narrator insists that they must behave virtuously “for God’s love and as we love the weal of our souls and bodies.”²⁶⁵ They must honor God because God delivered them from their earlier peril and because the Bensalemites are a pious people. The religion of the narrator is an eminently practical one. As a representative of European Christianity, his attitude provides some insights into how amenable Europeans might be to revising Christianity in a manner favorable to science. Much like the early American preachers, Bensalem’s Christians do not see the need to separate earthly prosperity from spiritual purity. The narrator is a practical man. His religion complements his way of life. Like the laws that form a commonwealth, the religion of a people must flow from their mores and shape their mores.

²⁶³ NA, p. 43

²⁶⁴ This aspect of the sailors’ story parallels Odysseus’ encounter with Circe.

²⁶⁵ NA, p. 44

If the religion becomes counterproductive to the prosperity of a state in a serious manner, then the religion must be reformed. Given the later revelation that the Bensalemites possess Christian scriptures unknown to Europe, one can assume that both Bacon and the Bensalemites are open to revising the details of a religion so long as the basic tenets hold. Such revisions are rarely peaceful, however.

The days of the quarantine (days 4-6 of their stay) pass without incident and without elaboration by the narrator. The sailors are confined to the Strangers' House, and claim to pass the time joyfully. It would seem that some form of mental manipulation is being employed against the sailors. They should not be calm and joyful. After their perilous journey, near starvation, and captivity in a strange land, they should be anxious and fearful, perhaps even angry. Yet by the time the sailors are allowed to mix with Bensalem's populace, they are unreservedly enamored with the place and have no intention of leaving.

On the seventh day of the sailors' stay in Bensalem, they are visited by the governor of the Strangers' House. He is dressed in blue, with a white turban bearing a red cross. The red cross on a field of white, now a symbol of combat medics, would have been recognized by Bacon's readers as the flag of St. George, worn by English Crusaders. The Crusades attempted to spread Christianity and European hegemony throughout the world. The appearance of this symbol in the context of a scientific society is curious. The governor is no mere state official, however. He is by office the governor and by vocation a Christian priest.²⁶⁶ This mixture of political authority and religious importance brings to mind Thomas More, whose *Utopia* serves as a foil for Bacon's *New Atlantis*. The governing of Bensalem is intricately tied to its religion, as is the case with Bacon's England. The governor has been sent to answer the sailors' questions and clarifies that, "Some things I may tell you, which I think you will not be unwilling to hear."²⁶⁷ The phrasing of this statement indicates that there are other things that the government may not tell them, things which they may not like to hear. The governor is not free to answer all of the

²⁶⁶ NA, p. 44

²⁶⁷ NA, p. 44

sailors' questions. They are still strangers in Bensalem. The governor is evidently unaware of the Father of Salomon House's plan to reveal Bensalem to the world. Or perhaps the Father of Salomon's House never intends for Bensalem to be exposed; his concluding speech reveals the state of Salomon's House, not the society wherein it resides. The governing structure of Bensalem remains a mystery. Assuming that custom carries the force of law, the reader is exposed to many customs of Bensalem through the narrator's observations and the accounts of those he encounters during his stay. Yet the actual political structure of the society is never explicitly described. The truth of politics is presented in the shadows and reflections of custom.

The sailors are given permission to stay in Bensalem for six weeks, but are told their time can be easily extended because the law on this point is imprecise. It has been thirty-seven years since a stranger last visited Bensalem, yet the Strangers' House receives revenue every year, and will pay the expenses of the sailors. This account is either false or it reveals a deep-seated commitment to tradition. It is difficult to imagine a modern government institution receiving funding after thirty-seven years of inaction. The idea of the Strangers' House preparing each year to receive foreigners, when Salomon's House takes such extravagant measures to avoid such visits, is very strange. It seems that once the customs or laws of the government were set they were not allowed to change. The laws are static, a state of affairs only possible in a completely isolated, controlled society. One must ask once again, how is it possible for static laws to govern a society defined by dynamic technological innovation?

The only explicit restriction placed upon the sailors is that they are forbidden from travelling more than a mile and a half from the walls of the city without special permission. This restriction could either be for the sailors' safety or to protect the secrets of Bensalem. The unit of measure used in Bensalem is a karan, derived from the Hebrew word *keren* (horn). According to Weinberger's note, this word is used to symbolize a people's strength.²⁶⁸ The Bensalemites' knowledge of Hebrew is

²⁶⁸ NA, p. 45; Footnote 60

emphasized, but the choice of word is likely significant as well. Does the strength of Bensalem lie in its ability to measure the physical world? Weinberger also notes that *keren* is used to refer to a ruler of the Davidic line. Bensalem's revered king Solamona is consistently compared to the Hebrew Solomon, so perhaps this choice of word is also meant to underscore that connection.

The narrator refers to their treatment as "parent-like"²⁶⁹. The government serves as a parent to its citizens. Not in a literal sense. The Feast of the Family demonstrates that, unlike in the city of the *Republic*, private family structure is recognized in Bensalem. The reader has already glimpsed the strict control that Bensalem's government can exert over its citizens. Yet the narrator regards the governor as a benevolent representative of a generous government. He does not just demonstrate a child's respect and love for his parent; he demonstrates a convert's zealous devotion to a new religion.

The narrator is so grateful for his treatment that he compares Bensalem to heaven, for it is their salvation. Yet, he acknowledges that the restriction on where the sailors may travel goes against his own instinct and curiosity. However, out of gratitude, the sailors will obey. He tells the governor that they will obey the government's command, though "it was impossible but that our hearts should be inflamed to tread further on this happy and holy ground."²⁷⁰ The narrator seems content to call Bensalem holy because they espouse a belief in Christianity and do not make a practice of immediately slaughtering stranded sailors.

This sentiment is perhaps betrayed by the narrator's next pledge, however. He vows "That our tongues should first cleave to the roofs of our mouths, ere we should forget either his reverend person or this whole nation in our prayers,"²⁷¹ in reference to *Psalms 137*:

¹ By the rivers of Babylon we sat and wept
when we remembered Zion.

² There on the poplars
we hung our harps,

²⁶⁹ NA, p. 45

²⁷⁰ NA, p. 45

²⁷¹ NA, p. 46

³ for there our captors asked us for songs,
 our tormentors demanded songs of joy;
 they said, "Sing us one of the songs of Zion!"
⁴ How can we sing the songs of the LORD
 while in a foreign land?
⁵ If I forget you, Jerusalem,
 may my right hand forget its skill.
⁶ May my tongue cling to the roof of my mouth
 if I do not remember you,
 if I do not consider Jerusalem
 my highest joy.
⁷ Remember, LORD, what the Edomites did
 on the day Jerusalem fell.
 "Tear it down," they cried,
 "tear it down to its foundations!"
⁸ Daughter Babylon, doomed to destruction,
 happy is the one who repays you
 according to what you have done to us.
⁹ Happy is the one who seizes your infants
 and dashes them against the rocks.²⁷²

Psalm 137 is a pledge by political prisoners to seek revenge on their captors. The prisoners remind themselves to never forget the homeland, and never forget their sacred duty to avenge the wrongs done to them. Is the narrator indicating that he still regards himself as a prisoner? He pledges to never forget Bensalem or the governor in his prayers. Has he already given allegiance to Bensalem as his new homeland? Or does some residual loyalty to Europe remain? Is he vowing to pray for Bensalem's prosperity or its destruction?

The sailors pledge themselves as the governor's servants, but he refuses their offer. The governor seeks a priest's reward: brotherly love and the good of the sailors' souls and bodies. The priest is not just concerned with the soul. This priest also has a duty and a concern to tend to the body. It is interesting that religious institutions often concern themselves with medical care in addition to spiritual care in the modern world. The sailors appear to be most grateful for the physical comforts afforded them. This is understandable, given that they have just suffered through weeks of deprivation at sea. But it also serves as a reminder that Bensalem is a society without obvious want. Everything

²⁷² NIV. *Psalm: 137*

appears to be plentiful, and the people happy. One implication that can be drawn here is that physical comfort is necessary for spiritual well-being. The soul cannot be content unless the body is content.

The next day, the governor again comes to visit the sailors. He meets with ten of the sailors from a higher class and agrees to answer their questions about Bensalem, beginning with the name of the island. Bensalem is derived from two Hebrew words “*ben, shalem*” meaning son or offspring of peace, safety, and completeness.²⁷³ The Hebrew origin of the word reinforces their old connection to Judaism. The island was called Bensalem before it was converted to Christianity; the people of Bensalem were already familiar with the Jewish God before receiving Christian Scripture. The governor does not reveal what religion (if any) the majority of Bensalemites followed before Christianity became the dominant religion of the people. The name Bensalem is indicative of the relationship between science and the state. The two Hebrew words indicate that Bensalem is the product of peace, safety, and completeness, not the source of these things. Secure, peaceful conditions are a necessary precursor for the type of society found in Bensalem. In Bensalem, the source of these things is science, either natural or political. Solamona and his successors at Salomon’s House manipulate the conditions of society in order to allow for the prosperous, happy state seen by the sailors.

The narrator first asks how Bensalem came to know about Christianity. He asks what apostle came to them and how they came to be converted. The governor is pleased because this question shows the sailors “seek first the kingdom of Heaven”.²⁷⁴ The governor cites *Matthew* 6:33, a Biblical passage that addresses two things: humility and trust. It could be important for Bacon’s project in several ways. The relevant passages read:

²⁴ “No one can serve two masters. Either you will hate the one and love the other, or you will be devoted to the one and despise the other. You cannot serve both God and money. ²⁵ “Therefore I tell you, do not worry about your life, what you will eat or drink; or about your body, what you will wear. Is not life more than food, and the body more than clothes? ²⁶ Look at the birds of the air; they do not sow or reap or store away in barns, and yet your heavenly Father feeds them.

²⁷³ NA, p. 46; Footnote 68

²⁷⁴ NA, p. 47

Are you not much more valuable than they? ²⁷ Can any one of you by worrying add a single hour to your life^[e]?

³¹ So do not worry, saying, 'What shall we eat?' or 'What shall we drink?' or 'What shall we wear?' ³² For the pagans run after all these things, and your heavenly Father knows that you need them. ³³ But seek first his kingdom and his righteousness, and all these things will be given to you as well. ³⁴ Therefore do not worry about tomorrow, for tomorrow will worry about itself. Each day has enough trouble of its own.²⁷⁵

The passage encourages Christians to refrain from pursuing material wealth and instead trust that their physical needs will be met by God. This argument would be anathema to Bacon. His science seeks to master Nature and make man capable of God-like feats. It is a ceaselessly inquiring science, constantly pushing the boundaries of the possible. In Bacon's mind, man's passive acceptance of his worldly fate has not led to any great spiritual purity; it is the rare person who can display moral strength when faced with starvation. Bacon would not encourage scientists to trust that God will provide when they are capable of providing for themselves.

If the governor is meant to be Bacon's representative in this scene, his praise of the sailors for seeking the kingdom of heaven is back-handed at best. The Europeans display characteristics valued by traditional Christianity, but despised by Bacon's science. On the other hand, this type of passivity is not useful in a scientist but it may be useful in getting science accepted by the public and the government. If science can provide physical comfort to the public, then the public may see science as a tool of God. In that case, the idea of "doing God's work" takes on a slightly new meaning. If science is seen as glorifying and aiding God's plan instead of challenging God's authority then it will stand a much better chance of finding support amongst non-scientists.

The governor tells the sailors that about twenty years after Jesus' resurrection, the people of Renfusa (a city on the eastern coast of Bensalem) saw a column of light about a mile out to sea. The night was cloudy and calm. Renfusa is a combination of Greek words *rhen* and *phusis*, meaning sheep-

²⁷⁵ NIV, *Matthew* 6:24-27; 31-34

like.²⁷⁶ It is important that the name of the city is derived from Greek words. A Greek name carries different connotations than a Hebrew name. The Greek could be a reference to the original language of the *New Testament*; a signal that Christianity is forthcoming. The people of Renfusa could be members of Jesus' flock. The name could also be an indication that the coming events are somehow related to philosophy, and sheep are not to be emulated by philosophers.

The column of light was topped by a brighter cross of light. The people of Renfusa went out in small boats to investigate, but they could not approach nearer than sixty yards away from the light. The boats could move backwards, but could not come closer. The governor relates that one of the wise men from Salomon's House *happened* to be amongst the men on the boats. It is odd that a scientist of Salomon's House was in Renfusa. The Father of Salomon's House has not visited the city where the sailors landed in a dozen years. It seems that such visits by the scientists are rare. One must wonder if the wise man's presence was a coincidence. It is also worth noting that the man from Salomon's House is called a "wise man" rather than a philosopher.²⁷⁷

Upon approaching the column of light, the wise man fell to his knees and began praying. Again, the governor does not mention what religion the Bensalemites followed before Christianity. Yet the wise man is clearly praying to the Judeo-Christian God. Either the wise man was a Jew or he had some way of knowing which deity was responsible for this miracle. The wise man speaks of Christian grace in the first sentence of his prayer.²⁷⁸ He then says that God wants the members of his order to know the secrets of the universe and to discern between true miracles and illusions. No earthly authority gave Salomon's House this authority; they took it for themselves. The members of Salomon's House exert religious authority in addition to their role as scientific investigators. The wise man breaks the works of

²⁷⁶ NA, p. 47; Footnote 72

²⁷⁷ It should be noted that the term "scientist" was not coined until 1835; during Bacon's life "scientists" would have been called natural philosophers. I use the term scientist throughout my analysis for the purpose of clarity in writing to a modern audience.

²⁷⁸ NA, p. 48

God's creation into the following categories: divine miracles, works of nature, works of art, and impostures and illusions.²⁷⁹ The scientists assert the authority to discern between these things. The wise man declares the pillar of light to be a divine miracle and says the members of Salomon's House learned in their books that God never performs miracles without great cause, because God is loath to violate the laws of nature.²⁸⁰ God largely works within the laws of Nature, but can overcome them when He chooses. This is likewise the goal of Bacon's science. In the *Great Instauration*, he writes, "For the chain of causes cannot by any force be loosed or broken, nor can nature be commanded except by being obeyed."²⁸¹ Learning the laws of nature allows one to push those laws to their limit. At a certain point, the ability to push nature in this manner yields results that would appear impossible. The wise man concludes his prayer by asking God for the power not only to interpret, but also to use, the miracle. It is meant to be an instrument of prosperity.

After his prayer, the wise man's boat was allowed to approach the pillar of light. Before he got very close, however, the pillar broke apart into a firmament of many stars, which also vanished. All that was left was a small cedar ark, which remained dry in the water. A palm leaf grew out of the front of the ark. The ark opened by itself and the wise man found a Book and a Letter wrapped in fine linen. The Book is said to have contained all the canonical books of the Bible (Jewish and Protestant canon) and the Book of Revelations.²⁸² The governor claims that some books of the *New Testament* which were not yet written were nevertheless in the Book. This is a very strange remark. It is not immediately clear why Bensalem should have been converted to Christianity so quickly after Jesus' life; Bacon could have delayed their conversion in the story until a time when the entire Bible had been written. Is he indicating that Bensalem's Book is a true miracle? If so, then God has singled them out as the most righteous of people, worthy of special attention. This does not seem to be a very Christian sentiment. If

²⁷⁹ NA, p. 48

²⁸⁰ NA, p. 48

²⁸¹ GI, p. 32

²⁸² NA, p. 49.

Salomon's House is responsible for manufacturing this miracle, as Weinberger convincingly argues,²⁸³ Bacon could be indicating that the members of Salomon's House wrote those books of the Bible and later spread them throughout Europe. After all, Europeans eventually came to know most of the books given to the Bensalemites.

The Letter is from Bartholomew, the apostle said to have preached the gospel to India and Armenia. Bartholomew was martyred and canonized; his miracles all concern altering the weight of objects. They are miracles that violate the laws of physics. His Letter says that an angel appeared to him in a vision and commanded him to put the ark in the sea, but it does not mention the strangeness of the *New Testament* books. Natives, Hebrews, Persians, and Indians were living on Bensalem at this time. Each person could read the Book and Letter as if it were written in their own language. The native language of Bensalem is rarely mentioned throughout the text. This could be because the native citizens only spoke in the sailors' language in their presence. Perhaps the sailors were not trusted to learn the native language of the island.

The governor compares this aspect of the miracle to the original Gift of Tongues.²⁸⁴ Reading or hearing the gospel in one's own native tongue appears to have a great effect. It strengthens the argument in favor of an event's divine origin and it renders individuals more likely to listen to and accept the message. Bacon's inclusion of this aspect of the miracle emphasizes the need to communicate to one's target audience on their own terms. People of all sorts are more likely to believe a speaker if they think the speaker understands them. Bacon wrote the *New Atlantis* in English, the language of the common people of England, rather than Scholastic Latin. He is sharing his vision of a new science with the public in a language and format accessible to a much wider audience than any of his other works.

²⁸³ Weinberger (1989), pp. xvii-xviii.

²⁸⁴ NIV, Acts 2: 1-16

The governor compares the conversion of Bensalem to the saving of Noah's remnant during the flood: both were saved by arks.²⁸⁵ As soon as the governor makes this comparison, a messenger appears and calls him away. It seems that not only was the conversation being observed, but the governor was approaching controversial or forbidden territory. The matter of divine revenge would necessarily be a subject best avoided in Bensalem. Weinberger argues that the Bensalemites only needed piety to absolve them for crimes committed in the pursuit of science.²⁸⁶ Perhaps any comparison of Bensalem to the corrupt pre-Flood world is an unwelcome reminder that Bensalem's science is actually a challenge to God's authority. The scientists clearly do not believe that their work will cause divine wrath to reign down on them (or else they would presumably cease their work). But it is never made clear if the scientists believe God to be nonexistent or merely uninterested in human affairs.

CUSTOMS OF BENSALEM

Though most of the laws governing the *New Atlantis* are not explicitly shown, several customs of Bensalem are either displayed or described to the sailors. These customs prove illuminating with regard to the governance of the island and the state of Bensalem's civil society. Readers of the *New Atlantis* can extrapolate much about the political culture of Bensalem from the two customs presented to the sailors: the Feast of the Family and the marriage rites as described by Joabin. White argues that Bacon is concerned with two societies: the one ruled by science and the one necessary for the rule of science to be established.²⁸⁷ Bensalem is meant to be the society ruled by science, but the culture of Bensalem must also be one that supports the rule of science.

²⁸⁵ NA, p. 49

²⁸⁶ Weinberger (1989), p. xxiii.

²⁸⁷ White, p. 12

After learning about the history and secrecy of Bensalem, the sailors pass a week as free men. They go abroad in the city and the places within the specified distance they are allowed. They no longer fear for their “utter perdition”²⁸⁸, and thus pass the time joyfully. The narrator’s choice of words conveys two meanings. The sailors no longer fear that the authorities of Bensalem will execute them summarily. But they have also seemingly been convinced of the righteousness of Bensalem; they no longer fear that residing in Bensalem will lead to eternal damnation. Piety is repeatedly identified as the primary characteristic of Bensalem and its people. Yet no attempt is made to define piety; the Christianity of Bensalem is markedly different from that of the narrator’s Europe, a fact never remarked upon. Piety in Bensalem is likely different as well. The Feast of the Family shows the reader that Bensalem’s culture is built on familiar words and phrases, but very strange ideas lie behind the use of those familiar tropes.

FEAST OF THE FAMILY

At some point during this week, two sailors of the company are bidden to a Feast of the Family, “a most natural, pious, and reverend custom, showing the nation to be compounded of all goodness.”²⁸⁹ The custom rewards procreation, not virtue or even the production of virtuous children. As Weinberger notes, “Bensalem, described later as the ‘virgin of the world’ is in fact dedicated to the preservation and generation of human bodies, and thus to the most intense pleasure that accompanies the procreation of human bodies.”²⁹⁰ But neither Weinberger nor Bacon offer an explanation for *why* Bensalem needs a constant supply of new citizens. Rather than rewarding political leadership or economic prosperity, the kingdom rewards those who provide it with....soldiers? Test subjects? Food? It is never specified why Bensalem values procreation so highly; in fact, an island nation that forbids emigration should be careful

²⁸⁸ NA, p. 60

²⁸⁹ NA, p. 60

²⁹⁰ Weinberger (1989), p. xxiv

to control the population. Evidently, there is a high death rate in Bensalem. The custom is considered pious and reverend because it celebrates what are evidently the most natural impulses in human beings – sexual attraction and the desire to procreate. Weinberger argues that “Bacon's teaching about modern science is ultimately about human relations during the conquest of nature.”²⁹¹ He further notes that the Feast of the Family emphasizes the pleasure of copulating over excellence of character.²⁹² By rewarding men for fulfilling their natural urges, Bensalem maintains a kind of peace. No one is required to think too deeply or act too bravely; indulging sexual desire makes one a valued and respected member of the community. The people of Bensalem are ensured that their pursuit of physical pleasure is both natural and pious.

The Feast of the Family represents the diametric opposite of ascetic science. There is no apparent harmony between the intellectual scientists and the constantly breeding populace. The narrator never learns if the scientists have families, but their prolonged absences and absolute dedication to research would suggest not. The forces at work in Bensalem may have found a way to balance one another through extremes, but moderation is not to be found in either camp. In nature these desires would necessarily be secondary to the fear of premature death, which Hobbes later identifies as the primary motivating force in human life.²⁹³ The idea that fear of death by violence or disease is not a significant factor in Bensalem's culture is telling. Their technology has drastically minimized the possibility of premature death. The creation of life is celebrated and encouraged while the scientists of Salomon's House endeavor to conquer death. Logically, Bensalem should not be able to perpetually increase its population.

The Feast of the Family marks (male) fertility as the highest virtue a Bensalem citizen can possess. If a man has thirty persons descended of his body alive together, all over three years of age, he

²⁹¹ Weinberger (1989), p. xi

²⁹² Weinberger (1989), p. xxiv

²⁹³ Hobbes, pp. 74-78

is given a feast paid for by the state. It is unclear if this means thirty children or thirty children and grandchildren combined. This man is called the Tirsan, which Weinberger translates as a Persian word meaning timid or fearful.²⁹⁴ The man being celebrated is marked as fearful. Why is the father considered timid? And why does the kingdom celebrate timidity? No answer is given to these questions. However, the family has traditionally been considered the realm of womanly virtue, while politics or war is the realm of manly virtue. The fact that Bensalem's men pursue glory through their domestic accomplishments would seem strange to an ancient Spartan or Roman. Bacon is perhaps acknowledging the strangeness or unnaturalness of this custom.

The order of nature would thus seem to be paternal authority over the family. Though the narrator says that Bensalem shows great respect for this "natural" authority, the reality is very different.²⁹⁵ The father is only given this authority on the rare occasion of a Feast of the Family. How do family members resolve disputes in other times? Who censures vice? Who gives edicts concerning money and marriage? It seems like the father is only given this authority once in a lifetime, and only with the express permission of the state and in the presence of the governor's representative. The state sets the rules for the Feast, funds the Feast, and lends its authority to the enforcement of the father's wishes. The whole idea of the Feast seems to be a mockery of the natural order of the family. It is a symbolic celebration of a traditional idea; one that reminds everyone that the state holds the only effective authority in Bensalem.

The Tirsan chooses one of his sons to live with him; the son is afterwards called the Son of the Vine. No mention is made of the son's family or occupation. It is unclear if being a Son of the Vine is merely a ceremonial honor or if the son is expected to devote himself to caring for his father. A herald presents a scroll to the Tirsan containing the King's Charter, granting money, privileges, exemptions, and points of honor to the Father of the Family. The scroll is addressed, "To such a one our well-beloved

²⁹⁴ NA, p. 61; Footnote 171.

²⁹⁵ NA, p. 61

friend and creditor”.²⁹⁶ The citizens are the king’s creditors. Rather than money, it seems they lend him new subjects. Again, what is the purpose of this type of prolific procreation?

The seal on the charter is the king’s image. The charters are somewhat tailored to fit the number and dignity of the family. Even in Feasts of the Family, wealth and status matter in Bensalem. As the charter is given to the Tirsan, the whole company chants “Happy are the people of Bensalem”.²⁹⁷ Happiness is the ultimate goal of Bensalem society; it is the purpose behind the work of Salomon’s House. The scientists may possess a love of wisdom and an ambition to conquer nature, but they also endeavor to increase the happiness of the people. Human happiness provides both a justification and a moral grounding for the boundary-pushing science conducted by Salomon’s House.

The narrator notes that Bensalem has excellent poesy. A society built on science also excels at poetry. Poetry allows access to truth through images that evoke emotional responses. It both opposes and complements philosophy and science. Human beings will never be able to completely repress emotion, and attempts to do so are extremely problematic.²⁹⁸ Bacon, who uses a poetic form to express his scientific/political vision, understands the vital role of poetry very well. Of course, one must question the use of the descriptor “excellent”. Bensalem’s poetry may be excellent because it expresses some truth of human existence, or it may be excellent because it efficiently accomplishes its purpose as determined by the state. Plato famously argues that poetry must be highly regulated in order to prevent harmful ideas about the gods from taking root in the city. In the city of the *Republic*, the purpose of poetry is to teach citizens piety.²⁹⁹ Real Greek poetry, on the other hand, served as a cathartic outlet for the public. It showed the power of *eros* to build and destroy whole civilizations.

The ritual follows an extremely strict schedule, providing another example of how this celebration provides a temporary break from the ordinary course of life in a scientific society. After

²⁹⁶ NA, p. 62

²⁹⁷ NA, p. 63

²⁹⁸ This argument is made particular clear by Plato in the *Phaedrus* and Euripides in *The Bacchae*.

²⁹⁹ *Republic*, 376e-403c

dinner, a hymn is sung; the hymns vary but all praise Adam, Noah, and Abraham. The choice of subjects is apt, as Adam and Noah peopled the world and Abraham is the “father of the faithful”. The hymn concludes with a thanksgiving for Jesus’ birth, by which all births are blessed. It is worth noting that Adam, Noah, and Abraham are not praised for their extraordinary faith or their accomplishments, but for their virility. The Tirsan blesses his descendants in the name of the Father, the Prince of Peace, and the Holy Dove, saying that the days of their pilgrimage should be many and good. This blessing references *Genesis 47:9*, which describes how Joseph saved his father and brothers from famine by moving them to the Pharaoh’s lands in Egypt. The servants of God were only saved by accepting the authority and generosity of a foreign ruler. Perhaps the father is giving his sons permission to accept the “un-natural” order of things in Bensalem.

The Feast of the Family celebrates the natural order of the family in an exaggerated and therefore conspicuously unnatural manner. If there is a mother from whom the whole lineage is descended, she sits in a screened compartment with a concealed door and a carved window. She is not seen by anyone at the Feast. This detail of the ceremony is exceedingly strange. The father’s ability to procreate is celebrated, while the mother’s is hidden. The strangeness is accentuated when one considers that if more than one mother is responsible for the father’s achievement, they are not concealed. The concealment is only seen if the mother’s accomplishment matches that of the father. Women are shown to occupy a secondary role in the Feast of the Family, but their marriage customs suggest that equality exists between the sexes in many aspects of Bensalem culture. Paternal authority may be natural, but Bensalem’s science is devoted to overcoming the limitations of nature. Nature cannot be completely overcome, but the government of Bensalem has completely changed the natural order of the family, as does any government that has progressed beyond the tribal.

Women are not remarked upon by the narrator, except in passages concerning marriage and fertility. This is not in itself notable except that the Father of Salomon’s House is careful to note that

they employ both men and women as servants and attendants.³⁰⁰ Women are not said to be employed as scientists; if my argument about scientists' lack of families is correct then we may have just learned how *eros* is controlled in Salomon's House. One of the many lessons to be gleaned from Plato's *Republic* is that *eros* cannot be effectively regulated through legislation or eradicated altogether from human life. It is a necessary and unconquerable force of human nature. Bacon was keenly aware of this ancient wisdom. If Bensalem is truly a model of an ideal society, then we must next investigate how sexual desire is regulated.

JOABIN

The narrator says that their acquaintances in the city are not of the meanest sort, meaning not the poorest or lowest class. His comment reveals that a class structure or some kind of economic disparity exists in Bensalem. Though the city is evidently prosperous beyond imagining, not every citizen possesses equal wealth. Of course, wealth is a relative concept. The poorest Bensalemite may very well be wealthier than the aristocrats of Europe. Other than a general sense of prosperity, no description of the actual standard of living in Bensalem is given. Furthermore, the reader is never told if occupations are assigned or freely chosen in Bensalem. A citizen's place in the class structure of Plato's *Republic* is determined by aptitude and ability, but once a citizen has been assigned a place, that place is permanent.³⁰¹ One's place in European class systems, on the other hand, is largely determined by birth and marriage; an advantageous marriage can elevate one to the nobility. It is not clear which of these examples Bensalem emulates, or if they are something altogether different.

The economy of Bensalem is obviously an important element of its culture. The narrator does not claim that European notions of the value of gold and gems are meaningless to the Bensalemites, as in Thomas More's *Utopia*. There is no mention of children playing with rubies or slaves wearing chains

³⁰⁰ NA, p. 82

³⁰¹ *Republic*, 412b-417b

of gold.³⁰² The Merchants of Light collect knowledge from foreign nations, and presumably use foreign currency to survive their missions; but the reader is not told if Bensalem itself uses currency, barter, or communalism as a means of distributing goods. Joabin is a merchant, and clearly an important member of society. It is not specified what he buys and sells – perhaps he is a Merchant of Light. The acquisition of knowledge is highly valued by Salomon’s House. It seems likely that Joabin is the merchant tasked with gathering all information possible about the culture and society of Bensalem.

The governor says that the fellows maintain a trade “for God’s first creature, which was Light: to have light of the growth of all parts of the world.”³⁰³ But the fellows are not engaged in a trade of knowledge. Salomon’s House gives nothing back to the nations from which it takes knowledge. This could be why the Father permits the narrator to tell his story at the end. Perhaps Salomon’s House is finally paying its debts to the world. It is interesting that the governor conflates the Light of the Enlightenment with the Light of the *Old Testament*. He claims that Salomon’s House is seeking God’s first creature, but Light in Genesis is thought to be physical light. In the *New Testament* Jesus is repeatedly referred to as the light of the world. Light does not mean knowledge in either Biblical context. It means order and life in the former and redemption and grace in the latter. But for the Enlightenment, Light means knowledge. The merging of Enlightenment thought and Christian religion is found in such details.

Weinberger notes that Joabin is the plural form of Joab, who was King David’s nephew and an important captain of David’s army.³⁰⁴ Significantly, in 2 *Samuel* 2, Joab was persuaded to cease pursuing revenge against his fellow Israelites during a conflict between the houses of David and Saul. The internal fighting weakened the tribes; Joab relinquishing his claim to revenge allowed for David to unite Israel. Joabin is said to be a Jew and circumcised; the plural origin of his name suggest that Joabin speaks for all

³⁰² More, p. 76

³⁰³ NA, p. 59

³⁰⁴ NA, p. 65; Footnote 196

Jews, for a religion and a people that have maintained a separate identity throughout the course of history. Even in Bensalem, the Jews have maintained their religious separateness. Their religion is however tolerated by the rest of Bensalem; Joabin seems to be prosperous and well-respected. Weinberger further notes the irony of Bensalem's chastity being defended by the namesake of the man who aided King David's unlawful lust.³⁰⁵ As I noted previously, Joabin's status as a merchant likely marks him as a member of the ruling class of scientists. It further signifies his place in the market; Joabin is thoroughly concerned with public matters.

It is interesting that Joabin repeatedly describes Bensalem's culture from the point of view of an objective observer, repeatedly employing a third person construction in his descriptions.³⁰⁶ He is already an outsider by virtue of his Jewishness. He is also revealed to be very informed about European culture and intimates that he has conversed with Europeans other than the sailors. These circumstances point to the conclusion that Joabin has traveled to foreign nations, again marking him as a member of Salomon's House. Joabin does not appear to be a physical scientist; rather he is described as a man well versed in political science. Assuming my argument is correct, one must ask why Joabin is living amongst the Bensalemites disguised as a merchant. In the *Laws*, the Athenian Stranger posits that every member of his well-founded city should serve for a time as a merchant.³⁰⁷ Understanding the economic life of the city is an essential task for those who would seek to rule it. If Joabin is a political scientist tasked with understanding the political life of Bensalem, his position as a merchant is another sign that Bacon is keeping Plato's thought in mind throughout his work.

The narrator claims that the Jews of Europe "hate the name of Christ and have a secret inbred rancor against the people amongst whom they live."³⁰⁸ The narrator thus reveals that he is possessed of

³⁰⁵ Weinberger (1989), p. xxi

³⁰⁶ NA, p. 68. Joabin uses "they" when speaking of Bensalem. He uses "I" when speaking of European culture and customs.

³⁰⁷ *Laws*, 918d-918e

³⁰⁸ NA, p. 65

the old prejudices of European society. Readers of the *New Atlantis* must remember this, and also acknowledge that the Bensalemites are well aware of these prejudices. Bensalem is presented through the eyes of a European; it is unclear if the Bensalemites are trying to eradicate such prejudices or play upon them. On one hand, Judaism is a familiar religion; the presence of Jews in Bensalem could provide a sense of commonality with European society. On the other hand, Bacon is writing very near the time of the Inquisition. The presentation of a type of Judaism that is compatible with Bensalem's Christianity could be yet another signal from Bacon that all religious concerns must be secondary to the functioning of the state.

In addition to loving Bensalem, the Jews of Bensalem appear to be very unorthodox in their beliefs. The narrator says that Joabin acknowledges that Christ was born of a virgin, that he was more than a man, and that God made him ruler of the Seraphims in Heaven. Furthermore, Joabin calls Christ the Milken Way (a way leading to heaven) and the Elijah of the Messiah (a prophet forerunner to the Messiah), but will not call Christ his divine Majesty.³⁰⁹ The narrator is pleased with Joabin's words. However, the fundamental doctrinal distinction between Christians and Jews is the dispute over Christ's divinity. This discussion is reminiscent of Bacon's presentation of Christianity without true religiosity.³¹⁰ The structure and authority of religious institutions is very useful, so long as doctrine does not interfere with political or scientific progress.

The type of Christianity displayed by the narrator is likely representative of the type of Christianity seen in the common people of Europe, especially amongst denominations that don't highly value the reading of scripture. The narrator knows the basic tenets of his religion, but is (evidently) not clear or not concerned with the finer points of doctrine. It is this type of ignorance or flexibility that Bacon hopes to exploit. The narrator knows that Christ is supposed to be divine, but he isn't going to argue doctrine with a man who is praising Christ's virtues. Even if the praise *is* backhanded. Bacon

³⁰⁹ NA, p. 65

³¹⁰ Or as Flannery O'Connor memorably expresses the phenomenon: The Holy Church of Christ Without Christ.

needs flexible Christians; ones who can be made to view attempts to bend and break the laws of nature as inquiries into the greatness of God's works.

Joabin claims that the Bensalemites are descended from Abraham by his son Nachoran, who is conveniently missing from Biblical texts.³¹¹ Joabin also claims that Moses, by a secret cabala, ordained the current laws of Bensalem.³¹² The narrator doesn't note the discrepancy, but this clearly conflicts with the account of Bensalem's laws given by the governor, who reported that the laws were set by Solamona. Joabin's claim serves to establish the religious authority of Moses as primary; the political authority of Solamona merely confirms Moses' edicts. Perhaps the Jews of Bensalem are not as assimilated as they first appear.

Joabin also claims that when the Messiah comes and claims his throne in Jerusalem, the king of Bensalem shall sit at his feet while all other kings keep their distance. The narrator calls these claims "Jewish dreams".³¹³ They are not heresies to be opposed or subversive alternative accounts of history; they are merely the fantasies of a religious sect. The narrator says that setting aside these dreams, Joabin is "a wise man, and learned, and of great policy and excellently seen in the laws and customs of that nation."³¹⁴ Politics is clearly separated from religion in terms of wisdom. If a man can be foolish in religion, but wise in politics, then the two cannot be inextricably related. This description also highlights the problem of religion: that no amount of political learning can overcome ingrained religious beliefs. Political wisdom does not necessarily produce religious wisdom, because politics must be grounded in reason and religion must be grounded in faith. Rather than seek to eradicate or overcome problematic

³¹¹ NA, p. 65. In Footnote 200, Weinberger lists several Bible verses that allegedly refer to Nachoran. They in fact refer to Abraham's brother Nahor. I do not have any explanation for this discrepancy on Weinberger's part.

³¹² NA, p. 65

³¹³ NA, p. 65

³¹⁴ NA, p. 65. Weinberger interprets "great policy" to mean political wisdom (Footnote 203). While that interpretation could certainly be valid, I believe being a man of great policy could also mean that Joabin is a man of significant political power. Weinberger also interprets "seen" to mean well-versed. If we regard Joabin as a man of political power, however, then his influence could be "seen" in the laws and customs.

religious beliefs from a hostile position, political philosophers must seek to work within the confines of religion and change the people's beliefs gradually.

The narrator claims "if there be a mirror in the world worthy to hold men's eyes, it is that country."³¹⁵ Weinberger cites mirror as meaning "model of excellence".³¹⁶ While this is one possible definition of "mirror", I think the possibility must be considered that Bacon is referring to the more popular understanding of a mirror as that which reflects an image of reality. The reflection can either show the unvarnished truth, or a manipulated, distorted image. The construction of the mirror as well as the angle and conditions under which it is used all affect the image that is shown. If Bensalem is meant to be a mirror for mankind, could it show men different things according to what they seek? Pious Christianity, unfettered scientific experimentation, and economic prosperity co-exist peacefully in Bensalem – an occurrence which should raise doubts in the mind of a careful reader. One should also keep in mind the story of Narcissus, who became so transfixed by his reflection that he died. Is Bacon warning us that Bensalem may be an impossible, devastating dream – one that mankind will pursue unto our destruction?

MARRIAGE CUSTOMS

The narrator reinforces his admiration for the "naturalness" of the Feast of the Family, and inquires into Bensalem's laws concerning marriage and procreation. He acknowledges Bensalem's evident desire for a high birthrate, and inquires about the legality of polygamy. Joabin responds that "there is not under the heavens so chaste a nation as this of Bensalem; nor so free from all pollution or foulness. It is the virgin of the world."³¹⁷ Of course, chastity is a relative virtue; what is chaste in one culture is licentious in another. If the sexual mores of Bensalem are different from those of Europe, and

³¹⁵ NA, p. 60

³¹⁶ NA, p. 60; Footnote 170

³¹⁷ NA, p. 66

Bensalem's greater chastity results from their mores' greater affinity with man's natural impulses, then the Bensalemites possess more natural customs, but not greater virtue, than the Europeans. The question then becomes one of whether or not it is virtuous to conquer man's natural impulses in the name of religion. The phrase "virgin of the world" is also curious. Bensalem has remained untouched by the outside world, and is therefore free from the bonds of history. Like the ancient Greeks, the Bensalemites do not have to contend with history and traditions that have been corrupted by outside influences. Unlike the ancient Greeks, however, the Bensalemites remember their own history. They are not an eternally youthful people.

Joabin presents a popular saying amongst the Bensalemites as the foundation of their chastity: "That whoever is unchaste cannot reverence himself. That the reverence of a man's self is, next religion, the chiefest bridle of all vices."³¹⁸ Chastity is good because it teaches men to reverence themselves, and this reverence will help curb the impulse to vice. So is licentiousness not a vice in itself? It seems that for the Bensalemites it is only a vice in relation to its consequences. This is different from the Christian teaching, which argues that chastity is good because the body is a work of God and must be treated as a temple/borrowed property. Christian chastity holds reverence for God, not reverence for oneself, at its heart. Under Joabin's argument, adultery would be wrong because it degrades self-reverence, not because it breaks a covenant made to one's spouse before God. Bensalem seems to have taken the morality of Christianity to heart, while dispensing with the cosmological motivations behind the moral code. This way of thinking has resonated with modern audiences – even amongst secular peoples adultery is condemned because it makes determining bloodlines problematic and fornication is condemned because it can result in children raised without sufficient family support. These considerations lead one to the same moral conclusions as Christian prohibitions, but they lack the force of divine wrath.

³¹⁸ NA, p. 68

Joabin has read *Sintram* by La Motte Fouque, and he indicates that it is only one of many European books that he has read.³¹⁹ In *Sintram*, a character desired to see the Spirit of Fornication and a little foul ugly Aethiop appeared before him. Europeans seek out the ugly and sinful. Joabin says if the character had instead desired to see the Spirit of Chastity of Bensalem (not just the Spirit of Chastity) it would have appeared as a fair beautiful Cherubin. Presumably, European books would not be widely disseminated in Bensalem. Detailed knowledge of the outside world would likely inspire curiosity in the citizens; curiosity would upset the ability of the government to control travel. Joabin is trusted and privileged enough to read European books and befriend European sailors without becoming corrupted. He can possess knowledge of sexual licentiousness without seeking to introduce these mores into Bensalem's culture.

Bacon implies that classifying natural behaviors as sinful is the root of much systemic guilt and stagnation – forces counterproductive to the development of his new society. The solution is simply to adapt customs and laws to meet the natural impulses of human beings. Christianity isn't the problem; its inflexibility concerning sex is the problem. Bacon's Christianity will be a more "natural" institution. Joabin argues that brothels make marriage undesirable and ineffective in regulating sexual activity. He claims that in both Europe and Bensalem, "Marriage is ordained a remedy for unlawful concupiscence; and natural concupiscence seemeth as a spur to marriage."³²⁰ However, in Europe the ready availability of prostitutes causes men to delay or forgo marriage. His argument carries an acknowledgement that the Bensalemites do experience lust, including unlawful lust. Since marriage is an effective solution to the problems caused by lust, one can infer that the marital customs of Bensalem are different from those of Europe. If two people are allowed to marry as soon as they feel lust, and to end the marriage simply when lust has been satisfied, then lust will not be a problem. Plato offers a similar solution in

³¹⁹ NA, p. 66

³²⁰ NA, p. 66

Book V of the *Republic*. Of course, one must always consider the ironic nature of that dialogue (and particularly that section of the dialogue) in such discussions.

Joabin argues that easily available extramarital sex causes European men “to choose a libertine and impure single life rather than be yoked in marriage”, or to marry late in life for political or economic gain.³²¹ He acknowledges that European men do marry in order to secure heirs, but says that the concern for children is secondary to their desire for freedom. He posits that men who so freely spill their seed cannot greatly value children. Joabin’s contention that the presence of prostitutes degrades marriage belies his claim that Bensalemites have chaste minds. Their minds are virginal, not virtuous. If the mere presence of prostitutes is enough to compromise a whole society’s virtue, then the foundation of virtue could not have been very strong. The Bensalemites don’t engage in vice because they have never been given the opportunity.

Joabin next addresses the argument that these vices should be tolerated as a means of preventing worse sins: adultery, deflowering of virgins, unnatural lust, etc. He claims this defense is preposterous and terms it Lot’s offer, referencing *Genesis 19:1-11*.³²² In the passage, Lot offers his virginal daughters to a hoard of villagers in order to save his guests from being raped. His guests are revealed as two angels sent by God to destroy Sodom; they spare Lot and his daughters as a reward for Lot’s piety. Lot’s story provides an example of where piety and virtue may part ways. Lot was willing to sacrifice his daughters’ honor and lives in order to spare his guests. Certainly Lot is upholding the custom of protecting one’s guests, but he does not seek to prevent the rape altogether or offer himself to the mob. Substituting one sin for another does not create virtue.

It follows that substituting different forms of sexual vice will not save marriage from corruption. Human beings must either learn to control their sexual desire or marriage must be reformed to better suit natural urges. Joabin says that unlawful lust is like fire – you must quench it entirely. If you give it

³²¹ NA, p. 67

³²² NA, p. 67

any outlet, it will rage.³²³ This is an odd argument for a man who celebrates the naturalness of the Feast of the Family. In the case of marital regulation, it seems that law is more important than nature. Law must accommodate nature as much as possible, but this does not mean that law should merely reflect the natural state of things. The idea of improving upon nature is inherent in Joabin's argument.

The narrator agrees that the righteousness of Bensalem is greater than that of Europe. He strangely likens his relationship with Joabin to that of the widow of Sarepta and Elias.³²⁴ Elijah did not journey to Zarephath to remind the widow of her sins; he was there to test her faith. Elijah performed a miracle – or a feat of advanced science – in resurrecting her son. As the narrator later learns, the scientists of Salomon's House have this same power. They are seeking to uncover and recreate *all* of God's powers, including the miraculous. This story provides an example of how displays of unexplained power can persuade ordinary people that someone is doing God's work. The widow didn't fully believe Elijah until he had performed the miracle.

Joabin continues giving an account of Bensalem's laws touching marriage. They (the identity of "they" is never revealed) allow no polygamy. They have ordained that no one enter into an engagement or marriage until they have known each other a month. There is no account of how long marriages are supposed to last. In Plato's *Republic*, marriages lasted as long as was necessary to conceive a child – sometimes as little as one night.³²⁵ Joabin does not mention divorce. If divorce is a necessary legal process (it wasn't necessary in the *Republic*), then divorces may be easily attained. If two people marry without consent of their parents, then they must pay a fine out of their inheritance; the children of such marriages are not allowed to inherit above a third part of their parents' inheritance. This would not likely serve as a strong deterrent, and it is clearly aimed at the wealthiest families. Children of poor parents would probably not be concerned about their inheritance. The marriages of the children from

³²³ NA, p. 67

³²⁴ NIV, 1 Kings 17: 1-24.

³²⁵ *Republic*, 459d-460b

wealthy and prominent families must be more carefully regulated than others. All of these customs point to a belief that if marriage is redesigned to better fit human being's natural inclinations then marriages won't be betrayed or corrupted.

Joabin then mentions a European book where engaged couples are allowed to see one other naked before the marriage.³²⁶ This book could be either Plato's *Republic* or More's *Utopia*. Once again, Joabin reveals himself as well-versed in foreign literature and philosophy. He implies that this custom is known but disliked in Bensalem, but he does not specify if the Bensalemites believe that Europeans have adopted this custom or if they are aware that the custom comes from works of fiction. After all, the discussion of virtue is meant to be a comparison between European customs and Bensalemite customs, not between a Bensalemite custom and a custom (ironically) suggested by Plato and More. The narrator previously mentioned that Bensalem has great poetry, but do they understand fiction? Are Bensalemites encouraged to imagine – they are aware of foreign nations, but their perceptions could be easily controlled by the reports from Salomon's House. It seems from Joabin's argument that he believes Plato/More's recommendation is representative of European mores.

Joabin says that the Bensalemites do not like the idea of seeing one's betrothed naked because they believe it would be a scorn to refuse to marry after having such familiar knowledge of another's body. But they agree that people should not have to risk marrying someone with a hidden defect of body. Their chastity is once again shown to be different from European notions, and in this case the reader is shown that the Bensalemite customs are not above logical discrepancies. Instead of viewing one another naked, the Bensalemites allow one friend of each member of the engaged couple to view the relevant member of the couple bathing naked. There are special pools near each town for these occasions; they are known as Adam and Eve pools.³²⁷ This name not only connotes nakedness and marriage, it implies the end of innocence and knowledge of good and evil. To European minds, it should

³²⁶ NA, p. 68

³²⁷ NA, p. 68

appear strange that this custom is considered very “civil”. How is the scorn lessened if a person rejects marriage based on a second-hand account of another’s body? And what of the lust or envy that might be inspired by the friend’s viewing? Nudity is not necessarily sinful in Bensalem. That Joabin supports this custom underlines that civility is a subjective, pliable concept. The Bensalemites believe that the Adam and Eve pools are civil, therefore they are civil.

Physical appearance appears to be the most important factor in choosing a spouse, not intellectual or moral compatibility. This is compatible with the view that procreation is the primary goal of marriage. But if divorce and remarriage are commonplace, what is the system for raising children? Joabin does not address this question. Children are known to their parents in Bensalem; they are present and celebrated at the Feast of the Family. A completely communal system of parenting is not found in Bacon’s work. Plato’s portrayal of such a system in the *Republic* is often cited as evidence of that dialogue’s ironic nature. Could Bacon’s acknowledgement of the insurmountable bonds present between parent and child be an admission that all of nature cannot be conquered?

While Joabin and the narrator are talking, a person wearing a hooded cape arrives who “seem[s] to be a messenger”. The hood conceals, or at least obscures, the messenger’s identity. The messenger whispers something to Joabin, and Joabin says he has been “commanded away in haste”.³²⁸ The reader is left wondering who commanded Joabin to leave, and why he did so. The subject of sexual mores and marital customs is clearly important to the success of Bensalem. Are these things hard to know, or not fit to discuss with outsiders?

CONCLUSION

As discussed in Chapter 2, *eros* (particularly sexual desire and familial love) is the primary obstacle to the realization of Plato’s ideal city in the *Republic*. Material goods can be held communally,

³²⁸ NA. p. 69

but very few people are willing to give up their private claim to spouse and children. Ambition, envy, greed, and pride can all stem from the possession of a family, and they cannot be eradicated from society. Bacon seems to realize this. In constructing Bensalem, he allows for private family life and celebrates procreation to an astonishing degree. Yet by taking the indulgence of sexual desire to such an extreme, Bacon's argument proves just as ironic as that of Plato. The "naturalness" of the Feast of the Family is anything but natural. Bensalem's citizens focus on procreation, and its accompanying pleasures, to the exclusion of all else. Fertility is equated with virtue. It seems clear that a people consumed solely with the production of children at the expense of the state will not be capable of self-government.

The scientists of Salomon's House are largely able to live as equals and function without external government regulation. They are capable of this feat in part because of their dedication to learning. The people of Bensalem, on the other hand, do not seem to receive any sort of political or philosophical education. They are entirely at the mercy of the scientists and dependent on the government. This sort of division between an elite class of philosopher-scientists and a general public comprised of breeding automatons appears to function well in the isolated environment of Bensalem. When the island comes into contact with Europe, however, it is unlikely that the dynamic will hold. Only Salomon's House's vastly advanced technology could ensure its survival. Even then, the cost of victory would be high. One state cannot maintain exclusive possession of a technology. Once a discovery has been made, knowledge of it will spread, especially in a freely trading international environment. By attempting to preserve Bensalem in a static political state, its rulers have ensured that the people will be unprepared to confront a dynamic enemy or maintain an equal friendship with a dynamic ally. If Bacon's vision of a science that conquers nature, benefits mankind, and expands perpetually is to be a reality, then the society that houses it must be capable of making informed decisions about the best regime and the best policy.

CHAPTER 5: THE RULE OF SCIENTISTS

Salomon's House is presented as the defining feature of Bensalem's society. It does not rule officially, but it is closely tied to the governing bodies of the kingdom. Bacon, as a political thinker acutely interested in the actual task of governing, uses the *New Atlantis* to show his readers what happens when scientists effectively rule. The text seems to support Faulkner's contention that Bacon prefers the carrot to the stick.³²⁹ The sailors are presented at every turn with luxury and order, with no discernible force employed to maintain said order.³³⁰ Coercion is always necessary to manage human beings, however. One must conclude that either the threat of coercion and memory of past coercion are enough to keep the citizens of Bensalem orderly, or the scientists of Salomon's House have managed to alter human nature. The carrot is only sufficient if human beings no longer possess pride, jealousy, ruthlessness, or simple stubbornness - or if these qualities can be controlled with absolute certainty. While eliminating these parts of human nature would lead to an orderly society, it would also lead to the eradication of dynamic competition that lies at the heart of political life. A society devoid of individualism may be better than a society overrun by injustice and stifled by civil conflict, but it will also be incapable of defending itself culturally and militarily against a society guided by intelligent self-interest and civic virtue.

To understand the true governance of Bensalem, one must separate the two functions of government: setting long-term policy goals and maintaining everyday order. The long-term goals of the island must be compatible with the goals of Salomon's House. Salomon's House needs to exist within a society; scientists cannot fully devote themselves to research if they must perform all the tasks necessary for self-sufficiency. Bensalem likewise needs Salomon's House to exist in their current state of security and prosperity. The citizens and scientists must have a mutually beneficial relationship. Less clear is which part of governance actually constitutes ruling. If Salomon's House controls the

³²⁹ Faulkner, p. 88

³³⁰ Faulkner, p. 248

information flow about the workings of the outside world and determines the level and type of technology that will be available to both the government and the public, then they can be said to rule. On the other hand, some sort of separate government must supervise the everyday lives of the citizens, collecting taxes, conducting legal trials, approving public works, etc. As in most modern societies, the citizens of Bensalem likely have more contact with low-level bureaucrats than with monarchs.

White and Faulkner agree that Bensalem, though ostensibly a monarchy, seems to be operated by a highly effective, intrusive bureaucracy.³³¹ The Feast of the Family features the king's charter, but an "official of the government" actually attends the ceremony to ensure things run smoothly. Likewise, the Adam and Eve pools can be viewed as complex rituals filled with religious, moral, and philosophical meaning. Or they can be viewed as a sublime example of the grossly ineffective, bizarre regulations that can occur when bureaucracies develop policy. The sailors seem to be under constant surveillance, and those speaking to them submit to the authority of whoever is watching without question. The citizens respond en masse when the sailors and the Father of Salomon's House each arrive in Bensalem. Their movements appear orchestrated without any evidence of authority figures giving directions. The government either has some way of communicating instantly to the population or the population is conditioned to respond in set patterns to certain events. Either scenario speaks to a well-organized, efficient state.

It is unclear how much contact Salomon's House has with the state. The Father reveals that the scientists tour the various cities in the kingdom dispensing advice and technology. Yet it is logical that the scientists would want to study the functioning of government, how citizens respond to various stimuli. After all, the long-term goals of Salomon's House depend on Bensalem's stability as much as its subservience. The state must be effective at maintaining order and determining what sorts of policies best facilitate this goal is one of the purposes of political science. Bacon contributed significantly to the

³³¹ Faulkner, pp. 255-256

idea of forming a modern science of politics. The way that he weaves political and scientific discourse together in his writings indicates a belief that natural science is a natural companion of political philosophy; together these two areas of study would form political science. Political science may never penetrate the mysteries of nature as thoroughly as physical science, but it could help form the type of society most conducive to scientific research. By studying the public's reactions to natural disasters, religious revelations, and various customs, one could understand how best to manage future reactions.

To that end, Salomon's House would need a political scientist in its midst. As I previously noted, I believe that person to be Joabin, a person wise in matters of policy and learned about foreign societies. Unlike the physical scientist, the political scientist cannot live his life cloistered in high towers or underground chambers. He must live in the arena of politics, namely the marketplace. The political scientist, specifically the political philosopher, *must* break out of the cave and he *must* return. He must attempt to understand the higher things, yet turn his attention to worldly matters. He must live in society, both because that is where he will learn the things he must know and because that is the only way to put his wisdom to good use. Ancient and modern philosophy agree on this point; they differ on how the philosopher must relate to the city upon his return to the cave. Joabin is a merchant; he negotiates the commerce between the people of Bensalem and the scientists of Salomon's House. He brings the scientists knowledge about how political society functions and gives the people the benefit of his scientific guidance.

The *New Atlantis* is not, however, a perfect portrait of how political science intersects with physical science. As Weinberger notes, Bensalem little resembles the enlightened, rational, secular society envisioned by the founders of the modern scientific project.³³² The Bensalemites' emphasis on Christian piety and secrecy is at odds with the idea of a society ruled by a science based on empirical truth. If my theory is correct, if Bensalem is a dystopia, then something must be wrong with either

³³² Weinberger (1985), p. 27

Joabin's relationship to Salomon's House or with his relationship to Bensalem. To understand what this problem might be, it is first necessary to examine the goals, capability, and structure of Salomon's House. Then the flaws in the scientists' rule may become evident.

THE FATHER'S ENTRANCE

During the third week of the sailors' stay, Joabin reveals that one of the Fathers of Salomon's House will be visiting in one week. No one in the city has seen a Father of Salomon's House in twelve years.³³³ Joabin says that the Father is coming in state, but the purpose of his visit is secret. Fathers of Salomon's House can demand reception by city governors without disclosing their purpose. Again, the reader glimpses the power balance between the scientists and the state. Joabin says he will make arrangements for the narrator and the sailors of good standing to see the Father's entry. Joabin is clearly well-regarded enough by the government and Salomon's House to be included in discussions about the strangers. His friendship with the narrator is likely sanctioned by the government.

The narrator describes the Father's procession in great detail. He is a man of middle height and middle age, attractive, and has an "aspect as if he pitied men".³³⁴ It is unclear if the important part of this description is the "pity" or the "as if". The Father pities men because he is above them spiritually, intellectually, and politically. He is set off from society and does not interact with those who do not possess scientific value. He pities them, which is why he turns his scientific experiments towards alleviating their suffering. On the other hand, the Father only looks "as if" he pities men. Pity could easily mask contempt. Salomon's House's scientists are unlike modern society's stereotypes; in contemporary society, scientists are thought to rarely care about appearance and finery, yet the Father comes to visit in state. The members of Salomon's House understand that the appearance of royalty is a powerful tool.

³³³ NA, p. 69

³³⁴ NA, p. 69

The Father is attended by symbols of purity (white clothing) and religion (bishop's staff and archbishop's cross). The form of Bensalem's Christianity has not deviated in obvious ways from the Catholic Church. The same offices and hierarchies remain, yet Bensalem's religious authorities are all subordinate to the Father of Salomon's House. The forms remain, but there is no sense that the Church is the seat of authority in matters religious. After all scientists, not priests, certify miracles.

The narrator notes that no horsemen accompany the Father, seemingly "to avoid the tumult and trouble."³³⁵ This is a thin explanation of a curious detail. Additional horsemen seem unlikely to cause a disturbance in a parade as orderly as this one. Perhaps no one should be seen at equal height with the Father. Behind the chariot follow all the officers and principals of the Companies of the City, which Weinberger identifies as trade guilds.³³⁶ Commerce is celebrated along with religion. Salomon's House incorporates both religion and trade into its scientific endeavors. It discovers the truth about nature and transforms this knowledge into useful technologies. It is curious that trade guilds are so prevalent in Bensalem. Trade guilds can serve as organizations where fellow tradesmen meet to discuss new techniques and share knowledge. But they can also function as places to organize complaints against the government and establish common pricing and standards. In a perfectly functioning economy, one imagines that trade guilds would not be necessary. Their presence is an acknowledgment that injustice, or at least the possibility of injustice, is present in Bensalem's economy.

The Father sits alone in the chariot on cushions of blue plush. Under his feet are silk carpets of various colors, similar to Persian rugs but finer. The Father, who is responsible for ruthlessly tormenting Nature until she reveals her secrets, is presented to the public as a coddled aristocrat swaddled in luxury. The mind of the scientist, which must be clear, sharp, possibly even ascetic, is disguised completely. The true nature of the scientist is not for public consumption; he must be obscured by the trappings of luxury.

³³⁵ NA, p. 70

³³⁶ NA, p. 70; Footnote 234

The Father holds up a bare hand, “as if he was blessing the people, but in silence.”³³⁷ The narrator comments that the street was wonderfully well-kept. As the Father blesses them, the people stand organized similarly to an army in battle-array. A person appeared in every window “as if they had been placed”.³³⁸ It seems that the organized crowd is very passive and perhaps carrying out instructions about how to behave. Why would the government arrange the people if the show is for the people’s benefit? Is the whole thing rather a show for the sailors? If Joabin is to be believed, Bensalemites regard Europeans as decadent and uncivilized – easily awed by displays of wealth. If the parade is genuinely a celebration for the people of Bensalem, they would seem to be incapable of spontaneity; their celebrations are carefully orchestrated and their society tightly controlled.

Though White argues that the citizens of Bensalem demonstrate extreme civility, I believe this scene is the clearest indication that something is amiss in Bensalem.³³⁹ The people are well-fed, but are they happy? Of course, happiness for most people could very well be physical comfort and relaxed sexual mores. The people of Bensalem are surrounded by luxury and encouraged to procreate prolifically. The philosophers and scientists are removed from the society for service in government or Salomon’s House; they partake in higher activities to the exclusion of participating in the larger society. Weinberger maintains that Bacon is well aware of the fallacy that overcoming need will eliminate injustice. Human life is erotic, with regard both to sexual desire and the longing for the rare, the beautiful, and the great.³⁴⁰ The two aspects of *eros* create the limitations of science, but very few will understand why it cannot be overcome. As Weinberger eloquently argues, “Bacon knows that any attempt to overcome bodily need, either by excessive attention to it or excessive abstraction from it, is just a sophistical imitation of a god who does not understand need.”³⁴¹ The *New Atlantis* is an

³³⁷ NA, p. 70

³³⁸ NA, p. 70

³³⁹ White, p. 146

³⁴⁰ Weinberger (1989), p. xxxi

³⁴¹ Weinberger (1985), p. 70

elementary form of science fiction. Science fiction literature recognizes the essential character of technology: it is completely ingrained in the modern mind and carries the potential to blind us to our own humanity. Bacon's tale shows what unregulated science can accomplish, and it also hints at what is lost in such a world.

The Father's religious authority is confirmed by his ability to bless people.³⁴² The conflation of religious authority and scientific prowess is a bold move on Bacon's part, and raises the question of why Bensalem's scientists need Christianity.³⁴³ Salomon's House was well-established before the conversion of Bensalem to Christianity. Political, religious, philosophical, and scientific authorities are all necessary elements of a well-founded society. Bacon presents all of these different types of power in one man, yet that man is not obviously a tyrant. Either the tyranny of Salomon's House is subtle, or something about Bacon's project will allow scientific progress to coexist with philosophical wisdom. Perhaps the Father of Salomon's House is akin to Plato's philosopher king - such a person can come to power only if another such person already holds power.³⁴⁴ Or perhaps the Father is a figurehead. The appearance of the Father is equally important to the narrator as his wisdom. The luxury of Bensalem is coveted as much as its peacefulness; its justness is never even considered.

When the sailors enter the room they bow low and kiss the hem of the Father's tippet as they were taught.³⁴⁵ Europeans are comfortable with protocol and etiquette when meeting highly ranked people. The appearance of power is extremely important in the sailors' minds. The Father holds his hand out to them in a posture of blessing. Once again, it is unclear whether he is actually blessing them, but he seems to possess religious authority. It is interesting that the sailors never question the Father's ability to give blessings. The Father is never explicitly identified as a priest, like the Governor of the Strangers' House. Yet the sailors accept his blessings without comment.

³⁴² NA, p. 70

³⁴³ Weinberger (1989), p. xix

³⁴⁴ *Republic*, 540d-541b

³⁴⁵ NA, p. 71

After kissing the tippet, all the sailors except the narrator leave the room. The Father also dismisses the pages, leaving him completely alone with the narrator. The narrator is invited to sit down next to him and the Father speaks to the narrator in Spanish.³⁴⁶ This abrupt change from extreme formality to informality is telling. The narrator doesn't kneel before the Father, he sits beside him. They are equals conversing in a private setting. The pretense of state is dropped. Even the use of Spanish instead of Latin calls attention to the Father's intimate manner.

SPEECH OF THE FATHER OF SALOMON'S HOUSE

The Father begins by asking God to bless "my son", indicating the narrator.³⁴⁷ Then the Father says he will give the narrator, "the greatest jewel I have... a relation of the true state of Salomon's House."³⁴⁸ Knowledge is far more valuable than material goods because knowledge creates the means for acquiring material wealth, both in terms of power and technology. The wording of this statement implies that this knowledge is secret, not only from Europeans but also from Bensalemites. If the narrator is to receive a true relation, how many others only receive false relations?

The account of the true state of Salomon's House consists of four parts: (1) the end of the foundation, (2) the preparations and instruments used for their works, (3) the various employments and functions of the fellows of Salomon's House, and (4) the ordinances and rites observed therein. Salomon's House established a goal, then obtained the means of carrying out its experiments, then divided the labor amongst the fellows, then developed its own sacred customs. The fellows are not perfectly equal; at the very least they are divided between fellows and Fathers. Customs are meant to keep knowledge intact between generations and to keep order through hierarchy. Salomon's House is

³⁴⁶ NA, p. 71

³⁴⁷ NA, p. 71

³⁴⁸ NA, p. 71

not a collective of philosophers. The scientists are presumably better able to govern themselves than the average group of human beings, but they are not completely capable of living without regulation.

PART ONE: PURPOSE

The Father states: “The End of our Foundation is the knowledge of Causes, and secret motions of things; and the enlarging of the bounds of Human Empire, to the effecting of all things possible.”³⁴⁹ In the text, this sentence is set apart; it forms a separate paragraph. The purpose of Salomon’s House is not to glorify God, as reported by the Governor. God created Nature, but Salomon’s House is attempting to discover the laws of Nature and how they can be manipulated. They aspire to equal God’s power. It is important to note that the express purpose of Salomon’s House is to affect the world; it includes practical application as well as theoretical knowledge. White argues that Bacon agrees with Plato that the highest life is the life of contemplation, because it is the most pleasurable. White maintains, however that contemplation means something different to Bacon than to Plato. For Plato, the pleasure of contemplation is based in wonder at the universe while Bacon’s pleasure more closely resembles that of the conqueror.³⁵⁰ White’s argument has merit, but he fails to pinpoint the precise difference between the two thinkers – Plato expresses wonder at an incomprehensible whole while Bacon rejects the idea of incomprehensibility altogether.

It is also worth noting that the knowledge of Causes is set out as a primary goal of Salomon’s House. Theoretically, knowing the causes of human behavior could allow one to accurately predict the consequences of events in society.³⁵¹ White maintains that Hobbes’ later attempt to formulate a

³⁴⁹ NA, p. 71

³⁵⁰ White, p. 219

³⁵¹ Of course, it must be noted that human beings are often (and predictably) irrational. The failure to understand this distinction is a major problem with modern political science. Political science’s inability or refusal to acknowledge the irrational component of human life is often attributed to its aspiration towards natural science, and is one of the issues that must particularly be addressed when studying Bacon and Hobbes.

science of politics would have been seen as premature by Bacon.³⁵² I maintain that his argument underestimates Bacon's Platonism. Bacon, though he thought the universe could be known, understood how far science needed to progress before it was understood. Bacon identifies human beings' propensity to act on incomplete information, leaping to unsubstantiated generalities, as the greatest danger stemming from modern science.³⁵³ Scientists are particularly susceptible to this danger, as they believe they operate in the realm of fact. Attempting to scientifically engineer political society with imperfect knowledge is much more dangerous than acknowledging the unknown and irrational elements of human nature. Bacon knew this; Salomon's House is his portrait of a possible outcome.

It is also important to note that the Father speaks of enlarging the bounds of *human* empire to the effecting of all things possible. The possibilities open to human beings through natural science are theoretically infinite. His declaration also carries a bit of a warning, however. One cannot seek to expand human capabilities in such a way without consequences. As Studer argues, Bacon collapses Aristotle's distinction between theoretical and practical knowledge.³⁵⁴ She further asserts that Bacon was correct to do so; it is largely inconceivable that human beings will refrain from acting on the knowledge uncovered by scientific inquiry. Once something can be built, it *will eventually be built*. Bacon could not know where modern technology might lead, but he did suspect that the experience of being human would be fundamentally changed in the modern world. Once technology advances, it takes on a life of its own. One cannot "un-invent" things, even dangerous things. The Father has too much assurance in his ability to control science. Or perhaps his absolute political control makes science less dangerous?

³⁵² White, p. 255

³⁵³ *NO*, p. 36

³⁵⁴ Studer (1998), pp. 231-232

Science in a republic is a very different creature than science in a monarchy.³⁵⁵ Capitalism likewise drastically changes the way technology will be used. A free economy means that technology will have commercial value and that the development of new technologies will be at least partially driven by economic considerations. Science that is not subject to economic forces will be at the mercy of government regulation and interest. The public (the scientifically unsophisticated public) will elect government officials who will have a hand in guiding the development of non-commercial technologies, which will be constantly monitored for military application. Military and profit are the twin masters of technological innovation in the modern world. Science for its own sake is as little valued as philosophy for its own sake (i.e. only valued by its practitioners). Scientists will have to make themselves useful to survive, even more so than philosophers. Philosophers do not need generous financial support; philosophy can be conducted in the privacy of one's home, or even one's mind. Scientists, on the other hand, need equipment, and that equipment requires funding. The chances of science with no practical application thriving in such an environment are very slim.

PART TWO: PREPARATIONS AND INSTRUMENTS

The Father next describes all of the capabilities of Salomon's House.³⁵⁶ He begins by listing the ways the scientists have obtained power over land. Salomon's House has deep caves of various lengths, some of them manmade. Some of them are up to three miles deep, made possible by the technique of digging under mountains. The depth of a cave is determined by how far under the surface it is, not how far under sea level. The caves are used for coagulations, indurations (hardenings), refrigeration, and conservation of bodies. The human body is used as a tool of science. The caves are also used for the imitation of natural mines and the producing of new artificial metals. The production of metals requires great skill and also hints at alchemy. Bacon was extremely interested in alchemy, and the ability to turn

³⁵⁵ The differences are even more pronounced in a democracy.

³⁵⁶ NA, pp. 71-80

iron to gold would be invaluable in any society.³⁵⁷ Ascertaining the possibility of alchemy would have certainly been one of Salomon's House's top priorities.

The caves are also used for the curing of some diseases and for prolongation of life in some hermits that choose to live there. The hermits are well provided for and live very long lives. The Father says they learn very many things by the lives of the hermits. He does not specify if they learn many things from the hermits because the hermits are wise ascetics or because they are experimenting on the hermits. It seems likely that these hermits would be former fellows of Salomon's House; after all, strangers would not likely be allowed to see the unvarnished truth of the institution.

Salomon's House also has high towers, the highest being half a mile, but combined with the hill possessed of a height of three miles. Nature and technology work together to stretch the boundaries of what is possible. Salomon's House evidently cannot build a tower higher than the highest mountain; but the advantage of the mountain is also improved by the construction of the tower. The towers form the Upper Region. The air between the Upper and Lower regions is the Middle Region. The towers are used for insolation (exposure to the sun), refrigeration, conservation, astronomy, and meteorology. Hermits live in the towers and observe the things that the scientists tell them to observe. The high and low places share many functions. It is curious that the Father doesn't say that they learn from the hermits in the towers. Only those that descend into the earth become wise. Perhaps this distinction alludes to the difference between the philosopher in the Allegory of the Cave and Aristophanes' characterization of Socrates in *The Clouds*? These two portraits of philosophy offer a distinction between political philosophers and natural philosophers. After all Bacon, who harbored scientific aspirations, recognized the primacy of political wisdom in society.

Salomon's House is acutely concerned with manipulating water, both the water that surrounds the island and the water ingested by the public. They have outposts on rocks in the sea and along the

³⁵⁷ Rossi, p. 23. It is unclear if Bacon ever truly abandoned the hope that alchemy is possible. It is certain that he believed science could eventually extend human life to the point that it would resemble immortality.

shore, meaning that they could surely see the sailors coming before anyone else. The Father's revelation that the scientists can manipulate the currents of the sea and the wind ensures that they almost certainly brought the sailors to Bensalem. The scientists have also developed artificial wells and fountains made in imitation of natural ones. It is strange that the scientists would need to imitate the natural in this area. These wells contain many minerals: sulphate, sulphur, steel, brass, lead, saltpeter. Steel and brass aren't natural metals, meaning that the scientists can definitely make these metals. The production of steel requires foundries; steel would never be found in a natural well. Also, steel and brass surely don't contribute to the health of those who drink them. It seems likely that Salomon's House would be capable of tainting or enhancing Bensalem's water supply without anyone noticing.

The Father next moves to discussing Salomon's House's power over the various aspects of life, human, animal, and plant. One mineral they mix with their water is called the Water of Paradise, which is "very sovereign" for health and prolongation of life. If Salomon's House is capable of prolonging human life by simply mixing an elixir, then one must ask again why procreation is so highly valued in Bensalem. Surely the beneficiaries of Salomon's House's technologies would not have a population decline. Also, at what point did the scientists develop this capability? Could Solamona still be alive? Are the scientists literally immortal, not just immortal through their discoveries?

Salomon's House's imitation of God is most evident in their control over weather. It has houses where they can imitate all manner of weather: snow, hail, rain, thunder, lightning, and rains of frogs, flies, and others. The raining of frogs and flies recalls the *Old Testament* plagues of Egypt. The Egyptians were plagued because their king failed to listen to God's messenger, Moses. The plagues were sent as a sign of God's wrath. Salomon's House can mimic the physical manifestations of God's wrath, which formed one of the primary motivations for piety amongst the Hebrews. The *Old Testament* God is a wrathful, jealous god. The people were in awe of His power, not his benevolence. Love becomes the defining characteristic of God in the *New Testament* – grace is the ultimate manifestation of God's love.

The scientists of Salomon's House may never need God's grace, however; if they can become immortal on earth, then they need not worry about heaven or hell. And if they can produce miracles, they are as powerful on earth as God.

The scientists have Chambers of Health, where they change the air to prolong health and cure disease. They also have various baths to ensure that the human body remains strong, recalling the Fountain of Youth.³⁵⁸ The prolongation of life is clearly one of the central goals of Salomon's House, placing them in opposition to the tenets of European Christianity.³⁵⁹ Christianity promises an eternal *afterlife*, in exchange for piety and faith during one's temporal life. Salomon's House would render the afterlife unnecessary. They are expanding mankind's empire over all Nature, including human nature. As Weinberger notes, if the limitations of the human body can be conquered, then the human will become the measure of Nature.³⁶⁰ The scientists don't want to just be able to alter weather or change one metal into another. They want to change the very nature of human life. Human beings are defined by our fear of death, according to Hobbes. That fear defines every aspect of political society. If human beings no longer fear death, what would be the consequences? The state must necessarily control the means for eternal life. If eternal life is possible, most people would do anything to achieve it. Chaos would reign. The state could prolong life as a reward, and deal out death as punishment.

Salomon's House has orchards and gardens, but they do not care about beauty. They care about variety. They experiment with causing things to grow out of season and to grow more quickly than normal. They also enhance all the fruits' characteristics, both to make them taste better and to give them medicinal use. Salomon's House has power over the cycles of nature, which figure prominently in pagan religions. If the harvest becomes meaningless, then many of the religious, social, and political customs of humanity will become largely symbolic. The Father says "We make them also

³⁵⁸ Myths similar to the Fountain of Youth date to as early as the writings of Herodotus.

³⁵⁹ White, p. 191

³⁶⁰ Weinberger (1989). p. viii

by art greater much than their nature.”³⁶¹ Art can improve nature – technology allows man to overcome his nature. Salomon’s House can also make plants grow without seeds and can change one plant into another. They can create life out of nothing, the ultimate challenge to God’s authority. To a modern audience the techniques of grafting and hybridization are relatively commonplace; in the Father’s description the technology resembles alchemical botany.

Salomon’s House keeps many birds and beasts in parks, where they observe their behavior. They perform experiments and dissections on these animals so that they “can take light what may be wrought upon the body of man.”³⁶² They have found ways to keep animals alive without their vital organs and resuscitate the dead. They try all poisons and medicines on the animals and perform all manner of surgeries. This passage recalls Socrates’ assertion that the most knowledgeable doctor has the potential to be the most effective poisoner, much as the most just ruler has the potential to become the cruelest tyrant.³⁶³ The end result of these experiments is that Salomon’s House can torture animals and humans endlessly – they can remove organs and perform surgeries until the point of death – and then resurrect the dead. The Father plainly states that they do these things to animals in order to gain knowledge about what can be done to the bodies of men.

Salomon’s House can also make animals larger or smaller than normal. They can make animals more fertile or barren. Again, given these capabilities, why is procreation so valued? Surely the scientists could just make the people of Bensalem extremely fertile. Perhaps they have done so – thirty children is a very large number to be borne by a single woman. Their control over procreation includes making different species breed with one another and produce fertile offspring. In this, they are more powerful than God. God made it possible for a horse and donkey to breed, but he did not make mules fertile. This could be because a mixture of species is against God’s will. If that is the case, then

³⁶¹ *NA*, p. 74

³⁶² *NA*, p. 74

³⁶³ *Republic*, 332a-336a

Salomon's House does not fear going against God's will. They are better gods than He. The scientists can also make serpents, worms, flies, and fishes out of dead material, long before Dr. Frankenstein attempted the same. They have apparently not advanced to the point of making birds or mammals in this way. There is still room for advancement in Salomon's House; modern science is never complete. The Father is also careful to say that the scientists do not perform these experiments recklessly. They know what type of animal will be produced in each instance.

Next, the Father discusses how Salomon's House has experimented with food and drink. The tone of this section emphasizes the luxuriousness of their advancements, but such manipulations can also be turned to darker purposes. Salomon's House has bakeries, kitchens, and brew-houses which produce all manner of foods and drinks. These foods are all designed to be sumptuous—their descriptions are much more flowery than those of the other inventions. Food and drink are not just for utilitarian purposes; they are things to be enjoyed. Salomon's House knows that it has to provide things that people want. What is the point of eternal life if life is not enjoyable?

After discussing what is done to bodies and the things bodies must ingest, the Father discusses the advancements made in the mechanical arts. Salomon's House has machines dedicated to producing luxury materials: papers, linen, silk, tissues, feathers, etc. They must provide all the beautiful clothes worn by the Father and government officials. The Father says that some of these inventions are brought into "vulgar use" in the kingdom, and some are reserved for the exclusive use of Salomon's House. If an invention has spread throughout the kingdom, Salomon's House keeps it only as a pattern or as an example of the original. They thus distinguish themselves from everyone else in the kingdom and set themselves apart from the general population. The scientists choose what to share with the public and with the government.

Salomon's House can also produce a great many types of heat, including heat in imitation of the sun and the stars. They experiment with changing the intensity of these heats to different effects. The

scientists can mimic the creation of the earth itself. They not only bring forth animal life, they create heat. It is worth noting that the sun is identified as a source of heat, not a source of light. Light is knowledge, always. Heat is also produced by animals' bodies, by the decay of plants, and by motion of inanimate objects. This analysis of the different sources of heat is reminiscent of Plato's search for the Forms, i.e. to find an understanding of heat itself.³⁶⁴ Salomon's House seems to function in a similar manner. They categorize types of heat and try to imitate them all and learn if there is any difference in their effects.

Salomon's House also proves to be very effective at deceiving human senses. The Father next describes the curiously named "perspective-houses". There, the scientists make demonstrations of all lights and colors. They can manipulate the colors of things and separate them individually. They can also project light very far. They can produce illusions that look real. They can produce light from previously unknown bodies. They can magnify objects and have powerful telescopes, microscopes, and mirrors. This discussion of light should not be interpreted as merely the power to deceive people's sight, although it is also that. This is surely evidence that Salomon's House produced the miracle that brought Christianity to Bensalem, and once again raises the question of why they would do so.

Light as a metaphor for knowledge is one of Bacon's most consistent rhetorical tools. The scientists have the power to manipulate knowledge and people's perception of the world. Not only through physical illusions, but also through rhetorical skill. As previously discussed, Bacon's essay "Of Truth" asserts that political life is best viewed in candlelight, rather than the harsh light of naked truth.³⁶⁵ Science is capable of revealing truth, but rhetoric is needed to make both science and truth palatable to the public. In fact, Wallace argues that this rhetoric is the only acceptable place for imagination in modern science.³⁶⁶ The purpose of Salomon's House must be kept secret, and presented

³⁶⁴ *Republic*, 595b-603b

³⁶⁵ *Essays*, "Of Truth", p. 61

³⁶⁶ Wallace, p. 163

as an effort to increase the glory of God. Just as Salomon's House is capable of manipulating the perspective of their audience, Bacon can manipulate the perspective of his readers.

The Father also mentions that Salomon's House has many precious stones and metals. It is interesting that this reference to beauty and wealth is placed after the discussion of the manipulation of knowledge and perception. The wealth of Bensalem has consistently occupied the sailors' attention. Wealth is as important a product of science as truth.

The Father concludes his account of the capabilities of Salomon's House with a discussion of weapons. The scientists have engine-houses for engines and instruments of motion. Muskets are specifically mentioned, noting that Salomon's House produces engines much faster than these. They are able to make these engines very easily. The scientists can make weapons stronger and more violent than the European weapons. Here the Father specifically addresses the narrator. It is one of the few occasions that he identifies the narrator as a European. The Father says his weapons are "stronger and more violent than yours are."³⁶⁷ In other places, he uses the phrase "stronger than those in use"; the talk of weapons is meant to convey a clear message. Salomon's House is a stronger military force than Europe, and will not tolerate European aggression. Salomon's House makes new compositions of gunpowder and fires that will burn in water and are unquenchable. Their weapons are uniquely suited for maritime invasions. They have also had some success with flying and with building submarines. They have equipment that allows individuals to swim long distances. Again, Salomon's House is eminently capable of waging naval warfare; combined with their ability to survive for a long time on little food, they are an ideal raiding force. Even more so than the ancient Athenians.

One of the most surprising claims of the Father is that Salomon's House has developed robots capable of imitating men and all manner of creatures.³⁶⁸ One must wonder about the strangely sated behavior of the people of Bensalem. The Father follows this claim with a curiously ambiguous sentence.

³⁶⁷ NA, p. 79

³⁶⁸ NA, p. 80

He says “We have also a great number of other various motions, strange for equality, fineness, and subtlety.”³⁶⁹ Weinberger doesn’t offer any explanation of this sentence. It is noticeable by its lack of specificity in a section of text that excels at descriptive detail. If one investigates the Oxford English Dictionary, a possible definition equates “motions” with “puppets”. The scientists are capable of imitating human beings in several forms.

Like any devotees of truth, Salomon’s House has a house devoted to mathematics. It is separate from the houses dedicated to producing tangible results. Math is an abstract, pure truth, yet the house of mathematics is included in the section discussing deception of the senses. The Father says that Salomon’s House has separate houses dedicated to deceits of the senses, but his earlier descriptions make clear that every house dedicated to experimenting with the senses can produce illusions. He further claims that in these latter houses the scientists have many things that would seem to deceive the senses if they were put into the larger world (would appear to be magic rather than science). But these houses are specifically dedicated to disguising things. The Father claims that, “We do hate all impostures and lies: insomuch as we have severely forbidden it to all our fellows, under pain of ignominy and fines, that they do not show any natural work or thing, adorned or swelling; but only pure as it is, and without all affectation of strangeness.”³⁷⁰ This passage emphasizes the fact that science and politics must be separate on some level. The scientists are forbidden to deceive one another, yet regularly deceive outsiders. Scientific advancement, unlike political advancement, is reliant on unvarnished truth. Scientists must be able to replicate experiments in order to build on them. The scientists of Salomon’s House must embrace the noble lie, but they must absolutely guard against the lie in their own hearts.³⁷¹

³⁶⁹ NA, p. 80

³⁷⁰ NA, p. 80

³⁷¹ Republic, 377e-417b

PART THREE: FUNCTIONS OF THE FELLOWS

The Father describes the various functions of the fellows of Salomon's House, but it is difficult to accurately count the number of fellows. For example, it is unclear if the Depredators and Mystery-Men are members of the Merchants of Light, or if they are separate groups within Salomon's House.³⁷² For the purposes of organization, I will consider them separate from the Merchants of Light. The Merchants of Light are the collectors of foreign knowledge. Twelve fellows sail into foreign countries under false names. They bring back the books and abstracts and patterns of experiments taking place all over the world. They are called the Merchants of Light because they collect knowledge, but it is unclear what they give in return. The title merchant indicates that a transaction occurs between two parties for their mutual benefit. Perhaps the narrator's revelation of Bensalem's existence will initiate Bensalem's repayment for the knowledge they have collected.

The Depredators consist of three fellows who "collect the experiments which are in all books".³⁷³ Their function is described similarly to that of the Merchants of Light, but their name indicates that they take things by force or deception. Perhaps the difference in tactics necessitates their differentiation from the Merchants of Light. Books would seem to be the most accessible sources of information, as they can usually be bought freely. Perhaps the Depredators focus on subversive or banned books? During Bacon's time, many books were considered dangerous by religious and political authorities. Perhaps these books are not easily procured by the Merchants of Light.

The Mystery-men are three fellows who collect "the experiments of all mechanical arts; and also of liberal sciences; and also of practices that are not brought into arts."³⁷⁴ The distinction between art and science is very interesting. Weinberger interprets Bacon's use of liberal sciences to mean liberal

³⁷² NA, p. 81

³⁷³ NA, p. 81

³⁷⁴ NA, p. 81

arts, but a different explanation may be possible.³⁷⁵ A science is different from an art – in ancient thought as well as modern. In classical thought, *episteme* (science) aims at pure truth, while *techne* (art) focuses on practical matters. A liberal science would be very different from a liberal art. In Bacon’s mind science may be conducted for the sake of art, making the practical application of knowledge as important as the knowledge itself. The name Mystery-men is also strange. Weinberger interprets the phrase “practices that are not brought into arts” to mean “unsystematic practices”.³⁷⁶ However, the phrase could refer to practices that do not have any foreseeable practical application – in other words, theoretical science or pure philosophy. The scientists at Salomon’s House, with their advanced techniques and unlimited funding may be able to create an art out of these art-less practices. Or, this could be an indication that Bacon’s dedication to practical application is not as absolute as it first appears.

The Pioneers/Miners consist of three fellows who try new experiments as they see fit. They presumably build on the work of the Merchants, Depredators, and Mystery-Men, but seem to have autonomy in their choices. Next, the three Compilers organize the works of the others into titles and tables. This allows the fellows to reach conclusions and make connections between experiments.

The three Dowry-men/Benefactors examine the experiments of their fellows to see what technologies can be drawn out of them. They also examine the experiments to see if they have yielded useful information about the theoretical nature of causes, laws of physics, or nature of bodies. They are dedicated to finding what is useful in experiments. This seems to be the most important function of the fellows. The name of this group is also strange. Benefactor is a reasonable title; presumably Salomon’s House sees itself as the benefactor of Bensalem and eventually the world. Dowry-men is less clear. Perhaps the fellows believe that the technological benefits of their experiments will provide an incentive

³⁷⁵ NA, p. 81; Footnote 331

³⁷⁶ NA, p. 81; Footnote 332

for the outside world to accept their guidance. Technology is not just a gift from Salomon's House to the world; it is also payment for Salomon's House's autonomy.

All of the fellows meet regularly to discuss the experiments of the preceding groups. Then three fellows called the Lamps direct new experiments "of a higher light more penetrating into nature."³⁷⁷ Next, the three Inoculators execute the experiments directed by the Lamps. Weinberger notes that "inoculator" is a man who buds trees, he is one who makes a thing sick in order to protect it from greater disease.³⁷⁸ They do something that seems harmful, but is actually essential to the survival of the organism. They torture Nature in order to improve the lot of man. The three Interpreters of Nature raise the discoveries made during experiments into greater observations, axioms, and aphorisms. These are the closest approximation of philosophy in Salomon's House.

Salomon's House has twenty-seven fellows who perform nine functions along with numerous novices and apprentices meant to eventually take the place of the fellows. They also have a great number of servants and attendants (both men and women). The Father never mentions the Fathers of Salomon's House as a group, yet he is called one of the Fathers, not the only Father. Are all the fellows called Father by the public? If so, then one can assume that all the fellows are considered to be priests as well as scientists. All of the fellows are involved in decisions about which experiments and inventions should be revealed to the state and to the public. They all take an oath of secrecy about the ones they "think fit to keep secret."³⁷⁹ Some they trust with the state but not the public; presumably the state is somewhat trusted to respect Salomon's House's judgments concerning technological dispersal. Likewise, the scientists must be trusted to keep their oaths of secrecy; they are persuadable. Truth is not an unmitigated good and technology cannot be allowed to proliferate without guidance. This is the

³⁷⁷ NA, p. 82

³⁷⁸ NA, p. 82; Footnote 342

³⁷⁹ NA, p. 82

essential point of Bacon's thought that is missed by modern science. Of course, the problem remains as to how technological development can be controlled once it has been set in motion.

PART FOUR: ORDINANCES AND RITES

The fourth part of the Father's speech concerns the internal ordinances and rites of Salomon's House. Salomon's House has two very long and beautiful galleries. The first contains patterns and samples of all their greatest inventions, while the second contains statues of all principal inventors (presumably inventors of the things contained in the first gallery).³⁸⁰ Recognition is important to the scientists of Salomon's House. They seek knowledge, but they also seek honor from their colleagues.

These galleries are devoted to the greatest inventions in recorded history, not just the greatest inventions of Salomon's House.³⁸¹ The scientists of Salomon's House must compete against all scientists for the honor of a place in the gallery. The Father says that Columbus, Roger Bacon/Berthold Schwarz (inventor of ordinances and gunpowder), the inventor of ships, the inventor of letters, the inventor of music, the inventor of printing, the inventor of astronomy, the inventor of works of metal, the inventor of glass, the inventor of silk, the inventor of wine, the inventor of corn and bread, the inventor of sugar are all in the gallery. This list is most impressive because the vast majority of these inventors are completely unknown to Europeans. The Father does not identify anyone besides Columbus (Weinberger identifies Bacon/Schwarz).³⁸² Since Bensalem has not been subjected to the natural disasters that have periodically erased the memories of other civilizations, their knowledge of history would be comparatively more reliable. The fact that the narrator does not know who is responsible for inventing these things that are essential to daily European life speaks to the tenuous nature of knowledge and

³⁸⁰ NA, p. 82

³⁸¹ NA, p. 82

³⁸² NA, p. 82; Footnote 344

recalls the difference in reliability between the Egyptian and Greek histories in the *Timaeus-Critias*. Even scientific greatness cannot guarantee immortality in the minds of men.

That said, pride is clearly not a foreign concept to the scientists. Their works may never be made public, but through the gallery their accomplishments are acknowledged as being equal to the greatest inventors in history. The Father reveals that not all of the statues are made out of the same material. Brass, marble, quartz, cedar, iron, silver, and gold are all used. The greatness of the invention may even be indicated by the material used in the inventor's statue. The scientists who receive statues are also given a "liberal and honorable reward."³⁸³ The Father does not specify what this award consists of. Some possibilities are money, choice of assignments, or the right to leave Bensalem as one of the Merchants of Light. The privilege of becoming a hermit scientist is also a possibility. Perhaps, as in the *Republic*, notable accomplishments are rewarded with desirable marriages.³⁸⁴ Once again, the Father does not discuss whether the scientists are permitted to marry or how their children are raised.

The Father also says that Salomon's House has "certain hymns and services, which we say daily, of laud and thanks to God for his marvelous works: and forms of prayers, imploring his aid and blessing for the illumination of our labours, and the turning of them into good and holy uses."³⁸⁵ Salomon's House certainly takes the claims and power of religion seriously. They may not be atheist, but they are certainly not pious. The evidence suggests that the scientists of Salomon's House think man can be God's equal, practically speaking. Everything God can do on earth, they can uncover and recreate. God's domain would therefore be the afterlife. If an afterlife is possible, it does not mean that human beings must suffer unnecessarily in this life. If there is no afterlife, then the task to improve human life becomes that much more urgent.

³⁸³ NA, p. 83

³⁸⁴ *Republic*, 457d-461e

³⁸⁵ NA, p. 83

The prolonging of life signifies a disbelief in the afterlife, or at least an un-Christian fear of it. Devout Christians have no reason to fear the afterlife, which is helpful when faced with rampant disease and want. They are capable of bearing the evils of this world in the knowledge that something better is coming. Of course, unnecessary suffering is evil and if science can be used to alleviate suffering then it is pious. However, once the scientists begin experimenting with eternal life on earth they begin challenging God's authority. Weinberger argues that Bacon's science intends to fulfill the most important promises of Christianity, the resurrection of the body and the salvation of the soul.³⁸⁶ The implication of their quest is that mankind is capable of saving itself and this life is preferable to the afterlife.

The Father also reveals that Salomon's House establishes circuits for visiting the principal cities of the kingdom and publishing profitable inventions of their choosing.³⁸⁷ On these visits, the Fellows also give natural/scientific explanations for diseases, plagues, swarms, scarcity, tempests, earthquakes, floods, comets, and climate. The scientists give the people information about how to remedy or prevent these things. Calamities do befall the people of Bensalem – it is not a perfect society. It seems strange that all of the disasters listed would happen on an isolated island, however. Again, the reader cannot rule out the possibility that Salomon's House causes these emergencies in order to see how people will respond. Salomon's House is presented as the savior of the people, but the people could comprise Salomon's House's greatest experiment. I do not think they would wreak havoc to keep the people weak, but I do think this is a beneficial way to test their inventions.

³⁸⁶ Weinberger (1989), p. xxix

³⁸⁷ NA, p. 83

TASK OF THE NARRATOR

Briggs argues that once the narrator comes to know the secrets of Salomon's House, the powers of science lose their mystery and "become as banal, as silent to the imagination as the dead Sphynx."³⁸⁸ This argument is incorrect on its face, but perhaps accurate upon further examination. The illumination of the full power of Salomon's House is seductive. And it is true that the Sphynx loses some power once we know how to defeat it; yet the Sphynx has exercised a pull on the Western world's collective imagination for hundreds of years. If anything, the illusion of familiarity makes such creatures more alluring. Briggs also notes that "The *New Atlantis* embodies and portrays the scientific rhetoric Bacon explains and exercises in other parts of the Works."³⁸⁹ The speech of the Father is meant to present Salomon's House's science in the best, most tempting light. It is meant as a weapon against European culture, employed by the returning European sailors.

After the speech concludes, the narrator kneels before the Father, and the Father places his right hand on the narrator's head. The Father prays, "God bless thee, my son, and God bless this relation which I have made."³⁹⁰ Once again, he assumes the aspect of a priest. The Father then gives the narrator leave to publish his relation "for the good of other nations; for we are here in God's bosom, a land unknown."³⁹¹ Bensalem suddenly wishes to be known to the outside world. It seems that Salomon's House believes that European society has progressed to the point where it can adopt the example of Salomon's House. Weinberger, Briggs and Faulkner correctly identify the obligation of universal charity as the link between Christianity and modern science. Both Christians and scientists are obligated to serve humanity. For Christians, this obligation arises from a need to cherish God's creations and mimic Christ's goodness. For scientists, the origin of charitable obligation is more obscure. Perhaps it is as simple as the compulsion to put knowledge into practice. If Bacon is correct that the distinction

³⁸⁸ Briggs, p. 174

³⁸⁹ Briggs, p. 174

³⁹⁰ NA, p. 83

³⁹¹ NA, p. 83

between theoretical and practical knowledge does not exist in the world of modern science, then scientists are obligated to discover all that they can and the rest of humanity is obligated to try to use their discoveries to improve mankind's lot. By teaching scientists that this is their obligation, Bacon also manages to place a restraint on the darker inclinations of human beings.³⁹²

As history has unfortunately shown, the impulse to universal charity occasionally has tragic consequences. When the good of humanity as a whole is ostensibly at stake, scientific rationalism and religious fervor have proven that philosophic and political wisdom remains a real, necessary thing in the world. By choosing to present his scientific society as an account of a foreign nation, Bacon obscures the truth of Bensalem's existence and paints a picture of the possibility inherent in modern science. Bensalem is foreign, yet also familiar. Its tragedy could be the tragedy of England if thinkers like Bacon do not rise to the occasion, or if the terrible potential of technology and charity cannot be controlled despite their best efforts.

The Father leaves the narrator with a gift of 2,000 ducets for the sailors, confirming the narrator's claim, "For they give great largesses where they come upon all occasions."³⁹³ This is interesting in light of the Bensalemites' disdain for tipping. Apparently, that custom only applies to regular citizens of Bensalem; the scientists don't abide by it. They are the only ones permitted to give money freely, reinforcing their separation and wealth. The scientists at Salomon's House understand an essential fact of political society: truth is powerful, but money is necessary.

CONCLUSION: ECONOMIC FREEDOM AND POLITICAL RULE

The *Critias* ends with Zeus preparing to punish Atlantis, while the *New Atlantis* ends with the Father giving the narrator permission to expose Bensalem to the outside world. Both texts end with destruction. The Father's speech concludes with an acknowledgment of the importance of gratitude,

³⁹² Briggs, p. 237

³⁹³ NA, p. 83

favors, commerce, and wealth. So long as the scientists were the only ones engaged in foreign travel and commerce, they could define the limits and values of Bensalem's society. If Europe, with its unreformed religion and varied centers of power becomes involved, the people of Bensalem will be forced to confront the contradictions of their society. The Father of Salomon's House seems to believe that Bensalem will shape Europe's future, but it seems more likely that Europe's culture will overrun the sheltered Bensalemites. Salomon's House retains the advantage of military dominance, but if their science is exposed, the nations of Europe will strive valiantly to catch up. Salomon's House will not be able to control how their technology is used.

Faulkner argues that a clear link between naval power and republicanism can be found in Bacon's work.³⁹⁴ Naval power fosters international commerce; nations can establish laws regulating trade, but the promise of wealth and exotic luxuries often outweighs the threat of reprisal. Economic liberty is tied to political and civic liberty in turn. Just as religious freedom teaches civic virtue, economic freedom gives men the means and ability to determine their own political fortunes. In Bensalem, the scientists are the only beneficiaries of Salomon's House's naval prowess, and they are also the only citizens exercising the capacity for self-government. This is not to say that the people of Bensalem would be completely unable to function in a republic. Rather, it would be impossible for any one person to effectively rule over the scientists of Salomon's House once they had experienced foreign travel.

If Bensalem as a whole is exposed to the outside world, then the government of Bensalem will necessarily become more liberal. The scientists will no longer be able to control the flow of information to the people; the people will be forced to choose policies themselves. Unfortunately, political freedom imposed in such a manner does not guarantee the people will possess virtue or even well-formed reason. By imposing their religious, economic, political, and physical rule over the people of Bensalem, Salomon's House may have effectively destroyed any chance for Bensalem to expand its influence.

³⁹⁴ Faulkner, p. 196

Bacon's tale demonstrates how carefully English scientists must foster liberty, while still seeking to persuade the public about the virtues of science. His plan only works if two conditions are met. First, science must be virtuous. Second, the people must be able to recognize virtue when they see it.

CHAPTER 6: SCIENCE, TECHNOLOGY, AND THE FOUNDING OF MODERN POLITICAL PHILOSOPHY

The origin of modern political society is intricately linked to the origin of modern political philosophy; both are linked to the emergence of modern science. To a certain extent, one can say that the early modern political thinkers used the techniques of a nascent modern science to engineer modern political society. At least, that was their intent, as scientists such as Galileo and later Newton provided a glimpse into a possible future defined by omnipotent natural science. As discussed in Chapter 3, Machiavelli redefined the relationship between political philosophy and political society, using philosophy to effect political change; Bacon built on his work by placing politics in the service of science and science in the service of humanity. This chapter focuses on Bacon's relationship to his immediate successors. Along with Machiavelli and Bacon, Hobbes is undoubtedly one of the most significant architects of modern thought. Hobbes spent several years as Bacon's secretary; his thought is clearly influenced by Bacon. I examine their philosophical relationship and how it led to the full development of modern political philosophy. Bacon and Hobbes are both avowed monarchists, and though there is reason to question Bacon's true intent on this point, he never openly wavers in his support for England's monarchy. Yet Bacon and Hobbes, two thinkers acutely concerned with the political, are founders of a movement that ended in the development of modern republicanism.

As I have shown, my larger project examines the signposts that Bacon leaves for his readers in an attempt to guide them through the potential quagmires of modern society. Weinberger eloquently argues that the *New Atlantis* "reflects on the modern project from the standpoint of the ancient utopian political philosophy."³⁹⁵ This statement implies that Bacon possessed correct knowledge of both the ancient and modern political philosophers, a state of affairs that many commenters believe results in a rejection of modernity. But Bacon did not abandon the modern project, no matter what doubts he

³⁹⁵ Weinberger (1985), p. 28

harbored. Ancient knowledge is necessary to prevent modern science from either failing or becoming tyrannical. My analysis of the *New Atlantis* indicates that Bacon likely foresaw the possibility that political liberty is related to modern science in some way. Perhaps modern science can only be fully accepted by a liberal society, or perhaps the technologies resulting from modern science make authoritarian regimes more difficult to maintain. After discussing Bacon's relationship to Hobbes, I will provide a cursory evaluation of the emergence of republican thought in England, tracing Bacon's influence as far as the thought of John Locke.

BACON AND HOBBS

As previously noted, the philosophic relationship between Bacon and Hobbes is partially informed by their personal relationship. Hobbes worked as Bacon's secretary for a time, and Bacon is said to have delighted in the young Hobbes' company.³⁹⁶ It is safe to assume that Bacon influenced the development of Hobbes' thought; the question is whether that influence means that one can take Hobbes' work as a commentary on Bacon. Certainly, there is common ground between Bacon's vision of a scientific society and Hobbes' introduction of a new political science in his *Leviathan*. Yet there seems to be disagreement between the two thinkers about the applicability of modern science to the study of man. Bacon refrains from explicitly showing how law and justice function in Bensalem. Government is obscured, functioning in the background of the text. Though he wrote the *Essays*, which take civil and moral life as their subject, Bacon never overtly attempts to apply the principles of modern natural science to a new political science. Government remains "a part of knowledge secret and retired."³⁹⁷

Hobbes' *Leviathan*, on the other hand, scientifically examines the origins of human behavior and the impetus for forming political societies. Chapter VI explicitly identifies human beings as the subject of scientific inquiry. Hobbes uses Bacon's methods to examine the most fundamental drives and

³⁹⁶ White, p. 254

³⁹⁷ AL, p. 208

desires of human beings, with the purpose of discovering what types of laws will be most effective in preserving the peace and security of political states. Both Bacon and Hobbes recognize that modern science will irreversibly change the way man exists in society; they differ, however, on how this knowledge should be applied to political philosophy. This difference is reflected in their approaches to writing about science and political philosophy.

White argues that, “Bacon would have considered Hobbes’ effort premature. Few, if any, experiments in natural science which developed between Bacon and Hobbes were of sufficient magnitude to justify, in Baconian terms, the assurance that Hobbes could arrive at the “two maxims of human nature.””³⁹⁸ White also makes clear, however, that “While Hobbes claimed to know more than Bacon believed he could know, the foundations of Hobbes’ claim are assuredly Baconian.”³⁹⁹ This argument recalls Bacon’s warnings about the dangers of “the mind’s premature and precipitate haste, and it’s leaping or flying to general statements and the principles of things.”⁴⁰⁰ Hobbes presents a scientific way to study politics before natural science has been fully developed. Perhaps the political environment of Hobbes made the assertion of political science more urgent than it had been for Bacon. During Hobbes’ life, Protestantism and the accompanying republicanism gained enough influence to present serious political challenges to the established monarchy. Hobbes’ work is dedicated to the prevention of civil war; his political science is designed to promote political stability.

It seems, however, that both Bacon and Hobbes recognize that while politics can be studied scientifically, political science will necessarily be a thing separate from natural science. Human nature and behavior is a much messier matter than the nature of chemicals or biological imperatives. Human beings must be persuaded to act. Hobbes demonstrates this knowledge through his emphasis on the power and importance of names. While the effort to affect politics necessarily requires the use of

³⁹⁸ White, p. 255. White quotes: Hobbes, Thomas (1949). *De Cive*. Sterling Power Lamprecht, (Ed.). New York, NY: Appleton-Century-Crofts. (Original work published in 1642). Epistle dedicatory, p. 5.

³⁹⁹ White, p. 255

⁴⁰⁰ *NO*, p. 52

rhetoric, Hobbes did not regard his project as un-scientific. If the public would accept his teachings on the correct order of nature and society, then his science of politics would become effectively true.

Bacon speaks of his new science “rising in a gradual and unbroken ascent to arrive at last at the most general axioms.”⁴⁰¹ If a scientist or philosopher seeks to skip ahead, if he lacks the patience to rise gradually, then his conclusions will be flawed. Bacon is clearly aware of this possibility, even amongst those most willing to accept his teachings. Likewise, Hobbes proclaims that, “The use and end of reason is not the finding of the sum and truth of one or a few consequences, remote from the first definitions and settled significations of names, to be begin at these, and proceed from one consequence to another. For there can be no certainty of the last conclusion without a certainty of all those affirmations and negations on which it was grounded and inferred.”⁴⁰² Though Hobbes consistently emphasizes the lack of certainty to be found in all knowledge, correct opinion is much more likely if the seeker follows Baconian methods of investigation. For Hobbes, the fundamental strength of modern science and philosophy will be the ability to control the naming of things. The scientist will name his discoveries, while the sovereign will provide the labels of good and bad.

Hobbes begins the *Leviathan* with a remarkably subtle redefinition of familiar terms. He begins his work with a discussion of sense perception, slowly moving through imagination, to reason, to the passions, to religion, to the laws of nature, and finally to an extended examination of commonwealths and the laws they form. Science permeates every aspect of the work, and religion is often ostensibly its subject. Political philosophy, natural philosophy, and religion are consequently understood through man’s animal nature, as are poetry, rhetoric, and politics. Imagination is removed from the realm of divine inspiration and is instead characterized as “nothing but *decaying sense*.”⁴⁰³ Imagination is not the human capacity to reach outside individual perception; it is the capacity to remember the pleasures and

⁴⁰¹ *NO*, p. 36

⁴⁰² Hobbes, p. 23

⁴⁰³ Hobbes, p. 8

pains of past sense perceptions. This assertion also effectually removes God and the infinite from Hobbes' teaching. Hobbes argues, "No man can have in his mind an image of infinite magnitude, nor conceive infinite swiftness, infinite time, or infinite force, or infinite power...for none of these things ever have, or can be, incident to sense, but are absurd speeches, taken upon credit...from deceived philosophers."⁴⁰⁴ God is a name given to that which is incomprehensible; and to the scientific mind, that which is incomprehensible is only that which has not yet been understood. It is fruitless to rely upon the incomprehensible, because no definitive conclusions can be reached about that which is outside empirical experience.

Hobbes' argument flows from Bacon's condemnation of imagination as a powerful but dangerous thing. Bacon writes, "[Imagination] being not tied to the laws of matter, may at pleasure join that which nature hath severed, and sever that which nature hath joined; and so make unlawful matches and divorces of things."⁴⁰⁵ This description indicates imagination to be a true enemy of Bacon's project. As he writes in the *Great Instauration*, "For the chain of causes cannot by any force be loosed or broken, nor can nature be commanded except by being obeyed...And all depends on keeping the eye steadily fixed upon the facts of nature and so receiving their images simply as they are. For God forbid that we should give out a dream of our own imagination for a pattern of the world."⁴⁰⁶ Bacon's project seeks true knowledge of causes; imagination's power to overcome the laws of nature makes it dangerous to philosophy and science.

Yet Bacon's method of writing requires a great deal of imagination, especially when applied to the *New Atlantis*. Bacon relies on the imaginative powers of his non-scientific audience to gain support for his project. Though he condemns imagination, it is clear that Bacon does not underestimate its power. Is imagination to be regarded as a dangerous weapon, only safely wielded by a philosopher

⁴⁰⁴ Hobbes, p. 15

⁴⁰⁵ *AL*, p. 86

⁴⁰⁶ *GI*, p. 32

immune to its charms? As science progresses, the resulting technology will also progress to levels thought impossible by previous generations. However, these modern inventions are only possible because of earlier scientists' careful, nuanced investigations into the causes of things. When Bacon's exhortation is applied to political science, his influence on Hobbes becomes clear. Appeals to the divine are as detrimental to Hobbes' political philosophy as they are to Bacon's natural science. Yet both thinkers are masterful rhetoricians, capable of shaping perceived reality through their words alone.

Modern philosophy, like all philosophy, is primarily concerned with the role and nature of reason. It is a discussion using reason to attempt a definition of reason. Socratic irony demanded that reason include an acknowledgment of the limits of reason. Hobbes, on the other hand, presents reason as the mathematics of the world. He writes, "REASON, in this sense, is nothing but *reckoning* (that is adding and subtracting) of the consequences of general names agreed upon for the *marking* and *signifying* of our thoughts."⁴⁰⁷ Hobbes stipulates, however, that the names used in reasoning do not necessarily represent true knowledge. Reason has the power to comprehend the consequences of certain interactions, but it does not have the power to give human beings absolute truth. When viewed in this light, Hobbes' definition of reason is not so far removed from that of the ancients. Hobbes presents his arguments in a scientific manner, but it does not entirely obscure his acknowledgment that reason operates primarily in the realm of opinion.

However, correct use of reason in natural science can end in the discovery of true scientific principles. Science is defined as "knowledge of consequences, and dependence of one fact upon another."⁴⁰⁸ This definition is not surprising in the context of Hobbes' argument. More surprising is the definition that occurs a few chapters later: "knowledge of the consequences of words, which is commonly called SCIENCE."⁴⁰⁹ Science is presented as the activity of mastering causes. And once the

⁴⁰⁷ Hobbes, p. 23

⁴⁰⁸ Hobbes, p. 25

⁴⁰⁹ Hobbes, p. 36

causes of things are known, a variety of effects can be either produced or avoided. Knowledge of the consequences of words, however, would seem to be a definition of rhetoric, not science. Moreover, Hobbes also argues that, “For *true* and *false* are attributes of speech, not of things...*truth* consisteth in the right ordering of names in our affirmations.”⁴¹⁰ Once again, Hobbes reveals the overtly political bent of his project. If philosophy is the activity of truth-seeking, then both philosophy and rhetoric would seem to exist in the service of science.

Yet Hobbes’ definition of science places it the realm of things political. His definitions of truth, reason, and science aim at using these ideas and activities in a practical political application. Political reality is fundamentally resistant to claims of absolute truth, and Hobbes’ discussion of science strongly indicates that science should be used in the service of politics. Again, if Hobbes can reduce political life to a few scientific principles, then the unpredictability of human action can be reduced. The problem with Hobbes’ effort stems from the unreliability of human senses; science can only go so far in describing human nature if scientists cannot be trusted to accurately perceive the world. Certain knowledge is a dangerous figment of the scientific imagination.

The application of Baconian methods to political science necessitated Hobbes’ reduction of human beings to their most fundamental needs and desires. He argues that human beings are intelligent animals striving to find pleasure and avoid pain, slaves to their desires and imbued with fear.⁴¹¹ There is no lasting happiness to be found other than the assurance that imminent death is not likely, and eternal torture after death is even less so. Hobbes writes, “The felicity of this life consisteth not in the repose of a mind satisfied. For there is no such *Finis ultimus* (utmost aim) nor *Summum Bonum* (greatest good) as is spoken of in the books of the old moral philosophers...Felicity is a continual progress of the desire, from one object or another, the attaining of the former being still but the way to

⁴¹⁰ Hobbes, p. 19

⁴¹¹ Hobbes, Ch. XIII, XIV

the latter.”⁴¹² Bacon likewise recognizes the power and importance of bodily desires and the fear of death; after all, his alleged utopia is a place free from scarcity, with highly developed medicines.⁴¹³

Bacon’s science is conducted in the service of technology. He does not propose to unlock the secrets of nature simply because of his erotic love of wisdom; he needs to know the laws of nature in order to develop tools meant to alleviate human suffering and satisfy human wants. In this sense, Bacon and Hobbes reveal a shared goal. They both intend to use modern science to improve the comfort and security of man; yet they both recognize that political philosophy is essential to shaping the type of society that will allow science to flourish.

The primary difference between the two thinkers seems to be one of urgency. Bacon prefers to “lead the dance”⁴¹⁴, giving his readers glimpses of his political teachings but never showing his complete vision of the best political regime. Hobbes on the other hand, makes political science the unconcealed topic of his project. Both thinkers argue that modern science is an essential topic for modern political philosophy; both understood that modern science would irrevocably change the way human beings live in society and that perhaps scientific principles could one day be used to better understand how effective laws can be implemented. It is true that Hobbes took this final step in a much more public fashion than Bacon, but it is equally true that Hobbes could not have done so without Bacon’s foundation. Perhaps no single person could have undertaken both projects; they are complementary rather than adversarial.

THE TURN TO PLATO

To a casual observer, Bacon and Hobbes’ insistence that philosophy and science serve a practical purpose is seemingly dismissive of contemplation, and serves to place them in fundamental opposition

⁴¹² Hobbes, p. 57

⁴¹³ *NA*, p. 43

⁴¹⁴ *Essays*, “Of Discourse”, p. 160

to the ancients. Upon closer investigation, however, both Bacon and Hobbes reveal a strong affinity with the ancients, particularly Plato. The areas in which Plato, Bacon, and Hobbes agree are not as obvious as the areas in which they disagree; but this does not mean that the agreements are unimportant. Politically, the three thinkers present very similar conclusions. Bacon and Hobbes break with both Aristotle and Machiavelli, who openly support mixed regimes. Instead, they follow Plato's argument that order and justice can best be found in a monarchy. Philosophically, the three are not so clearly aligned. One must look carefully for the signs that while Bacon and Hobbes are overtly concerned with the practical, they are careful to make room for unadulterated contemplation in their political philosophies.

Bacon intends to satisfy the physical needs of his society's subjects, but he does not view those subjects as currently (or perhaps ever) being capable of understanding or governing the science that makes prosperity possible. At the same time, an educated, capable citizenry will make science's task much simpler. Moreover, Bacon does seem to believe in the idea of a community of higher thinkers. Salomon's House is not presided over by one man; the Fathers of Salomon's House make decisions "after divers meetings and consults of [their] whole number."⁴¹⁵ These men spend their lives unraveling the secrets of nature and determining the best ways to use their discoveries in society. Theirs are not lives of pure contemplation; in fact the only contemplative deliberation mentioned takes place in the meetings discussed above. As discussed earlier, however, the scientists are similarly educated and share similar goals. They are a community of equals and govern themselves as such. The question becomes, can modern citizens be educated to the point of being capable of functional self-government in a scientific age?

As discussed previously, the Fathers of Salomon's House recall the Nocturnal Council in Plato's *Laws*, which meets daily to discuss "laws and their own city, and anything they may have learned

⁴¹⁵ NA, p. 81

elsewhere that is different and pertains to such matters.”⁴¹⁶ The Athenian Stranger specifies that these men must meet “from dawn until the sun has risen,” a particularly ambiguous statement which may be interpreted to mean that the council meets very briefly or meets constantly.⁴¹⁷ Their meetings are closed to everyone except members of the council and their protégés. During meetings, the council meets with any person who has been abroad and wishes to enter the city. The council listens to the traveler’s account of foreign laws, and judges whether anything of value is to be gained from his journeys or if the man has returned corrupted. If the man is found to be corrupt, he may live “as a private man”, but if he engages in public disruptions, he will be executed.⁴¹⁸ In this way, the Nocturnal Council exercises absolute control over what information about foreign cities enters Magnesia. Likewise, the Fathers of Salomon’s House are said to rarely come amongst the people of Bensalem.⁴¹⁹ They are also the sole arbiters of foreign knowledge, being the only citizens allowed to travel abroad.⁴²⁰ In both cases, foreign knowledge is deemed suspicious. New customs and laws, if they have virtue, must be integrated into a well-ordered city incrementally.

In the *Laws*, the Nocturnal Council is concerned with legislation and regulation, but their most urgent task is to root out impiety and prevent its spread. Those who are convicted of certain types of impiety, specifically atheism or the belief that the gods do not care about human affairs, but do so “because of a lack of intelligence, without evil anger or disposition” are placed in a prison called the Moderation Tank.⁴²¹ Prisoners in the Moderation Tank are sequestered from the general public, and may not talk to anyone except the members of the Nocturnal Council. The Nocturnal Council is charged with regulating the introduction of new ideas into the city; presumably they are capable not only of

⁴¹⁶ *Laws*, 951e-952a

⁴¹⁷ *Laws*, 951d

⁴¹⁸ *Laws*, 952b-d

⁴¹⁹ *NA*, p. 69

⁴²⁰ *NA*, p. 81. It is true that strangers are occasionally admitted to Bensalem. But as the Father of Salomon’s House makes clear in his speech, the sailors were granted access only to serve the purposes of the Fathers.

⁴²¹ *Laws*, 908d-909a

judging which things are beneficial to the city, but also of convincing others that that the health of the city must be each citizen's primary concern. Their "lack of intelligence" is a lack of understanding about the necessity of discretion.

Those who cannot persuade the Council to adopt their views and who are not willing to abide by the Council's judgments must be removed from the city. The Athenian Stranger recommends that, "When the time of their imprisonment is up, if someone among them should seem to be moderate, he is to dwell among the moderate, but if not, and he should be convicted at such a trial again, let him be punished with death."⁴²² The Nocturnal Council is not concerned with citizens' innermost beliefs; they are only concerned with outward appearances and actions. Former prisoners are free not to believe, but they must not express their beliefs publicly. The society of Magnesia is dependent on maintaining a public religion conducive to civic virtue. Beliefs that do not support this goal may not be wrong, but they are dangerous.

The Fathers of Salomon's House exert a similar level of control over the religion of Bensalem. The scientists are responsible for verifying miracles, miracles that they are admittedly capable of manufacturing, as Weinberger notes.⁴²³ Not only does Bacon place miracles under the authority of science, he also forces the reader to doubt the veracity of everything in Bensalem. If the narrator cannot trust any of his senses, how much should the reader trust his account? Rather than educating errant citizens about the necessity of moderation in public discourse, the Fathers awe their subjects with manufactured miracles. Bensalem was already a prosperous, orderly society before the introduction of Christianity, leading one to wonder exactly how Christianity improves the society. Of course, the "miraculous" history of their civilization could likewise be a product of Salomon House's almost complete control over the flow of information into and within Bensalem. For both Plato and Bacon, control of publicly expressed opinions is essential to maintaining order in the city. Individuals are free to

⁴²² *Laws*, 909a

⁴²³ Weinberger (1989), p. xvii-xviii

pursue knowledge privately and are free to believe and think as they wish, so long as they do not express dangerous ideas in a public manner, without regard for the consequences.

Just as Plato is seen to harbor great appreciation for the practical consequences of philosophy, Bacon and Hobbes subtly acknowledge philosophy's reliance on *eros*. Strauss argues that a common critical reading of Hobbes leads to the not unreasonable conclusion that, "modern science...which tried to interpret nature by renouncing all 'anthropomorphisms', all conceptions of purpose and perfection, could...contribute nothing to the understanding of things human...In the case of Hobbes, the attempt to base political philosophy on modern science led to the consequence that the fundamental difference between natural 'right' and natural appetite could not be consistently maintained."⁴²⁴ The attempt to find the most basic foundations of human behavior and society led to a dismissal of the higher aspects of man. The focus on empirical evidence caused modern man to abandon the search for virtue, focusing instead on human desire. According to Strauss, the condemnation of Hobbes is based on a flawed understanding of his teaching, an understanding that has led to a vast underestimation of Hobbes by many students of political philosophy.

Strauss declares the central attempt of his work on Hobbes will be to demonstrate that "the real basis of [Hobbes'] political philosophy is not modern science."⁴²⁵ The basis of Hobbes' political philosophy is rather the morally justified fear of violent death. Man is the only being that demonstrates such a fear when he is not in immediate mortal danger; therefore, Hobbes' political philosophy is rooted in the experience of human nature, not modern science. Strauss goes on to stipulate that, "[Hobbes] certainly knew and valued the joys of knowledge no less than any other philosopher; but these joys are for him not the justification of philosophy; he finds its justification only in benefit to man, i.e. the safeguarding of man's life and the increase of human power."⁴²⁶ In this sense, Hobbes is building on

⁴²⁴ Strauss (1952), p. ix

⁴²⁵ Strauss (1952), p. ix

⁴²⁶ Strauss (1952), p. 34

Bacon's ideas. In the *Advancement of Learning*, Bacon posits his hope that "knowledge may not be as a courtesan, for pleasure and vanity only, or as a bondwoman, to acquire and gain to her master's use, but as a spouse, for generation, fruit, and comfort."⁴²⁷ Knowledge, and the pursuit of knowledge, is characterized as pleasurable by both thinkers. However, whatever pleasure the philosopher or scientist may derive from his activities is secondary to the tangible benefits provided by the knowledge gained from philosophy and science.

The philosopher's pleasure is secondary, but it is not discounted altogether. Like Plato, Bacon and Hobbes are intensely concerned with order and necessity. For Plato, a well-ordered city was a necessary precondition for the pursuit of philosophic contemplation. The political questions must be addressed with urgency, because only after good laws have come into effect can philosophers find room to exist peacefully, albeit privately. I believe Bacon and Hobbes harbor similar aspirations. Bacon needs to shape the laws of his society so that modern science can flourish. But the goal of modern science is not *only* to increase the physical comfort of human beings and political power of states. Modern science seeks to unravel the workings of the universe, and bend the laws of nature to man's will. The technology that results from modern science's experiments justifies its continued support by society, but the technology itself is not the aim of scientists. Bacon believes that scientists value the *power* to create technological wonders much more highly than the end products themselves. The pursuit of scientific knowledge and the knowledge of their power are the sources of their pleasure.⁴²⁸ The political societies imagined by Bacon and Hobbes allow modern scientists room to pursue knowledge, while keeping the tangible benefits of their efforts firmly in the view of the state. Modern science is not sufficient, however, for maintaining this balance. Political philosophy is always and consistently necessary.

⁴²⁷ *AL*, p. 37

⁴²⁸ The question remains whether or not Plato and Socrates would agree with this argument. The answer to that question lies in how closely the pursuit of scientific knowledge mirrors the pursuit of philosophic wisdom. At the theoretical level, I believe the two are similar in their *eros* for wisdom.

THE LIBERAL AFTERMATH

Machiavelli's thought reorients the individual's relationship to the city, using political philosophy as a tool of widespread persuasion. As Mansfield argues, "In reinterpreting the popular claim to rule as the desire not to be dominated, Machiavelli prepares the way for democracy and even republicanism to become liberal."⁴²⁹ Machiavelli's works attempt to alter citizens' perception of their correct relationship to their rulers; he uses philosophical writing to accomplish political goals. Hobbes builds on Machiavelli's innovation, presenting a hardened sketch of human beings as individuals who chose to enter into society for their own benefit. Individuals depend on the city, and are obligated to follow its laws; but they are also allowed to leave the city if the city fails to uphold its obligations to the individual. The technologies touted by Bacon led to the wide dissemination of knowledge, in terms of both education and current affairs. Unlike the Fathers of Salomon's House, the scientists and rulers of Europe made no concerted (or effective) effort to confine technologies. As knowledge becomes readily available, individuals are considered responsible for their own level of understanding. While very few have the leisure and inclination to seriously pursue philosophic wisdom, many more begin to view themselves as capable of self-government. The Protestant Reformation's emphasis on individual responsibility for reading scripture taught men that they were not only able, but also obligated to understand God's word. If those men are able to interpret ecclesiastical doctrine for themselves, it follows that they would soon demand the right to interpret political laws as well.

In the decades following Bacon's life, England embraced both modern science and liberal government. It did not descend into tyranny, either political or scientific. It is fairly certain that Bacon anticipated the link between science's success and liberalism. This does not mean that he embraced republican government, however. Both he and Hobbes hoped that a liberal monarchy could be established. Instead, the rise of individualism in both religious and political thought proved too potent a

⁴²⁹ Mansfield (1996), p. xxviii

force for the monarchy; republicanism is now seen as the natural extension of liberal government.

Though the state of technology in our own times presents its own challenges, the explosion of technology during the Enlightenment unquestionably enabled English society to become more liberal, and eventually find its way to a liberal republicanism.

One of the most enduring voices of England's nascent republicanism was John Milton. Writing in the middle decades of the seventeenth-century, Milton invokes the great moral virtue of the people as a bulwark against demagoguery and anarchy (the two major concerns of anti-republican advocates). Milton places great faith in the capacity of political leaders for virtue, and the capacity of the populace to detect virtue in their leaders. Milton is an especially interesting foil for Hobbes because of his prominent position in the history of English poetry. Milton's *Paradise Lost* is rightfully considered one of the masterpieces of English literature, and is often viewed as a poetic vehicle for expressing republican sympathies too radical to be safely published in treatise form. Milton is not explicitly indebted to Bacon's vision of modern science, but he is one of the beneficiaries of the new relationship between philosophy and politics negotiated by Machiavelli and Bacon.

In *The Readie and Easie Way to Establish a Free Commonwealth*, Milton implores Parliament to support the establishment of a republican regime rather than reinstate the monarchy. Ultimately, Milton's outline of a free Commonwealth is dependent on the virtue of its leaders, a dependence that would be alarming to many pre- and post-Enlightenment thinkers. He seems to believe such a system is now possible in England, due to the democratizing and educating effects of the Protestant Reformation on religion. He writes:

The whole freedom of man consists either in spiritual or civil libertie. As for spiritual, who can be at rest...who has not libertie to serve God...by the reading of his reveal'd will and the guidance of his holy spirit? That this is best pleasing to God, and that the whole Protestant Church allows no supream judge...but the scriptures...which necessarily infers liberty of conscience... [is] obvious in all historie since the Reformation...This liberty of conscience...no government [is] more inclinable not to favor only but to protect, than a free Commonwealth.⁴³⁰

⁴³⁰ Milton, p. 439

The act of reading and interpreting Scriptures enables men to take responsibility for their moral actions. Certainly, not all Protestants seriously apply themselves to a study of the Scriptures; however, Protestantism does provide an argument for religious self-governance. Milton applies this argument about spiritual liberty to civic liberty. If ordinary men are capable of interpreting God's will, surely they are capable of choosing their political leaders.

Milton seems to believe that republicanism and Protestantism are natural allies; the development of one leads inevitably to the flourishing of the other. He maintains that spiritual liberty will lead to the development of moral virtue. This moral virtue will aid political virtue in preparing the people for civic liberty. In turn, a people that have experienced civic liberty will never stand for a religion that does not promote spiritual liberty. It seems clear that Milton believes the Protestant Reformation should be used in the service of establishing a free Commonwealth. Like Bacon, Milton seeks to co-opt religion in the service of political philosophy. Milton does not develop a comprehensive political or philosophical teaching of his own; he is best regarded as a thoughtful advocate of the liberal project. Though he maintains the persona of a devout Christian, Milton's republican fervor surpasses his religious fervor. Any reader of *Paradise Lost* will have noticed that Satan, who rebels against his monarch, gets all the best lines.

Algernon Sidney's *Discourses Concerning Government* follows in the same vein as Milton's polemical writings. With Sidney, one glimpses the zeal of a true republican revolutionary. Sidney argues adamantly for the rule of law; no man's virtue should be trusted completely, no matter how well-born or well-educated he may be. He is both more revolutionary and more cautious than Milton. He declares:

There is a vast distance between what men ought to be, and what they are. Every man ought to be just, true, and charitable; and if they were so, laws would be of no use: but it were a

madness to abolish them upon a supposition that they are so; or to leave them to a future punishment, which many do not believe, or not regard.⁴³¹

Man's inescapable imperfections make universal laws necessary. One cannot found a lasting society on hope for the rule of virtue. Sidney's argument relies heavily on the idea of political science; a scientifically verified method of governance will be much more dependable than the virtue of a few great men. He holds out no hope for a philosopher-king, preferring instead to rely on Machiavelli's portrait of a common people serving as a bulwark against tyranny in their quest to not be dominated. Sidney's argument is essential to republican ethos; however, his treatment of the divine is especially important for revolutionary thinking. Cosmic justice is not sufficient for Sidney; he wants temporal justice, as well. It is not enough that tyrants will be punished in the afterlife. Man cannot rely on God for the dispensation of justice on earth; men of virtue must act to rectify injustice whenever and wherever it emerges.

If a king has been established as the lawful head of state, but begins to act in a tyrannical manner, the people have a natural right to overthrow him and establish new laws. Sidney writes, "For every man has a right of resisting some way or other that which ought not to be done to him...I think there is none [law] that does not justify the man who kills another that offers violence to him, if it appear that the way prescribed by the law for the preservation of the innocent cannot be taken."⁴³² Because laws are formed by men, they will invariably fail to achieve their goal of maintaining justice in society. And, as the title of one of his sections makes clear, Sidney believes, "*That which is not just, is not Law; and that which is not Law, ought not be obeyed.*"⁴³³

A republican revolution does not violate the laws of the kingdom, because republicanism appeals to a higher, natural law. Bacon's quest to expand the realm of human empire carries the implication that individuals who understand the laws of nature are not bound by any other law. If an

⁴³¹ Sidney, p. 325

⁴³² Sidney, p. 339

⁴³³ Sidney, p. 380

entire people becomes Enlightened, they will be governed by no higher law than their own reason. A people that cannot govern themselves must be governed from above. They must endure patiently, hoping for justice in the afterlife. However, this argument does not apply to England. Sidney argues:

But such nations as are naturally strong, stout, and of good understanding, whose vigour remains unbroken, manners uncorrupted, reputation unblemished...do ordinarily set limits to their patience. They know how to preserve their liberty, or to vindicate the violation of it...Those who are so foolish to put them upon such courses, do to their cost find that there is a difference between lions and asses; and he is a fool who knows not that swords were given to men, that none might be slaves, but such as know not how to use them.⁴³⁴

Sidney's argument makes clear that revolution is not merely a right, it is an inevitability. No matter what arguments an absolute monarch may present, free men *will* rebel against perceived tyranny.

The development of liberal republicanism in modern political philosophy then reaches its peak with John Locke, whose writings provided the philosophical and rhetorical blueprint for modern republican government. Locke's *Two Treatises of Government* follows Hobbes in presenting an account of the state of nature wherein all men are born effectively equal, with an equal right to preserve their life, health, liberty, and possessions.⁴³⁵ Locke's natural state is a classically liberal state; preservation of individual liberty is the bedrock of all political society. Though Locke disassociates from Hobbes, his political philosophy is fully immersed in the idea of political science. He does not purport to scientifically investigate politics per se; rather, his approach to writing suggests that government can be purposefully constructed, engineered by philosophers dedicated to the modern project.

Locke's arguments about the nature of property clearly show a Baconian influence. In his *Second Treatise*, he writes:

The earth, and all that is therein, is given to men for the support and comfort of their being...yet every man has a property in his own person...The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property.⁴³⁶

⁴³⁴ Sidney, p. 343

⁴³⁵ Locke, p. 102

⁴³⁶ Locke, pp. 111-112

This passage contains Locke's essential teaching on natural right. Each individual possesses his or her body; no one person can rightfully deprive another of their body. One's body also leads to the procreation of children – private family life is thus incorporated into nature. The labor of one's body, ranging from rudimentary agriculture to mechanical art, is the property of the individual by this same natural right. The assertion that everything found on or in the earth is the proper domain of mankind is taken from Christianity. Bacon's influence is seen in the idea that one can actively assert individual right to specific parts of the earth through the development and use of technology. Bacon and Locke do not imagine a society wherein all things are held communally. All things are the potential property of enterprising individuals, not divinely ordained kings or priests. The society built on Locke's foundation would be liberal certainly; but it would also be utterly accepting of a science that sought to conquer all of Nature.

The idea that all things on earth belong to the individual who can improve upon their natural state is the liberal culmination of Bacon's expansion of the empire of mankind to the effecting of all things possible. When applied to politics, Bacon's scientific principle of relentless, bold inquiry into the laws of nature led not to scientific tyranny but to liberal natural right philosophies. Practically speaking, the technology produced by modern science spread the idea of the Enlightenment farther than would have been thought possible only a few decades earlier. The spread of knowledge combined with the idea that all men are endowed with certain rights then led to widespread support for the idea that modern republican government was not only possible, but desirable. Modern science has flourished under liberal government, as Bacon perhaps foresaw. In the modern world, technology serves to simultaneously protect and threaten individual liberty, privacy, and safety. It is left to political philosophers to ensure that technology, like all other political forces, is not left to indiscriminately conquer that which should be free.

THE ROYAL SOCIETY

In 1660, the Royal Society of London was founded by a group of the leading scientists of the day. The Royal Society exists “to recognize, promote, and support excellence in science and to encourage the development and use of science for the benefit of humanity.”⁴³⁷ Members of the society were to meet weekly in order to discuss ongoing experiments and advancements in modern science, engineering, and medicine. Eventually, they also began to acquire a library in the hopes of accumulating all scientific knowledge in one place. The influence of Bacon is clear. Farrington goes so far as to argue that Salomon’s House is the fullest expression of organized scientific research and the blueprint for the Royal Society.⁴³⁸ Unlike Salomon’s House, however, the Royal Society harbors no political aspirations. Their formation during a time of increasing liberalism seems to have secured the scientists against undue political ambition.

Their mission of advancing science for its own sake and for the benefit of humanity marks them as Bacon’s descendants, but it also confirms one of Bacon’s fears. He feared that science, philosophy, and politics would become utterly divorced when modern society most needed them to unite. The Royal Society’s path seems to have been set during the great conflict between Hobbes and Robert Boyle concerning the latter’s air-pump experiments.⁴³⁹ Hobbes questioned Boyle’s experimental method, but primarily objected to the air-pump experiment’s political implications. Boyle’s results seemed to support the arguments of the clergy; Hobbes feared any gain in clerical influence would threaten the stability of the monarch. As a philosopher, Hobbes never lost sight of the primacy of the political. He was unwilling to expand experimental science into areas that might be dangerous politically. Hobbes was excluded from the Royal Society and though Bacon continued to be regarded as a forerunner of the modern scientist, science and philosophy took separate paths. Modern political society did not follow

⁴³⁷ Retrieved from: <http://royalsociety.org/about-us/>.

⁴³⁸ Farrington, p. 17

⁴³⁹ Shapin and Schaffer provide a detailed account of the conflict between Hobbes and Boyle, including the details of Boyle’s experiments and the resulting shift in experimental method.

the course for which Bacon hoped. It may be the course required for Bacon's science, however. If the latter is true, one must ask if Bacon anticipated science in a republic, and if republics are equipped to defend against the dangers inherent in liberated technology.

CHAPTER 7: CONCLUSION: THE LIMITS OF ENLIGHTENMENT

Is Bacon an Enlightenment thinker? The answer to this question may be the key to discovering how well Bacon understood the potential dangers of his project. The Enlightenment is characterized by faith in reason, questioning of established authority, and belief in individual rights. When these elements are combined, the Enlightenment can be viewed as a movement towards the idea that all men are equals in reason and morality, and should therefore be equals in politics. Hobbes declares all men essentially equal by nature, in the sense that any man can kill any other under the right circumstances.⁴⁴⁰ His thinking seems to align with Enlightenment ideas. If all men are born with the capacity for reason, then every effort should be made to develop that reason. Likewise, if all men are born with equal moral responsibilities, then all are equally responsible for understanding moral precepts.

Weinberger argues that the modern democratic rights tradition “sprang from the Hobbesian interpretation of Machiavelli’s political science, the right that all share equally and from which all other rights derive is the right to acquire for the sake of needs...it was from the start associated with the promise that such liberated acquisition would master nature and so would facilitate...the very conditions upon which it is thought that acquisition need not be politically controversial.”⁴⁴¹ Machiavelli wrote in the midst of the Renaissance, historically and geographically. His suspicion of the Church and penchant for revolutionary thinking paved the way for his successors to question every limit traditionally imposed on the human will. Machiavelli’s teaching concerning the individual’s desire to not be dominated combined with Bacon’s insistence that natural science could solve the problems of scarcity led to a Hobbesian political science that purported to engineer a stable, prosperous society.

⁴⁴⁰ Hobbes, pp. 74-75

⁴⁴¹ Weinberger (1985), p. 331

This promise of modern science (the elimination of privation) may be the root of modern political philosophy's problems. Weinberger points to the "delusion of the productive arts that takes political controversy to be caused by scarcity rather than vice versa" as the cause of modernity's tendency towards political extremism. And both Bacon and Hobbes do indicate that the problem of scarcity must be the urgent task of modern science, political or natural. However, modern science will only be free to address these problems in a stable, tolerant political environment. Weinberger's argument continues:

For classical utopian thought, the truth about political rule is that it can never be perfectly free or just...For this reason, political life could be ordered only by the moral virtues that...could never be complete...By comparison the founders of the modern scientific project are more like dogmatic partisans – or at least more like practical founders with axes to grind – than like questioning, ironic political philosophers...Machiavelli, Bacon, and Hobbes all complained that classical utopian thought impeded the power of men to conquer nature and fortune and to discover demonstrable principles of justice.⁴⁴²

The ancients advocated using moral virtue to temper the ambitious claims of the productive arts. These moral virtues could never completely eliminate vice or injustice, because such things are inherently found in the productive arts. Those who understand how to create also understand how to destroy. As Socrates notes, the best healers are also the best poisoners. The moral virtues were meant to encourage moderation in all things as the guiding principle behind political life. Conversely, Machiavelli, Bacon and Hobbes sought to release the productive arts from the constraints of moral philosophy. They believed that if science were allowed to reach its full potential, then the resulting technology would be able to eliminate physical privation, thus allowing man the freedom to contemplate philosophical questions.

Once again, political questions must be answered by political philosophers and their answers accepted by legislators and citizens if science is going to be allowed this freedom. Bacon's project was not intended to end in scientific tyranny. The *New Atlantis* demonstrates the need for philosophers and

⁴⁴² Weinberger (1985), pp. 24-25

statesmen to guide technological development. It also shows the need for economic liberty and the accompanying maritime power. The highly controlled society of Bensalem has not produced an Enlightened citizenry. Like Bacon, both Machiavelli and Hobbes have been accused of advocating tyranny; yet they are two of the most important thinkers in the history of modern natural right theory. The political philosophers' need for philosophy is not diminished in the modern founders' plan. Bensalem is not liberal, and the science found there is tyrannical.

Weinberger identifies the treatment of origin myths as one of the key differences between ancient utopian thought and modern scientific thought. In the *Republic*, Plato famously states the necessity of controlling the types of stories told about the gods. The gods must not be seen engaging in problematic behavior, and the origins of a society must be cloaked in justice.⁴⁴³ Otherwise, virtue in the city will decay and eventually perish. The ancients consistently advocate striving to regain the glory of a better past as a means of instilling virtue. The myth of a glorious past can easily be contained in religion, and in fact Christianity lends itself to this purpose better even than the ancient religions. By constantly seeking to atone for original sin, Christians adhere to a moral code that promises restoration. Weinberger writes that "the moderns argued that if religion could be made to reflect...that all human possibilities, and especially the moral virtues, are actually comprised of the earthly passions and needy desires served by the practical arts, it would be possible to achieve perfect justice by producing a perfect economy of liberated desire and physical satisfaction."⁴⁴⁴ Bacon's science certainly does make this promise. But I suspect that the political philosophy controlling his science does not. Bacon does seek to manipulate the relationship between religion and science, they are conflated in Bensalem. However, the political government of Bensalem is never shown as perfectly just. In fact, its workings are never discussed at all.

⁴⁴³ *Republic*, 377b-383c; 414b-415c

⁴⁴⁴ Weinberger (1985), p. 26

The monarchy of Bensalem is presented as effectually subservient to Salomon's House. If Bensalem was a true utopia, privation would evaporate in the face of a well-organized market and advanced production techniques. Reason would allow human beings to co-exist peacefully in a society, and thoughtful legislation would ensure that law breaking is infrequent and swiftly punished. Citizens would be loyal to the regime not only because of custom or fear, but because reason tells them that this is the best society possible. And many who followed Bacon truly believed in the power of his science to accomplish this vision. They were simultaneously naïve in their faith in man's capacity for reason and hardened skeptics of any idea that could not be seen and tested. As Weinberger notes, they "hope for a justice so perfect that it is no longer political."⁴⁴⁵

Though he does not turn to poetic form, Hobbes' adamant dedication to producing a science of politics shows him to be surprisingly dependent on rhetoric. Hobbes translated Aristotle's *Rhetoric*, which takes a scientific approach to the analysis of rhetorical techniques and their effect on human emotions. Clearly Hobbes considered the impact that his writings would have on his readers and understood that rhetoric was an intrinsic part of not only convincing readers of the value of his teachings, but also remaining alive and free from imprisonment while he was writing.⁴⁴⁶ Hobbes subtly shifts the foundation of political philosophy. He uses the same terms that have traditionally been used in describing human nature and society, but slightly changes the way they are used in the context of his writings. Hobbes attempts to merge science and philosophy, while still acknowledging the power of irrationality in human life. By reducing human beings to their most basic points, he provides a clear way for science to investigate political life. And by ensuring that political science focuses on natural rights, Hobbes paves the way for liberal Enlightenment.

⁴⁴⁵ Weinberger (1985), p. 331

⁴⁴⁶ Clearly, he was not entirely successful on this point. Fearing for his safety, Hobbes fled England in 1640 and remained in exile for over a decade.

The confluence of liberalism, Protestantism, and technological advancement then spurred Enlightenment thought towards republicanism. Citizens of the Enlightenment period did not wish to be dominated, and were persuaded that their innate human reason was sufficient for religious and political self-rule. The recent advancements in technology made such widespread education possible for the first time. The movement towards liberal republicanism then culminated in the thought of Locke, who combined the Christian understanding of man's place as the rightful master of the earth, Bacon's call for man to expand his domain through conquering technology, and Hobbes' conception of a natural right to self-preservation into a philosophic call for republican revolution.

In the end, Bacon both is and is not an Enlightenment thinker. Though Bacon clearly believes that the future stability and happiness of political society rests with modern science, he is also keenly aware of the dangers of his own project. He tacitly embraces liberalism, while remaining suspicious of republicanism. The *New Atlantis* is not a perfect society – it is a society free from want but with an active need for safeguarding, innovation, and concealment. Bacon chooses to present Bensalem in a poetic form; there are elements of the society that are not fit to be uttered. Bacon shows the reader the truth about science through the soft reflection of society; he does not present a straightforward, harsh account of the sacrifices necessary for the alleviation of privation. Bacon's scientific endeavor is dependent on a decidedly unscientific tool, namely poetry. The rationality of modern science cannot exist without the means necessary for manipulating the irrational passions of the public. Even in Bacon's monarchy this deception was needed; how much more so in a democracy?

Poetry and philosophy have always had a complicated relationship; modern philosophy has done nothing to alleviate this tension. Plato recognized poetry's power to shape the morals of society; in both of his imagined cities, poetry's role is severely censored.⁴⁴⁷ The proper scope of poetry is to be determined by philosophers. In the end, Bacon's scientific society will only be possible through the

⁴⁴⁷ *Republic*, 376e-383d; *Laws*, 655d-661d

same means as Plato's just society: careful education and the tenacious pursuit of virtue. He identifies the man inclined towards philosophy as the greatest danger to modern science – the man inclined to philosophy but lacking the dedication to follow his method carefully. He knows that even men who set out on a philosophical course are tempted to jump to metaphysics or system construction when they discover something that does not conform to preconceived ideas. Bacon's project is dependent on a few individuals being able to resist this temptation.

Modern science, Bacon's science, is often blamed for contributing to the totalitarianism and alienation of the twentieth-century. This is as hasty as blaming Plato for his later utopian interpreters. If one does not read Plato's dialogues very closely, it is easy to miss signs of his realism. The Platonic dialogues are so complex, so subtle that one can easily be forgiven for misreading them. The damage done by such misreading is, nevertheless, real. The same inability to read the subtleties of the text has led to the version of modern science that exists today. It is a version almost completely divorced from political philosophy. Moreover, it is forced to exist in democratic societies that may be unprepared and unable to govern it safely. Modern political philosophy cannot offer easy solutions to the problems that have plagued human society from the beginning. Of course, it is probable that Bacon knew this. Political science cannot provide perfect justice. Political philosophy will always be necessary, even with a completely successful modern natural science. Strauss argues that the ancient political philosophers "demanded the strict moral-political supervision of inventions...yet they were forced to make one crucial exception. They had to admit the necessity of encouraging inventions pertaining to the art of war....in an important respect the good city has to take its bearings by the practice of bad cities."⁴⁴⁸ If amoral or immoral cities are willing to cross questionable scientific lines in the pursuit of wealth or power, the good city has no choice but to follow suit or perish.

⁴⁴⁸ Strauss (1958), pp. 298-299

Moreover, as the history of the modern world demonstrates, most technologies are initially pursued for military purposes, but eventually come to permeate every aspect of civil society.⁴⁴⁹ Modern technological marvels will not confine themselves to their designated realm. Strauss cautions that modern readers cannot look solely to ancient wisdom in this matter because “From the point of view of the classics, such use of science is excluded by the nature of science as a theoretical pursuit.”⁴⁵⁰ Of course, the ancients were possessed of technology; but they never had the capacity to explore the heavens or destroy the earth. Though technology’s ultimate aim is to increase human beings’ comfort and make life easier, it often has the opposite effect. Despite the appealing promise that modern science makes, it is ultimately no easier than ancient philosophy. Human nature evidently does not change, no matter how hard we try to change it. And as Weinberger correctly notes, “what Bacon taught following the later ancients is true in our time: the science of government will always be hard, and good government will be rare.”⁴⁵¹

If the tension between the city and man is universal and irresolvable, and philosophy proper is for the freeing of individuals, then philosophy must always be conducted privately or between individuals. Modern political philosophy is meant to solve problems in and of the city, but it must do so using wisdom that cannot be spoken publicly. Bacon understood this dynamic, couching his warning about the dangers of science in a poetic form accessible only to careful readers. Bacon, and his liberal successors, acutely understood the dangers of engaging in political life. Bacon was disgraced and imprisoned, while both Hobbes and Locke spent several years of their careers in exile from England. Affecting political policy without compromising genuine philosophical questioning requires extraordinary rhetorical skill. Bacon possessed such skill; it is now the task of his modern readers to ensure that it does not go to waste.

⁴⁴⁹ E.g. the Internet and cellular telephones both originated in military technology.

⁴⁵⁰ Strauss (1958), p. 299

⁴⁵¹ Weinberger (1985), p. 331

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