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The Nominal Essence of Motion:

John Toland's Natural Philosophy, 1696-1704

by

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Abstract

In this thesis, I explore the theological foundations of John Toland's materialism. Toland (1670-1722) is best known for *Christianity not Mystrious*, in which he claimed Christianity should conform to human reason. Much of Toland's argumentation came from John Locke's *Essay Concerning Human Understanding*. Specifically Toland used Locke's distinction between nominal and real essences, claiming that God provided knowledge of only nominal essences of the created world. These epistemological beliefs extend into Toland's philosophy of nature, which he first published in *Letters to Serena*. There he demonstrated that motion was part of matter's definition, and hence one aspect of its nominal essences. God required no more of him, because the cause of motion remained an unknowable real essence. This theological motivation for Toland's worldview place him in the company of other early modern natural philosophers; it also explains why his philosophy took the shape it did and why he read Newton's *Principia* through materialist lenses.

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Chapter One: Introduction

At the end of the 17th century, theology was the study with a firmly established, long dominant role of European civilization, a role beginning to be challenged by the early success of modern science. It appears to me that we are more likely to find the flow of influence moving from science, the rising enterprise, towards theology, the old and (as we know from hindsight) fading one.¹

Natural Philosophy studied the world — that is, nature — as created by God: it was nature studied *as creation*. Natural Philosophy was about God throughout its entire career, from its origin as a study in the mid-1200s right up to the nineteenth century when it was abandoned in favour of a new study, 'science.' In being centrally about God and God's creation, Natural Philosophy as a study of nature was quite unlike science today, even though science today is a study of nature.²

Consider the above statements by two distinguished historians of science. Both authors examined the study of nature as it existed in the late seventeenth and early eighteenth centuries, their conclusions, however, are remarkable different. The first writer was Richard S. Westfall the second was Andrew Cunningham.

Westfall was certain that the end of the seventeenth and beginning of the eighteenth century saw the emergence of modern science and the decline of the authority of theology. He never wavered from this belief. In his first book, *Science and Religion in Seventeenth Century England*, (1958) Westfall argued that by the 1700s: "The worldview of natural science had achieved

¹ Richard S. Westfall, "Newton's Theological Manuscripts" in *Contemporary Newtonian Research* ed. Zev Bechler (Dordrecht: D. Reidel Publishing Company, 1982), 140.

² Andrew Cunningham, *The Anatomical Renaissance: The Resurrection of the Anatomical Projects of the Ancients* (Aldershot: Scolar Press, 1997), 38. (Italics in original)

predominance [over religion]. Science now supplied the criteria of truth.”³ In one of his last articles, published posthumously in 2000, he repeated that statement almost verbatim.⁴ Westfall supported his interpretation by suggesting that the rational disposition of modern science, which he identified as its essential factor, replaced theology as the guiding factor in the study of nature.⁵ The Enlightenment, which in Westfall’s view introduced rational inquiry into Europe, was the vehicle that science rode to its position of dominance.⁶ As part of this interpretation, Westfall saw the rise of deism – contemporarily defined as the denial of revealed religion⁷ – particularly in the eighteenth century as the result of the application of rational science to religion.

However, did the break between theology and science occur at the time Westfall suggested, or were the late seventeenth and early eighteenth century thinkers engaged in the same intellectual activity as their predecessors? In the case of the deists, did they arrive at a rational conception of God by using Westfall’s modern science, or were they creating a rational account of nature because of their theological presuppositions?

³ Richard S. Westfall, *Science and Religion in Seventeenth-Century England* (New Haven: Yale University Press, 1958), 218.

⁴ Richard S. Westfall, “The Scientific Revolution Reasserted” in *Rethinking the Scientific Revolution* ed. Margaret J. Osler (Cambridge: Cambridge University Press, 2000), 50.

⁵ Richard S. Westfall, “Isaac Newton: Theologian” in *The Scientific Enterprise* ed. Edna Ullmann-Margalit (Dordrecht: Kluwer Academic Publishers, 1992), 237-8.

⁶ *Ibid.*

⁷ John Leland, *A View of the Principal Deistical Writers That have Appeared in England in the last and present Century*, 3 vols (1756-7; facsimile reprint, New York: Garland Publishing Company, 1978), I: ii. The definition of deism is elusive and not always consistent. Scholars this century do not always agree on the essential traits of deism. For example *The Encyclopedia of Unbelief* states: “Deism, also called the Religion of Nature, is the view that the existence of a super natural being or first cause may be demonstrated by human reason independently of any kind of supernatural revelation...” See “Deism” in *The Encyclopedia of Unbelief*, 2 vols. ed Gordon Stein (Buffalo: Prometheus Press, 1985), I: 154. Another encyclopedia of philosophy claims: “Deism in the proper sense affirms a divine creator of the world but denies revelation, holding that human reason alone is sufficient to provide us with whatever knowledge is necessary for a correct moral and religion life. ... The deist denies that God reveals to us truths that are important for us to believe but human reason cannot

Perhaps a more historically accurate classification of the early modern study of nature will provide a solution.

In contrast to Westfall's view, is that of Cunningham, who believed that science, the discipline we recognise today, was not practised in Europe until the mid-1800s. He noted that "Natural Philosophy" is the proper label for the early modern study of nature. The choice to use "natural philosophy" in place of "science" for purposes of identification is more than a linguistic consideration. It is a way of staying true to the meaning of the historical figures and not mere word replacement. Cunningham argued that "science" does not accurately describe the activity of early modern thinkers, who themselves identified their practice as natural philosophy. Cunningham cautioned that historians must take as valid the categories of the historical actors and remember the enormous influence that religion and belief in God played in all aspects of their intellectual life and studies. His guidance led to acknowledgement of the marked difference between science and natural philosophy.

The difference between Natural Philosophy and Science is that Natural Philosophy was an enterprise, which was about God; Science by contrast is an enterprise, which ... is *not* about God. ... Natural Philosophy ... had Nature as its subject matter, but not as its goal. For Nature was the book of God's works. Thus Natural Philosophy could be an exploration of God's creation and an admiration of His wisdom and foresight, or it could be an attempt to discover God's laws ... it was about God's achievements ...⁸

As natural philosophy was, at its core, a study about God, the philosophers' conception of God's power and intentions played an important role in their study of nature. Various conceptions of God led to different world systems.

discover on its own." See William L. Rowe, "Deism" in *Routledge Encyclopedia of Philosophy*, 10 vols. ed Edward Craig (London: Routledge, 1998), II: 853.

⁸ Andrew Cunningham, "Getting the Game Right: Some Plain Words on the Identity and Invention of Science" *Studies in the History and Philosophy of Science* 19 (1988): 384.

In the post-Reformation years, competing images of God led to competing schemes of natural philosophy. Again, Cunningham illustrated this point.

Hence each and every kind of Catholic, and also Lutherans, Calvinists, Latitudinarian members of the Church of England, Puritan, eirenicist Protestants, Arians, each and every sect and sub-division of Christian and even deists, would all of necessity, by the very fact of their religious commitments, have somewhat differing concepts of God, His nature and attributes, and therefore about how His nature can be seen or uncovered in the world He created. This is the basic reason why there were varieties of, and developments in, natural philosophy over the centuries: because different people brought different understandings of God to this God centred study...⁹

In Cunningham's view, influence ran from theology to the study of nature, and not the reverse, as claimed by Westfall, and it remained this way until the nineteenth century. To demonstrate how Cunningham's assertion manifested itself in the seventeenth century, we look to a select group of philosophers: René Descartes (1596-1650), Robert Boyle (1627-1691), and Isaac Newton (1642-1727).

Perhaps there is no philosopher more examined by scholars than Descartes. However, until recently, the influence that his theology had on his worldview was misunderstood. Descartes believed that God was limited by his own goodness and immutability. Following from this limitation, Descartes believed that God would never deceive him, as divine goodness would not permit it. He was then able to claim that the world operated according to universal laws, which could never be broken.¹⁰ God insured that the world would continue to run as it always had.

⁹ Andrew Cunningham, "How the *Principia* Got its Name; or, Taking Natural Philosophy Seriously" *History of Science* 29 (1991): 388-9.

¹⁰ For divergent views of Descartes' theology, see Edward B. Davis, "Creation, Contingency, and Early Modern Science: The Impact of Voluntaristic Theology on Seventeenth Century Natural Philosophy" (PhD diss, Indiana University, 1984), 67-121; Margaret J. Osler, *Divine Will and the Mechanical Philosophy: Gassendi and Descartes on Contingency and Necessity in the Created World* (Cambridge: Cambridge University Press, 1994).

Recent studies of the man once hailed as the father of modern chemistry have convincingly demonstrated that Boyle's lifelong study of nature was only one part of his investigations into God's creation. Boyle was motivated in his studies by his belief in God; it was this belief in God that supports all his scholarship. One cannot separate supposed modern aspects of his work, without destroying the unity that Boyle himself believed existed. Jan W. Wojcik has made this point explicitly in *Robert Boyle and the Limits of Reason*. She argued that Boyle's belief that God chose to limit human reason, was the foundation for all his work.¹¹ Similarly, Lawrence M. Principe suggested that Boyle's alchemical studies, long dismissed by scholars, too were supported by his belief in an artisan God.¹² Boyle believed that God could at any time act in the world. God was a powerful being who was not restricted in his actions by the regular operation of the creation in the same way that Descartes believed. It is true that God may never intervene in the natural order, but he is always able to do so.

In a manner similar to that of Boyle, Newton believed that God voluntarily upheld the regular operation of universe. There was no guarantee that God would always maintain the world in the manner in which it presently existed. Newton's voluntaristic theology was the root for all his intellectual endeavours. He believed that a philosopher could hope to achieve only a probabilistic knowledge of the world, probabilistic in the sense that at any time God could chose to abrogate the natural order, as in the case of miracles. However, God intended that a few prophets would have the ability to understand the universe with more certainty. Newton believed he was one of the elite.¹³

¹¹ Jan W. Wojcik, *Robert Boyle and the Limits of Reason*. (Cambridge: Cambridge University Press, 1997).

¹² Lawrence M. Principe, *The Aspiring Adept: Robert Boyle and his Alchemical Quest* (Princeton: Princeton University Press, 1998).

¹³ On Newton's theology and its role in his natural philosophy see Betty Jo Teeter Dobbs, *The Janus Faces of Genius: The Role of Alchemy in Newton's Thought* (Cambridge: Cambridge

In this present study, I take seriously Cunningham's thesis that in early modern Europe natural philosophy is a more accurate description of the activity of people who studied nature. To evaluate this claim, I will examine the natural philosophy of a deist, who was active in the period, which Westfall claimed saw the rise of rational science at the expense of theologically guided studies. The deist is the Irish philosopher John Toland (1670-1722). All the natural philosophers noted earlier wrote within a generation of Toland's life, and in the case of Newton was contemporary with him. As we saw, scholars have asserted that conceptions of God influenced their philosophical writings. I will examine whether this is true of Toland too. If I am successful in demonstrating an eighteenth century deist was guided in his study of nature by belief in a rational God, I will question Westfall's dating for the appearance of modern science.

In addition to the work of Cunningham, this study is shaped by scholarship of Peter Harrison who examined the strategies used by seventeenth century readers of the Bible. Reading the Bible took on new significance in the post-Reformation decades, as allegorical interpretations of Scripture gave way to more literal readings. Harrison has demonstrated the implications of this for the study of nature, hypothesising that:

When in the sixteenth century people began to read the Bible in a different way, they found themselves forced to jettison traditional conceptions of the world. The Bible—its contents, the controversies it generated, its varying fortunes as an authority, and most importantly, the new way in which it was read by Protestants—played a central role in the emergence of natural science in the seventeenth century.¹⁴

University Press, 1991); on Newton's belief in his status as one of the chosen see Robert Illiffe, "Making a Shew': Apocalyptic Hermeneutics and the Sociology of Christian Idolatry in the Work of Isaac Newton and Henry More" in *The Books of Nature and Scripture* ed. James E. Force and Richard H. Popkin (Dordrecht: Kluwer Academic Publishers, 1994), 55-88.

¹⁴ Peter Harrison, *The Bible, Protestantism and the Rise of Natural Science* (Cambridge: Cambridge University Press, 1998), 4-5.

The Protestant belief that “the priesthood of all believers” had access to the contents of the Bible was significant here. Harrison believed that this personal reading freed natural philosophers from “slavish adherence to classical writings” and allowed them to look for new answers to the questions posed by nature.¹⁵ Using his work as a guide, I suggest that Toland’s rational criteria for interpreting the Bible without the assistance of intermediaries such as priests gives important insight into his reading of the book of nature.

Scholars who study the work of Toland, have discovered that he is, to use Winston Churchill’s oft-quoted description of the Soviet Union, “a riddle wrapped in a mystery inside an enigma.” The reason for his mysterious nature is the vast scope of his writings. He is best known for his polemical attacks on Christianity, particularly *Christianity not Mysteriorious* (1696), but that book only scratches the surface of Toland’s intellectual interests. Subjects such as: natural philosophy, literary criticism, political commentary, and religious advocacy all claimed Toland’s attention. His was a life that defies current disciplinary boundaries. The diverse nature of his interests is reflected in the wide range of scholarship his work generates.

Most studies of Toland examined his role in the foundation of deism and his relationship to John Locke. Within a generation of his death, Toland was listed among the notorious deists of the day. John Leland’s *A View of the Principle Deistical Writers of the Age* (1754) placed Toland in the company of these heretics.¹⁶ While Leland was certain of Toland’s deism, he provided no convincing evidence to prove his belief. In the late nineteenth century, Leslie Stephens argued strenuously for Toland’s status as a deist. He also wrote the entry on Toland in *The Dictionary of National Biography*.¹⁷ Since Stephens’ assessment, a deist label has been attached to Toland as

¹⁵ *Ibid.*, 7.

¹⁶ Leland, *A View of the Principle Deistical Writers of the Day*, I: 43-7.

¹⁷ Leslie Stephens, “Toland, John” in *The Dictionary of National Biography*, 22vols. ed. Leslie Stephens and Sidney Lee (London: The Oxford University Press, 1917), 918-22, esp. 918.

scholars in this century continue to cite this view with approval. According to a study by G. R. Cragg: "His [Toland's] method is that which, with slight variations, all the deists adopted."¹⁸ Peter Gay included Toland in his anthology on deism, claiming that the "deist debate got under way in really dramatic fashion in the middle of the 1690s."¹⁹ One of the reasons for this was the publication of Toland's *Christianity not Mysterious* in 1696. In that book, Toland claimed that God intended Christianity to conform to human reason. Toland's emphasis on human reason earned him the deist label. Peter Byrne also included Toland in his history of deism.²⁰ Toland's deism figures prominently in two surveys of religion in early modern Europe, one by Peter Harrison and the other by W. R. Ward.²¹

Specialised studies of Toland produced at similar conclusions. Robert E. Sullivan's accepted Toland's deism in *John Toland and the Deist Controversy: A Study in Adaptations* (1982).²² Sullivan, however, noted that deism was an ambiguous term that applied to a wide range of beliefs. That stated, he still identified Toland as a member of this group. His book was a contextualised examination of the climate of dissent present in Toland's day. By this method, Sullivan hoped to explain Toland's heretical views as a product of his time. To achieve this goal, the book dealt at length with the various heresies that infiltrated seventeenth century England. The problem with this approach was that it sought only to collect influences on Toland's views it did not look for foundations or explanatory factors which would

¹⁸ C. R. Cragg, *From Puritanism to the Age of Reason: A Study of Changes in Religious Thought Within the Church of England 1660-1700* (Cambridge: Cambridge University Press, 1966), 142.

¹⁹ Peter Gay, *Deism: An Anthology* (Princeton: D. Van Norstrand Company, Inc., 1968), 52.

²⁰ Peter Byrne, *Natural Religion and the Nature of Religion: The Legacy of Deism* (London: Routledge, 1989).

²¹ Peter Harrison, *'Religion' and the Religions in the English Enlightenment* (Cambridge: Cambridge University Press, 1990); W. R. Ward, *Christianity under the Ancien Régime* (Cambridge: Cambridge University Press, 1999).

²² Robert E. Sullivan, *John Toland and the Deist Controversy: A Study in Adaptations* (Cambridge: Harvard University Press, 1982).

explain why his views took the form they did. Gerard Reedy also explored Toland's association to various heretical sects. In his article, Reedy demonstrated "the methodological similarities and discontinuities between the Socinians and Toland..."²³

Toland's relation to the English philosopher John Locke (1632-1704) is also a topic of frequent scholarship. There is no doubt that Toland borrowed from the work of Locke and did meet him in the early 1690s. The pages of *Christianity not Mysterious* are filled with concepts taken from Locke's *Essay Concerning Human Understanding*. That an upstart philosopher, and deist, built his second-rate thoughts upon the foundation of Locke's unimpeachable writings, was a notion, which did not sit well with some scholars. For example, Stephen's contempt for Toland leaps from his page: "Toland attempted to gain a place in social and literary esteem by boasting of intimacy with Locke ... From his earliest days Toland was a mere waif and stray, hanging loose upon society ... his career is made pathetic by his incessant efforts to clutch at various supports, which always gave way as he grasped them."²⁴ Modern scholars, however, are less emotional in their treatment of Toland's use of Locke's philosophy. A more objective account was the work of John C. Biddle. He suggested that the relationship between the two men did not run only one way. According to Biddle, Locke responded to Toland's work, with the publication of *The Reasonableness of Christianity* (1695).²⁵ Some Locke scholars, too, accepted that Toland likely did influence Locke. John Marshall's recent biography of Locke took this position.²⁶

²³ Gerard Reedy, "Socinians, John Toland, and the Anglican Rationalists" *Harvard Theological Review* 70 (1977): 285.

²⁴ Leslie Stephen, *History of English Thought in the Eighteenth Century*, 2 vols (1876; reprint, London: Smith, Elder, & Co., 1902), I: 93, 101-2.

²⁵ John C. Biddle, "Locke's Critique of Innate Principles and Toland's Deism" *Journal of the History of Ideas* 37 (1977): 411-22.

²⁶ John Marshall, *John Locke: Resistance, Religion and Responsibility* (Cambridge: Cambridge University Press, 1994), 409-10.

Despite the scope of Toland's writings, which ranged from supporting the naturalisation of Jews²⁷ to proposing a worldview based on self-moving matter, scholars have tried to determine a common thread in his life's work. Where one starts the search for this commonality has varied with each study. Stephen H. Daniel in *John Toland: His Methods, Manners, and Mind* argued that a consistent method might be gleaned from Toland's writings. Daniel described Toland's method as: "the way in which his work is united by a common pattern of thought emphasizing the capacities of the individual to think for himself on philosophical, religious, and political issues."²⁸ Toland's belief in the innate ability of all people to think for themselves suggested Daniel explained why he claimed that Christianity was reasonable. Priests were not required to interpret the Bible, because all people possessed the ability to do so. This activity of the human mind also had implications for his theory of matter; as the mind had constant movement, so too did matter.

Toland's advocacy of self-moving matter provided the basis for much of the scholarship about his life. Although Margaret C. Jacob did not use Toland's belief in self-moving matter as a vehicle to unite his life's work, her studies on his materialism set the precedent for all subsequent scholarship in the genre. I explore her views fully in chapter three, but I will outline them here. In the late 1960s, Jacob placed Toland into the context of early eighteenth century Newtonianism.²⁹ She noted that Toland supported his construction of a materialistic worldview, by taking evidence from Newton's *Principia*. Paradoxically, Jacob concluded, the purpose of Toland's worldview was not to provide support to Newton but to challenge his philosophy. According to Jacob, Toland built his philosophy upon the work

²⁷ See Isaac E. Barzilay, "John Toland's Borrowings from Simone Luzzatto" *Jewish Social Studies* 31 (1969): 75-81.

²⁸ Stephen H. Daniel, *John Toland: His Methods, Manners, and Mind* (Montreal: McGill-Queen's University Press, 1984), 18.

²⁹ Margaret Candee Jacob, "John Toland and the Newtonian Ideology" *Journal of Warburg and Courtauld Institutes* 32 (1969): 307-331.

of the Hermetic philosopher Giordano Bruno. At the time of her article, there was renewed interest in influence of Renaissance magic on early modern science, sparked by the work of Frances Yates. Yates' book, *Giordano Bruno and the Hermetic Tradition* (1964) generated many debates regarding the contributions of "magic" to the Scientific Revolution.³⁰ Jacob's work was no doubt influenced by these debates. Indeed, she claimed: "By the 1960s a pilgrimage to the Warburg Institute or to Dame Frances's home in Claygate came to be seen as essential by any student with a serious interest in early modern thought." Moreover, Jacob stated that she was "inspired by a reading and rereading of her [Yates's] Bruno book."³¹ As the historiography in the history of science has shifted emphasis to theological concerns, Bruno's influence on Toland is being re-evaluated.³² Regardless of the source, Toland expressed his materialism in both *Letters to Serena* (1704) and *Pantheisticon* (1720).

Several recent authors took Toland's last work *Pantheisticon* as the entry point into his philosophy. In *Pantheisticon* Toland argued for the existence of a Socratic society. The members of this secret organisation based their fraternity on a shared system of beliefs. One of which was that of pantheism, the view postulating the presence of God everywhere in nature. Taken to extremes, pantheism claimed no separation between nature and the divine. The society also believed that matter was self-moving. In Toland's own words:

[T]he force and Energy of the Whole, the Creator and Ruler of all, and always tending to the best ends, is God, whom you may call the Mind,

³⁰ Frances A. Yates, *Giordano Bruno and the Hermetic Tradition* (London: Routledge and Kegan Paul, 1964). On the influence of Yates' book and a brief description of the historical debate it generated, see Floris H. Cohen, *The Scientific Revolution: A Historiographical Inquiry* (Chicago: University of Chicago Press, 1994), 169-70; 286-96.

³¹ Margaret C. Jacob, "Dame Frances Amelia Yates, 28 November 1899 – 29 September 1981" *Isis* 73 (1982): 425.

³² See J. A. I. Champion, *The Pillars of Priestcraft Shaken: The Church of England and its Enemies, 1660- 1730* (Cambridge: Cambridge University Press, 1992), 153; Robert Rees Evans, *Pantheisticon: The Career of John Toland*, (New York: Peter Lang, 1991), 211.

if you please, Soul of the universe; and hence it is that Socratic Brethren, by peculiar Term, as I have said, are called Pantheists; this Force, according to them, being not separate from the Universe itself...³³

Toland did champion such views when he published the Latin version of the book in 1720. Because it was his last work, scholars see it as the mature expression of Toland's thoughts. Therefore, several historians have searched in Toland's earlier works for anticipations of his pantheism.

Robert Rees Evans proposed to explain Toland's philosophical system, which Evans claimed was indeed "Pantheism."³⁴ He divided Toland's writing into three sections, each forming a part of the forthcoming philosophy. As regards to *Christianity not Mysterior*, Evans saw it completing the first phase of Toland's career, which was to write *Pantheisticon*. The problem with such an approach is that Evans assumed that Toland knew where his journey in philosophy would take him.³⁵ Each work was a mere stepping stone on the path to pantheism. Although, Evans did say that he was tracing "Pantheism's development in the contemporary climate of opinion"³⁶ he was looking for the context of a philosophy that Toland himself had not yet formed.

In a recent doctoral dissertation Gavina L. Cherchi supported the view that Toland's thought is best viewed through hindsight, beginning with *Pantheisticon*. Her argument was more sophisticated than Evans', claiming that Toland's pantheism was far too complicated to be traced using any modern disciplinary boundaries. She noted that scholars need to examine the intellectual context of Toland's day to understand why his philosophy took the shape it did. This is true because Toland practised a "two fold

³³ John Toland, *Pantheisticon: or the Form of Celebrating the Socratic-Society* (1751; reprint, New York: Garland Publishing Inc., 1977), 17-8.

³⁴ Evans, *Pantheisticon*, ix.

³⁵ I am grateful to Andrew Cunningham for making me aware of this during a fruitful discussion over lunch.

philosophy.”³⁷ Toland wrote in such a manner as to communicate with those people who were well versed in his thoughts, and at the same time hide his heretical views from those who would act against him. Failure to identify this literary style, she claimed is why Toland’s views have been misunderstood for so long. It is a belief supported by other scholars.

David Berman and Perez Zagorin both argued that Toland often wrote one thing, while meaning another.³⁸ Berman labelled this strategy “the art of theological lying.”³⁹ He examined *Two Essays in a Letter from Oxford to a Nobleman in London* (1695); a work attributed to Toland. In that book, the author advised his readers how to communicate and conceal in the same writings. Berman saw this as evidence that Toland practised a double-edged style of writing. A recent article, however, tends to discredit this assumption. Rhoda Rappaport argued that the certainty of Toland’s authorship for the *Two Essays* is far from conclusive.⁴⁰ If her thesis is correct, then Berman’s argument raises more questions than it answers. While such works are important because they expose Toland’s desire to prevent his views from being read by those who would not accept them, they do not explain if any links existed between Toland’s writings in his early years. Nor do they explain why Toland’s construction of his worldview was very superficial in its first formulation, in *Letters to Serena*.

Rather than searching anticipations of his final work, *Pantheisticon*, in all of Toland’s writings, my study examines his work for a specific period. By

³⁶ Evans, *Pantheisticon*, ix.

³⁷ Gavina Luigia Cherchi, “Atheism, Dissimulation and Atomism in the Philosophy of John Toland” (PhD diss. Warburg Institute, London University, 1994), 221-3.

³⁸ See David Berman “Disclaimers as Offence Mechanisms in Charles Blount and John Toland” in *Atheism From the Reformation to the Enlightenment* ed. Michael Hunter and David Wootton (Oxford: The Clarendon Press, 1992), 255-272; Perez Zagorin, *Ways of Lying: Dissimulation, Persecution, and Conformity in Early Modern Europe* (Cambridge: Harvard University Press, 1990), 293-5.

³⁹ Berman, “Disclaimers as Offence Mechanisms”, 259.

⁴⁰ Rhoda Rappaport, “Questions of Evidence: An Anonymous Tract Attributed to John Toland” *Journal of the History of Ideas* 68 (1997): 339-48.

looking at his philosophy chronologically, the theological nature of his early materialism is evident. The period I have chosen to examine is 1696-1704. These eight years include the publication of his most famous book *Christianity not Mysteriorious* and his first expression of materialism in *Letters to Serena*. This study demonstrates that Toland was not always a pantheist and that *Christianity not Mysteriorious* cannot be excluded from accounts of his worldview. What also differentiates my study is the obvious suggestion that Toland was a practitioner of natural philosophy. Taking Cunningham's definition of natural philosophy presented above, for granted, theology becomes of paramount importance in accessing seventeenth and early eighteenth century systems of the world,⁴¹ Toland's conception of the universe is no exception. Therefore, it is my thesis that Toland's theological beliefs and conception of God provided the foundation for his investigations into the world and its construction.

Toland's early theological views are seen most clearly in *Christianity not Mysteriorious*. Chapter Two, of this thesis, examines the book and reconstructs Toland's claim that theology must be rational. For Toland, the original Christian religion, the one dictated by God, was simple and free from ecclesiastical mysteries. God wished that knowledge needed for salvation be understandable by all people. Furthermore, any other knowledge needed for humanity's terrestrial existence was within the intellectual capacity of even the most unlearned person. More importantly, God did not command the understanding of knowledge that was not useful for humanity's present condition. As he did throughout his writings, Toland borrowed his concepts from other philosophers. In this case, he separated useful and useless knowledge by using Locke's distinction between nominal and real essences. His belief in this distinction had a profound impact on the way he examined the world, and the degree to which he expected to investigate it.

⁴¹ See Davis, "Creation, Contingency, and Early Modern Science."

Chapter Three explores the impact of Toland's theology, which he described in *Christianity not Mystrious*, upon the construction of his world system. The first presentation of Toland's natural philosophy was in *Letters to Serena*, the last two letters of which contain his reasons for asserting that the universe is composed of self-moving matter. It is apparent that God's desire for philosophers to concern themselves with only useful knowledge is the foundation for Toland's account of self-moving matter. Toland's natural philosophy also explains his materialistic reading of Newton's *Principia*, a study of which completes the chapter.

Chapter Two: The Theology of *Christianity not Mysterious* and Toland's Lockean Epistemology

This chapter describes John Toland's theology. In *Christianity not Mysterious* Toland expressed the belief that God communicated his message to all Christians, both educated and simple. He formulated this theology after educational experiences in Britain and on the Continent. There among many of the most radical thinkers of his day, Toland constructed, and in some cases borrowed, his conception of a Christianity that conformed to human reason. As Toland did not write in isolation, I have interspersed this account of his theology and epistemology with selected writings of his contemporaries, thereby illustrating the intellectual climate, mainly theological, of his day.¹ Most telling are the written responses his work generated as well as his rebuttals.

When Toland died in 1722, Pierre Des Maizeaux attempted to write his biography. He soon lamented the ironic fact that few documents existed from the life of a man who was the inspiration for so many pamphlets and books. The hopeful biographer wrote of his concerns to S*** B*** L***,² the patron of the study.

I resolv'd to comply with your request. But when I came to the performance, I found it so difficult to meet with proper materials, that

¹ In stressing the importance of context in intellectual history, I am following the example provided by Jan W. Wojcik who stated: "I believe that a scholar often finds that an understanding of the context within which a particular thinker expressed his or her views enhances the scholar's understanding of those views. Indeed, in many cases, a knowledge of the context is an important prerequisite for interpreting the thinker's text correctly." See her, *Robert Boyle and the Limits of Reason* (Cambridge: Cambridge University Press, 1997), xi.

² Any student of Toland soon comes to find that many of the names in his papers are blanked out, making identification almost impossible.

I should have been oblig'd either to drop my design, or send you a most confus'd and imperfect account ...³

Modern scholars have experienced the same problem. Robert E. Sullivan complained at the outset of his study that "Toland habitually covered his tracks, and the bulk of his papers have been destroyed." He also noted that there are many charred relics of Toland's writings headed by "Burn this."⁴ One can only speculate about the kinds of documents that such an order deprived historians. Similar feelings of frustration were expressed by Richard Kearney, who wrote that scholars often give up in "despair" when they try to classify Toland's thought.⁵ Despite the lack of materials on Toland's life—aside from his published works, which are numerous⁶—his appeal to scholars is remarkable. In a recent biography, Stephen H. Daniel commented that, "for almost three hundred years John Toland has intrigued, puzzled, and offended students of English literature, political history, theology, and philosophy."⁷ Alan Harrison supported such a statement, claiming: "those interested in the intellectual development of the past three hundred years cannot ignore the contribution of John Toland..."⁸ This

³ Pierre Des Maizeaux, "Some Memoirs of the Life and Writings of Mr. John Toland: in a Letter to S*** B*** L***" in *A Collection of Several Pieces of John Toland*, 2 vols (1729; reprint, New York: Garland Publishing Company, 1977), I: iv.

⁴ Robert E. Sullivan, *John Toland and the Deist Controversy: A Study in Adaptations* (Cambridge: Harvard University Press, 1982), 1.

⁵ Richard Kearney, "John Toland: An Irish Philosopher?" in *John Toland's Christianity not Mysterious: Text, Associated Works and Critical Essays* ed. Philip McGuinness et. al (Dublin: The Lilliput Press, 1997), 207.

⁶ There are approximately 200 works either written by Toland or attributed to him. See David Berman, "Toland, John" in *The Encyclopedia of Unbelief*, 2 vols. ed. Gordon Stein (Buffalo: Prometheus Books, 1985), II:668.

⁷ Stephen H. Daniel, *John Toland: His Methods, Manners, and Mind* (Montreal: McGill-Queen's University Press, 1984), ix.

⁸ Alan Harrison, "John Toland and the Discovery of an Irish Manuscript in Holland" *Irish University Review* 22 (1992): 33.

interest combined with limited manuscript sources has led to conflicting interpretations of Toland's early life, particularly accounts of his birth.⁹

Early Life and Education

Most scholars agree that Toland was born in Ireland. "Mr. Toland was born on the 30th of November 1670, in the most northern Peninsula in Ireland, in the Isthmus whereof stands Londonderry."¹⁰ The exact location was Inishowen, County Donegal.¹¹ His parents were an Irish Catholic priest and his concubine. Toland was then raised in the religion of his father, until just before his sixteenth birthday when he found its doctrines wanting.

Not all historians accepted this account of Toland's birth. In the late 1940s, F. H. Heinemann discovered a letter written by Dr. Edmund Gibson to Reverend Dr. Charlett, dated 21 June 1694. The letter concerned the origin of a certain "Irish Refugee."

The account I had of the Irish Refugee is something improv'd since. When I told you he was all Irish, I was in error. He was born in France, of an Irish father and French mother: brought up a Papist till ten or 12 years of age: came to his friends in Ireland to see what could be had there...¹²

Late in his life, Toland presented yet a different account of his family. He told the story to a group of Irish Friars. The friars passed it on to Des Maizeaux who included it in his biography. "These honest Friars, you see, do certify under their hands and seal, that Mr. Toland was descended from an honourable, noble, and most ancient Family, recorded in the History of

⁹ Much of the biographical information for Toland's life comes from the prefaces that Toland added to *Christianity not Mysteriorious* and in his defences which followed it. It was from these sources that Des Maizeaux constructed his biography.

¹⁰ Des Maizeaux, "Some Memoirs", I: iv; Daniel, *John Toland*, 5.

¹¹ J. G. Simms, "John Toland (1670-1722), a Donegal Heretic" *Irish Historical Studies* 16 (1968/69): 304; Sullivan, *John Toland and the Deist Controversy*, 2.

¹² Quoted in F. H. Heinemann, "John Toland, France, Holland, and Dr. Williams" *Review of English Studies* 25 (1949): 346.

Ireland for several hundred years.”¹³ Whether he was a native Irish citizen or an immigrant, Toland grew up Irish and there received his basic schooling.¹⁴

Toland was not always John; he was baptised into the Irish Catholic Church as Janus Junius. This unusual name caused many problems for the young Toland. At primary school he “was called by that name in the school-roll every morning; but the other boys making a jest of it, the Master himself order’d him to be called John for the future which name he kept ever after.”¹⁵ Toland survived the ridicule of his classmates and went on to study at several universities, at home and abroad.

He pursued higher education at the universities of Glasgow, Edinburgh, Leiden, and Oxford.¹⁶ Toland was not a registered student at all of these schools; in many classes, he was only a face in the crowd. Such was the case at the University of Glasgow. Although he was not an official student, Toland attained a letter from the civic authorities attesting to his time there.

We the magistrates of Glasgow undersubscribing, do hereby testifie and declare to all who these presents may concern, That the bearer John Tolland, [sic] Master of Arts, did reside here for some years as a student at the University in the Citie, during which tyme he behaved himself and ane trew Protestant and loyal Subject; as witness ovr hands at Glasgow and penult day of July one thousand sex [sic] hundreth and ninetie years. And the common Seale of Office of the said citie is hereunto affixt.¹⁷

¹³ Des Maizeaux, “Some Memoirs”, I: vi.

¹⁴ For a view of the conflicting interpretations of Toland’s birth see Eugene Inglish Dyche, “The Life and Works, and Philosophical Relations of John (Janus Junius) Toland” (PhD diss. University of Southern California, 1944), 1n-4n.

¹⁵ Des Maizeaux, “Some Memoirs”, I: v.

¹⁶ J. A. I. Champion, “Toland, John” in *Routledge Encyclopedia of Philosophy*, 10 vols. ed. Edward Craig (London: Routledge, 1998), IX:427.

¹⁷ Des Maizeaux, “Some Memoirs”, I: viii-ix.

The letter is circumstantial evidence of Toland's conversion from the Catholic faith. The magistrates described him not as an Irish Catholic, but a "Trew Protestant."

Toland graduated from the University of Edinburgh, earning an MA. The degree is also evidence of Toland's new religious affiliation; it was given to students who were not prepared to take the oath of allegiance to the Catholic Church.¹⁸ His rejection of Catholicism was prompted by both an increasing distaste for its doctrines and by his lack of success in attracting a Catholic patron. After his bid for support was rejected by the Archbishop of Glasgow, Toland turned to the Presbyterian party to finance his scholastic endeavours.¹⁹ Eager to impress his new benefactors, Toland became active in their religion, and was an avid spokesperson for it.

While at Edinburgh (1690-1), Toland received his first lessons in contemporary natural philosophy, learning Newtonian mechanics. Although it was not part of the official curriculum, mathematics instructor David Gregory (1661-1708) made his students complete exercises in Newtonian mathematics before they could graduate.²⁰ Gregory was friendly with Newton and claimed to be the first person to give public lectures on his natural philosophy.²¹

¹⁸ Simms, "John Toland (1670-1722), A Donegal Heretic", 305.

¹⁹ H. F. Nicholl, "John Toland: Religion Without Mystery" *Hermathema* 100 (1965): 57.

²⁰ Margaret C. Jacob, *The Newtonians and the English Revolution* (New York: Cornell University Press, 1976), 211. Not all scholars of Toland accept that he was exposed to Newton's work at Edinburgh. For example, Sullivan claims that the *Principia* was not made part of the curriculum until after Toland had left; Sullivan, *John Toland and the Desist Controversy*, 194. A history of the University of Edinburgh, however, refutes Sullivan's claim. Gregory was using Newton's work in his classes thirty-five years before it was officially adopted by the University. See Alexander Grant, *The Story of the University of Edinburgh During its First Three Hundred Years*, 2 vols (London: Longmans, Green, and Co., 1884), II: 296.

²¹ Philip McGuinness, "'Perpetual Flux': Newton, Toland, Science and the Status Quo" in *John Toland's Christianity not Mysterious: Text, Associated Works and Critical Essays* ed. McGuinness et al (Dublin: The Lilliput Press, 1997), 324, n. 5.

Upon leaving Edinburgh, Toland sailed for England where he spent a great deal of time in Protestant coffeehouses²² taking part in philosophical and theological debates with the patrons.²³ The Presbyterians were impressed with Toland's intellectual abilities, and wished him to become a minister in their faith. To this end, the party arranged for Toland to travel to the University of Leiden. The university was a renowned centre of Calvinist thought, which explains why Toland was sent there rather than being educated at an English university, all of which were subject to the thirty-nine Articles of the Anglican Church.²⁴ At Leiden, he was to study with the Protestant scholar Friedrich Spanheim the younger (1632-1707).²⁵ Although this was the plan of the Presbyterians, Toland likely learned more from philosophers outside of the university.

Dutch Years

Toland's time in Holland (1692-3) had an enormous impact on his future writing. As John Locke had a generation before, Toland found Amsterdam a centre of religious tolerance and a forum for the open exchange of ideas. The city's religious freedom was institutionalised by the Union of Utrecht in 1579. The thirteenth article made it a law that every person "should be accorded freedom of worship and no one should be molested on

²² In early modern England, each association frequented its own coffeehouse, where they could meet and discuss their ideas with patrons who held similar views. Customers were expected to engage their tablemates in conversation whether they knew them or not. See Mark Pendergrast, *Uncommon Grounds: The History of Coffee and How it Transformed Our World* (New York: Basic Books, 1999), 12-3.

²³ "Toland" in *The Dictionary of National Biography*, 22 vols. ed. Leslie Stephen and Sidney Lee (London: Oxford University Press, 1917), XIX: 919. For more on the role that coffee-houses played in the dissemination of natural philosophy, see Larry Stewart, "Other Centres of Calculation, or, Where the Royal Society Didn't Count: Commerce, Coffee-Houses and Natural Philosophy in Early Modern London" *British Journal for the History of Science* 32 (1999): 133-53.

²⁴ See the various chapters in *Leiden University in the Seventeenth Century: An Exchange of Learning* ed. Thomas H. Lunsingh Scheurleer and G. H. M. Posthumus Meyjes (Leiden: E. J. Brill, 1975).

²⁵ Nicholl, "John Toland: Religion Without Mystery", 58; Simms, "John Toland (1670-1722), a Donegal Heretic", 306.

account of his belief."²⁶ During his time there, Toland frequented the home of Benjamin Furly (1636-1714) where, along with Spanheim, he associated with Jean Le Clerc (1657-1737).²⁷ All three men advocated religious toleration.

Furly, a Quaker, was accustomed to housing religious dissidents from England; Locke had stayed with him during his self-imposed exile (1683-88). Furly's hatred of priests was very strong.²⁸ On the subject of how faith was achieved by a personal relationship with God and not via an "outward" church, including priests, Furly wrote:

[We] singly bear the Testimony of the Lord as we have received it from him, leaving the thing to be witnessed by the Light and Spirit of God alone in every man's Conscience ... our Unity is not without but within, nor with any outward practice though never so apparent to have been the practice of the Saints and holy men of old, whether Patriarchs, Prophets, or Apostles in the times of greatest purity...²⁹

Locke had also associated with Le Clerc, exchanging several letters with him on the divine status of the Bible. Le Clerc, like Furly, was a prolific writer on matters of religion. He was a minister in the Remonstrant Brotherhood and held a chair in philosophy at their seminary.³⁰ The Remonstrants were followers of Jacob Arminius, who held a chair in theology at Leiden. After his death, in 1609, three of his faithful, including Simon Episcopius, who succeeded Arminius as a professor of theology at the University of Leiden, met to document the teachings of their former leader. The tract they produced was titled *Remonstrantie* (1610), hence subsequent

²⁶ Union of Utrecht (1579) quoted in Ralph Melnick, "From Polemics to Apologetics: Jewish-Christian Rapprochement in 17th Century Amsterdam" (PhD diss. Columbia University, 1977), 9.

²⁷ Daniel, *John Toland*, 7; Margaret C. Jacob, *The Newtonians and the English Revolution* (New York: Cornell University Press, 1976), 212-3.

²⁸ John Marshall, *John Locke: Resistance, Religion and Responsibility* (Cambridge: Cambridge University Press, 1994), 331.

²⁹ Benjamin Furly, *The Worlds honour detected, and, ... rejected: and the honour which comes from God Alone, asserted, and reduced to practice: or, Some Reasons why the people of God Called Quakers, do deny the accustomed honour and Salutation of the World* (London, 1663), 1-2.

followers were Remonstrants. Arminius established his sect as a response to Calvinism. The question of predestination lay at the heart of the difference between these two Protestant groups. Calvinists believed that God predestined those souls he would raise into Heaven. Therefore, individuals Christians could not by their actions on Earth affect the predetermined status of their soul in the after life. In contrast to this view, Arminians pointed to The New Testament and James 2:24 "Ye see then how that by works a man is justified, and not by faith alone."³¹ Based on that passage, Arminians suggested that humans were free to accept or reject the Christian faith and the salvation of God. Calvinists denied this position and emphasised God's absolute power. They stressed the limited ability of humans to affect their own salvation. It was human free will and the ability to choose faith in which the Arminians believed. They viewed God as good and merciful: he would raise into Heaven those Christians who chose His faith. Furthermore, the Arminians believed that the Bible was written so that it could be obeyed.³² All Christians could know the doctrines concerning salvation because they were not hidden behind obscure phrasing.

Le Clerc used his journal, *Bibliothèque Universelle et Historique*, to advertise his views on religion. It was here that Locke first published an abridged version of the *Essay Concerning Human Understanding* in 1688.³³ Le Clerc also founded an approach to biblical interpretation, which he developed during his long debate with the Jesuit scholar Richard Simon. Simon argued that Protestants could not overcome the obscure nature of Scripture and therefore they must return to Catholicism, which had the institutional apparatus to clarify any mysterious passages.³⁴ Alternatively,

³⁰ Theo Verbeek, "Le Clerc, Jean" in *Routledge Encyclopedia of Philosophy*, V:475.

³¹ Wojcik, *Robert Boyle and the Limits of Reason*, 79.

³² *Ibid.*, 80-1.

³³ Martin I. Klauber, "Between Protestant Orthodoxy and Rationalism: Fundamental Articles in the Early Career of Jean Le Clerc" *Journal of the History of Ideas* 54 (1993): 611.

³⁴ *Ibid.*, 636.

and staying true to his Ariminian roots, Le Clerc believed that to achieve salvation it was merely “necessary to believe that there is a god and that it is the one referred to in the Holy Scripture....”³⁵ This was true because God is good and does not make salvation difficult. The acceptance of His teachings was thought to be sufficient to achieve it.

It was Spanheim, the man to whom Toland referred as “my master,”³⁶ together with Le Clerc, who taught Toland that the Bible deserved an “intelligible explication no less than Herodotus.”³⁷ Spanheim received his MA in 1648 and in 1670, was appointed to the chair of theology at the University of Leiden, a post that his father had previously held. He was a devoted Calvinist, a fact that explains why Toland’s Presbyterian patrons sent him to study with this Dutch theologian. Spanheim’s debates with Thomas Hobbes and Baruch Spinoza on matters of theology gained him a reputation as an excellent Calvin apologist.³⁸ Spanheim’s views had a profound impact on Toland, teaching him the value of referring to the ancient sources, mainly Greek and Hebrew, when interpreting any biblical passage.³⁹ It was original knowledge—before the commentary of the Catholics corrupted it—which was the goal of such an exercise. This approach was preferable, to relying on the poor exegesis of medieval commentators, the source of corruption. The practice also became part of Toland’s search for biblical knowledge that was a part of the original Christianity, a religion he would advocate in *Christianity not Mysterious*. These teachings led Toland to argue that the Bible should be read in the same way as any other book.⁴⁰ The context and history of the book needed to be kept in mind during its reading. The book also needed to

³⁵ Quoted in *Ibid.*, 631.

³⁶ Sullivan, *John Toland and the Deist Controversy*, 4.

³⁷ Daniel, *John Toland*, 36.

³⁸ J. Krasenbrink, “Spanheim, Ezechiel and Friedrich” *New Catholic Encyclopedia*, 17 vols (New York: McGraw-Hill Book Company, 1967), XIII:519-20.

³⁹ J. A. I. Champion, *The Pillars of Priestcraft Shaken: The Church of England and its Enemies, 1660-1730* (Cambridge: Cambridge University Press, 1992), 125.

present its message in a clear manner. Such strategies for biblical interpretation, were a legacy of Descartes, whose adherents included Le Clerc.⁴¹

Descartes did most of his philosophical writing in Holland, and his views found a home in many of the universities there including Leiden; by the 1640s, the Cartesian philosophy was changing the intellectual climate there. It was from the Dutch universities that Cartesianism spread to the rest of Europe.⁴² The application of Descartes' method of inquiry to biblical studies was an invention of Dutch philosophers.⁴³ Richard H. Popkin has studied this phenomenon, arguing that it was the Cartesian insistence on "clear and distinct" ideas wedded to the search for biblical truths that provided the method for many Protestants⁴⁴ and certainly for the Arminians. These teachings permeate *Christianity not Mysterious*.

During his years in Holland, Toland also became acquainted with the work of Spinoza. He was exposed to Spinoza's philosophy by his frequent association with a sect of "Christian Spinozists." This group possessed a manuscript copy of Spinoza's "De Deo et Homine."⁴⁵ "God, Man and His Well Being" (its modern title) was an early abbreviated version of Spinoza's best known work, *Ethics*,⁴⁶ a work that proved to be important for Toland. Silvia Berti claimed that the significance of Toland's exposure to Spinoza cannot be overemphasised, stating that "its influence, must have been

⁴⁰ Daniel, *John Toland*, 7, 124.

⁴¹ Verbeek, "Le Clerc, Jean", 475.

⁴² Edward G. Ruestow, *Physics at Seventeenth and Eighteenth-Century Leiden: Philosophy and the New Science in the University* (The Hague: Martinus Nijhoff, 1973), 34

⁴³ J. Samuel Preus, "The Bible and Religion in the Century in Genius" *Religion* 28 (1998): 10-11.

⁴⁴ Richard H. Popkin, "Cartesianism and Biblical Criticism" in *Problems of Cartesianism* ed. Thomas M. Lennon et. al (Montreal: McGill-Queen's University Press, 1982), 61-82. See also Ruestow, *Physics at Seventeenth and Eighteenth-Century Leiden*, 36.

⁴⁵ Dyche, "The Life and Works, and Philosophical Relations of John (Janus Junius) Toland", 32.

⁴⁶ Spinoza, "God, Man and His Well-Being" in *The Collected Works of Spinoza* vol I ed and trans. Edwin Curley (Princeton: Princeton University Press, 1985), I: 59-156.

enormous and has yet to be measured fully.”⁴⁷ In 1669/70, Spinoza published *Tractatus Theologico-Politicus*, an anonymous work which, was a plea for religious tolerance. There he stated that the books of the Bible were products of their particular historical contexts and should be read with those contexts in mind. Moreover, he believed that the Bible was originally written in ordinary language.⁴⁸ It was the seventh chapter of Spinoza’s *Tractatus*, “On the Interpretation of Scripture” that Toland found so compelling. In the chapter Spinoza claimed,

[O]ur method of Scriptural interpretation is the best. For since the supreme authority for the interpretation of Scripture is vested in each individual, the rule that governs interpretation must be other than the natural light that is common to all, and not any supernatural right, nor any external authority. Nor must this rule be so difficult as not to be available to any but skilled philosophers; it must be suited to the natural and universal ability and capacity of mankind.⁴⁹

Spinoza’s book played a major formative role in the development on Toland’s own philosophy.⁵⁰ The influence of such ideas upon Toland becomes clear when *Christianity not Mysterious* is explored.

Through his exposure to the teachings of Furly, Le Clerc, and the posthumous writings of Spinoza, Toland became increasingly radical in his thought and lost interest in being a minister for any church even a Protestant church. His emerging views clashed with those of Spanheim. “The reason he left Holland”, claimed Des Maizeaux, “was a quarrel he had with his Monsieur Spanheim, upon which occasion he hiss’d out of the school.”⁵¹ It was Toland’s insistence on a purely rational reading of the Bible, likely a result of his conversations with Le Clerc, together with his affinity for

⁴⁷ Silvia Berti, “At the Roots of Unbelief” *Journal of the History of Ideas* 56 (1995): 566.

⁴⁸ J. Samuel Preus, “The Hidden Dialogue in Spinoza’s *Tractatus*” *Religion* 28 (1998): 120, 121.

⁴⁹ Spinoza, *Tractatus Theologico-Politicus* trans Samuel Shirley (Lieden: E. J. Brill, 1989), 160.

⁵⁰ Joel C. Weinheimer, *Eighteenth-Century Hermeneutics: Philosophy of Interpretation in England from Locke to Burke* (New Haven: Yale University Press, 1993). He mistakenly cites “On the Interpretation of Scripture” as chapter eight.

⁵¹ Quoted in Heinemann, “John Toland, France, Holland, and Dr. Williams”, 347.

Spinoza's philosophy, which strained the relationship with his former teacher. His new views had not alienated him from all his Dutch friends, however. Benjamin Furly, now Locke's frequent correspondent sent a letter of introduction to the English philosopher on behalf of Toland. Furly asked Locke to find employment for Toland, who had chosen to reject the job of Presbyterian minister. The letter dated 19 August 1693 stated:

I find him [Toland] a freespirted ingenious man; that quitted the Papacy in James's time when all men of no principles were looking towards it; and having now cast off the yoke of Spiritual Authority, that great bugbear, and bane of ingenuity, he could never be persuaded to bow his neck to that yoke again, by whomsoever claymed; this has rendered it somewhat difficult to him, to find way of subsistence in the world, ... I knew no way for him, but to find some free ingenious English gentleman that might have occasion for a Tutor in his family...⁵²

By all accounts, Locke was unable to find work for Toland, who then made his way to Oxford.

Rumours of Christianity not Mysterious

Toland "went to Oxford; where besides the Conversation of learned men, who have never been wanting in that Famous university, he had the advantage of the publick Library."⁵³ Although not a registered student at the institution, or any of its affiliated colleges,⁵⁴ Toland was an active member of the scholarly community.

The group of thinkers at and around Oxford included several Socinians. Socinianism was a heretical sect of Christianity founded by Laelius Socinus (1512-1562) and his nephew Faustus Socinus (1539-1604). The

⁵² Quoted in *Ibid.*, 348. Locke also received notice of Toland's impending arrival from Le Clerc. Le Clerc had Toland deliver a package to Locke for him. He describes Toland as being a non-conformer. See Jean Le Clerc to Locke, 11 September 1693, *The Correspondence of John Locke* 8vols. ed. E. S. De Beer (Oxford: The Clarendon Press, 1976-1989), IV: 724.

⁵³ Des Maizeaux, "Some Memoirs", xii.

⁵⁴ Rosalie L. Colie, "Spinoza and the Early English Deists" *Journal of the History of Ideas* 20 (1959): 36.

Reformation, which had asserted that lay readers had the ability to interpret the Bible, inspired the appearance of various groups which all claimed to provide the correct interpretative strategy to their members. Socinus argued to his followers that some sections of the Bible might be above human reason, but that no part was contrary to it. Certain sections were above reason because God inserted mysterious passages into Scripture. The purpose of mysteries was to discourage the unfaithful reader who sought immediate satisfaction from the Bible. A faithful and diligent reader could penetrate the unclear verses.⁵⁵ Therefore, mysteries kept unworthy readers from knowing the inner secrets of Christianity, but they were not above the reason of the truly faithful. Moreover, the sect denied the divinity of Jesus Christ. Socinians believed that Jesus was originally a mortal man, who was conceived by God in Mary. The importance of Jesus was in his resurrection. Through the act of raising Jesus, God demonstrated that all Christians would eventually follow him into Heaven. Socinianism developed further during Toland's day, with a stronger emphasis placed on rational interpretations of the Bible. Socinians of the late seventeenth-century concluded that God had dictated the Bible in accordance with human understanding. Therefore, no interpretation of a biblical passage could contradict human reason.⁵⁶

One of the earliest English Socinians was John Biddle (1615-1662), who was a schoolmaster in Gloucester. He claimed that his own reading of the Bible led him to the heresy.⁵⁷ Biddle wrote his controversial theological books in the 1650s. They were reissued in 1691, prefixed to an account of Biddle's life. In one of his many works, Biddle addressed the concept of mysteries in Christianity. He concluded that,

⁵⁵ Wojcik, *Robert Boyle and the Limits of Reason*, 44.

⁵⁶ *Ibid.*, 45, 47.

⁵⁷ Gerard Reedy, *The Bible and Reason: Anglicans and Scripture in Late Seventeenth-Century England* (Philadelphia: University of Pennsylvania Press, 1985), 121.

God, who has all Men to be saved, and to come to the knowledge of His Truths, has made his Revelations so intelligible, as to make it plain and easy to all Men, as well to idiots, as to the most subtle Philosophers. Therefore it is, God never uses any Term to teach us his Mysteries, but what we have a clear and distinct idea of.⁵⁸

His account is typical of the Socinian stance on mysteries. God wished his message to be available to all Christians. Therefore, all doctrines were plain and within the intellectual capacities of “all Men” and “idiots.” It followed that the Bible must conform to this belief.

The most prominent Socinian at Oxford, during Toland’s time there, was Stephen Nye (1648-1719). Nye wrote *A Brief History of the Unitarians, Commonly Called Socinians* (1687) a book he was persuaded to compose by Thomas Firmin (1632-97), who himself was drawn to Socinianism by the work of Biddle.⁵⁹ Toland gravitated towards Nye and his personable manner. It was from Nye that Toland learned of the Socinian belief in the competency of reason and in the agreement of Scripture and human reason.⁶⁰ This English assertion that the Bible must conform to human reason agreed with the views of his Dutch teachers and gelled in Toland’s own theology.

Orthodox scholars also knew of Toland’s philosophy and theology, prompting attempts to curtail his emerging heretical ways. An author known as A_ A_ wrote to Toland on 4 May 1694, advising him to abandon his beliefs and embrace orthodoxy. The author informed Toland that “the Character you bear in Oxford is this; that you are a man of fine parts, great learning and little religion.” Even if Toland did not presently think his religious views dangerous, A_ A_ was sure that:

‘Twould be a very grievous and bitter thought, when you lay upon your death-bed (and thither one day you must come; God only knows

⁵⁸ John Biddle, “An impartial Account of the Word Mystery, as it is Taken in the Scripture” in *The Faith of One God, Who is Only the Father; and of One Mediator between God and Men, Who is only the Man Christ Jesus* (London, 1691), 23.

⁵⁹ Daniel, *John Toland*, 39.

⁶⁰ Sullivan, *John Toland and the Deist Controversy*, 106-7.

how soon) to consider that your parts, and your knowledge, which if employ'd in the service of your maker, and to the benefit of mankind, might have entitled you to a nobler share of happiness and glory....⁶¹

Toland should seek to win the favour of God. The admiration of philosophers was not a worthy goal. "Popular esteem, the applause of Coffee-house, or of a club of prophane Wits are mean and unworthy ends." A_ A_ claimed he gave such advice not to chastise or to ridicule Toland, but out of genuine concern. "Believe me, I am concern'd for your sake: methinks, 'tis ten thousand pities that anyone should freely choose to be eternally wretched."⁶²

Toland was unconvinced by such altruistic motives, because A_ A_ left his unsealed letter at a coffeehouse that Toland frequented. Toland was concerned that other people had read, and worse yet believed, A_ A_'s charges of heresy against him. A subsequent letter tried to reassure Toland of A_ A_'s honesty. The identity of its author is unknown but he was familiar with the letter of 4 May; and wrote to Toland on 7 May 1694. "No, assure your self, Dear Sir, he who wrote it, meant you no harm, but rather the contrary: and if, through any accident, the matter went farther than his own, and your breast, 'tis quite beside his intention."⁶³ Toland was not ready to let the matter drop, and penned his own response to A_ A_. He believed that: "The irreligion laid to my charge, is as much owing to the malice of my enemies, as the reputation of my parts and learning to the goodness of my friends."⁶⁴ He went on to question his reason for study at Oxford if he was indeed a heretic. "But to what purpose should I study here or elsewhere, were I an Atheist or Deist, for one of the two you take me to be?"⁶⁵ In direct

⁶¹ A_ A_ to Toland, 4 May 1694, *A Collection of Several Pieces* II: 295-6.

⁶² *Ibid.*, 296, 297.

⁶³ For Mr. Toland, 7 May 1694, *Ibid.*, 299.

⁶⁴ Toland's response, n. d., *Ibid.*, 302.

⁶⁵ *Ibid.*

response to the accusations, that Toland was sure A_ A_ hurled his way, he restated his orthodoxy:

I assure you that I firmly believe in the existence of an infinitely good, wise and powerful being, which in our language we call God, substantially different from the Universe he created, and continues to govern by his Providence; of whom, through whom, and to whom are all things.⁶⁶

Thinking such a statement enough to appease his correspondent, Toland concluded: "Sir, I hope by this time I have satisfy'd your pious concern about my everlasting happiness...."⁶⁷

Toland's letter had the desired effect, as A_ A_'s response had a very different tone. A_ A_ began with an apology for the content of the previous letter. "I am sorry you should think, that I mistook you for an Atheist or a Deist: by the character of little Religion, I meant no more than this; that you were one who dealt somewhat too freely with it, a man of uncontrouled reason..."⁶⁸ After he wrote how it pleased him to read of Toland's hatred for atheism, A_ A_ turned to more serious matters. He was concerned about rumours, circulating around Oxford, describing Toland's forthcoming work. If the rumours were true, A_ A_ questioned the value of such a book.

[it is] commonly reported, that you are at present upon a work, which I fear will not prove so half advantageous to yourself or others: 'tis said that your are now publishing a piece with the intent to show, that there is no such thing as a Mystery in our Religion; but that everything in it is subicible to our understanding. I confess, I do not foresee what good influence it would derive upon our practice, if all the deep and hidden things of God lay open to the meanest capacities (and there is no better argument with me, that the knowledge of them would be no great use to us, than they lye so very deep) but that ever they should be thus laid open to men in these bodies...⁶⁹

⁶⁶ *Ibid.*, 303.

⁶⁷ *Ibid.*, 305.

⁶⁸ For Mr. Toland, 30 May 1694, *Ibid.*, 308-9.

⁶⁹ *Ibid.*, 312.

The date of this letter seems significant, coming only a few weeks after a sermon in which Robert South attacked Socinianism and defended the mysterious aspects of Christianity.⁷⁰ Robert South (1634-1716) was a prolific apologetic writer, who published over six volumes of sermons. He and John Locke were classmates at Westminster School and they were both elected to Christ Church in 1651.⁷¹ The friendship between the two men continued into adulthood. South, like Toland held Locke's *Essay* in high esteem. In 1697, South wrote to Locke telling him of his admiration for it. "I heartily wish, it [the *Essay*] were translated into Latine, that so the World might reap the benefitt of so Comprehensive a Subject in a Comprehensive Language, there being no Reason that a Work of so great a Value and so peculiar a Character should be kept within the Narrow Compass of our Native Tongue."⁷²

South received his MA in 1657 and at the time of the sermon was canon of Christ Church, Oxford. His classical schooling is evident in his sermons, which were indebted to Aristotelian logic. They included numerous references to classical and medieval authors.⁷³ South viewed kings as "God's regency on earth." Later in life he would soften this view, but would never abandon his quest for an earthly equivalent to the heavenly ruler. This belief informed South's denial of religious toleration. As kings and their governments were God's earthly representatives, their beliefs were law. There should be no religious views that differed from the orthodoxy, as it would undermine the political order. The Socinians, at Oxford, were an unorthodox group that South believed threatened the status quo. He objected

⁷⁰ With his apology for the mysteries of Christianity, South followed in some illustrious theological footsteps. Other divines who gave similar accounts included: Richard Baxter, *The Certainty of Christianity without Popery* (London, 1672); Charles Wolseley, *The Reasonableness of Scriptural Belief* (London, 1672); Seth Ward, *An Apology for the Mysteries of the Gospel* (London, 1673); John Norris, *Reason and Religion* (London, 1689).

⁷¹ Gerard Reedy, *Robert South (1634-1716): An Introduction to His Life and Sermons* (Cambridge: Cambridge University Press, 1992), 23.

⁷² Dr. Robert South to Locke, 22 September 1697, *The Correspondence of John Lock*, VI: 197.

⁷³ Reedy, *Robert South*, 21.

to the Socinian refusal to accept the obvious fact that the human mind was limited in its capacity. On 29 April 1694, South preached “Christianity Mysterious and the Wisdom of God in Making it so.”⁷⁴ The scriptural inspiration for the sermon was I Corinthians 2.7: “but we speak of God’s wisdom in a mystery, the hidden wisdom, which God predestined before the ages to our glory.”

The sermon began by emphasising the limited abilities of the human intellect, when compared to the infinite intelligence of God. “God has hereby vouchsafed us light enough to inform and guide our faith, so he has left darkness enough to exercise it too,” stated South.⁷⁵ He answered the question of “why God should deliver to mankind a religion so full of mysteries as the Christian religion certainly is[?]” The nature and being of God was responsible for both mysteries in the Bible, and the limited capacity of human minds, as South explained:

[N]ow God, we know, is an infinite being, without any bounds or limitations of his essence, wonderful in his actings, inconceivable in his purpose, and inexpressible in his attributes; which yet, as great as they are, if severally taken, given us but an incomplete representation of him. He is another world in himself, too high for our speculations, and too great for our descriptions.⁷⁶

Since the Bible is the word of God, he dictated it in accordance with his intellectual abilities. Such abilities, as South noted, were “inconceivable” and “inexpressible.” The inclusion of mysteries, is not a fault with the biblical text, but rather with humanity’s limited reason. Any person, or group, who held up his own reason as the foundation of Christianity, was intoxicated by

⁷⁴ Weinsheimer claims that the English divine Edward Stillingfleet gave a lecture in the same year with exactly the same title “Christianity Mysterious and the Wisdom of God in Making it So”. After searching all available copies of Stillingfleet’s sermons, in the Wing Catalogue of Early English Books, I have been unable to substantiate this. See his *Eighteenth-Century Hermeneutics*, 47.

⁷⁵ Robert South, “Christianity Mysterious and the Wisdom of God in Making it so: Proved in a Sermon Preached at Westminster Abbey, 29 April 1694” in Robert South, *Sermons Preached on Several Occasions* (Oxford: The Clarendon Press, 1833), 378.

self-love. South believed the Socinians to be such a group, as they tried to create, “a new Christianity of their own inventing,” moreover, “these bold persons stand alone by themselves, upon a new bottom, ... spitting upon all antiquity before them...”⁷⁷ For South, knowledge that is sought by reason alone, is the appearance of true knowledge. Only reason coupled with faith in God provides substantive truth. South, no doubt would have agreed with the Psalmist (120:1-2.) who stated: “In my time of trouble I cried to the Lord, and He answered me. Deliver my soul, O Lord, from lying lips. Form deceitful tongue[s].” In conclusion South claimed that every Christian must, “assent to the great mysterious points of our faith: for we know and understand them thoroughly we cannot; but since God has revealed and affirmed them to be true, we may with the highest reason, upon this bare word, believe and assent to them as such.”⁷⁸ Absolute knowledge is not granted during this time on earth, it is saved as a reward for Christians who will ascend into Heaven.

The coincidence of dates—South’s sermon on 29 April 1694 and A_A_’s letter on 30 May 1694, indicating a date for the initial writing of *Christianity not Mysterious*—makes the idea of Toland wishing to refute South tempting. The circumstantial evidence is highly suggestive. Firstly, South delivered the sermon at Oxford, so it is possible that Toland heard it or, at least was familiar with its contents. Secondly, Toland started his work within a month of South’s sermon. Thirdly, the remarkable similarity of the titles, “Christianity Mysterious” and *Christianity not Mysterious* indicates that Toland’s book was the antithesis of South’s sermon. Finally, South’s sermon attacked theological beliefs that Toland had recently learned and continued to hold. There is, however, no concrete evidence that Toland wrote his book with an eye to refuting South.

⁷⁶ *Ibid.*, 382.

⁷⁷ *Ibid.*, 383.

Besides A_ A_, other writers also commented on the rumours of Toland's future book. John Locke, whose influence on Toland was substantial, saw preliminary drafts of *Christianity not Mysteriorious*. As early as 1695, he had read several of Toland's papers, including sections from the forthcoming book.⁷⁹ The evidence for this comes from the exchange of letters between Locke and John Freke. Freke came into possession of some of Toland's writings, by the actions of Toland himself. In a letter written upon his return to England, Toland urged an unknown correspondent to "acquaint Mr FREKE as soon as you see him with the contents" of his latest work.⁸⁰ The first passing reference to Toland was a letter of 29 March 1695, in which Freke brought Toland's work to the attention of Locke.⁸¹ After Locke had read the papers, he responded to Freke.

I thank you for the packet you sent me and the character in it of the gentleman I enquired after. I know not whether Mr T[oland] may not have some reason about the abridgement on the bookselling account, though perhaps it may promote his business too. But whether good or ill in itself or the consequence the book is abroad, and his that buys it, and he [that] has it he may do with it as he pleases.⁸²

This passage demonstrates two things. Firstly, that Locke was aware of Toland's work in 1695. Secondly, and perhaps more importantly, the abridgement of which Locke writes is of his *Essay*. Locke saw that Toland was using the work to support his own philosophy. This is evident in the final sentence: "and his that buys it, and he [that] has it may do with it as he pleases." Freke, however, hoped that Locke would give him a more detailed opinion of Toland's work and wrote as much a week later:

⁷⁸ *Ibid.*, 389.

⁷⁹ John C. Biddle, "Locke's Critique on Innate Principles and Toland's Deism" *Journal of the History of Ideas* 37 (1976): 418.

⁸⁰ John Toland to * * *, January 1694, *A Collection of Several Pieces*, II: 294.

⁸¹ John Freke to John Locke, 29 March 1695, *The Correspondence of John Locke*, V: 318.

⁸² John Locke to John Freke and Edward Clarke, 2 April 1695, *Ibid.*, 324-5.

Accept my thanks for yours of the 8th which I received together with Mr Ts Papers but give me leave to tell you that I hoped you would have said something to me of your opinion both of his tract (I mean as much as you have seen of it) and of the man with respect to the Resolution he seems by his Letters to have taken for my own part I confess I have noe great satisfaction in either.⁸³

Freke made no secret of his disdain for Toland and his future book. Locke's response was more subtle and the subject of some debate.

The debate over Locke's response to Toland's papers centres on his *The Reasonableness of Christianity* (1695). For many years, historians believed that Toland wrote *Christianity not Mysterious* in response to Locke's *The Reasonableness of Christianity*.⁸⁴ The basis for this interpretation was the chronology of the two books, and scholars therefore assumed that Locke's book influenced Toland. With the wider availability of Locke's correspondence, a new view has emerged. It is clear that Locke knew of Toland's book before he wrote *The Reasonableness of Christianity*. It is also clear that Toland's letters show he began work on *Christianity not Mysterious* in early 1694 and was well underway in 1695. Therefore, beginning with the work of historian John Biddle, and supported by others, the consensus is that Locke wrote *The Reasonableness of Christianity* after he had read Toland's papers.

Locke's book was, at least in part a refutation of Toland's as yet unpublished attack on the present state of Christianity.⁸⁵ His criticism of the ideas that Toland would champion is clearly evident in the book. Locke argued that unaided reading of the Bible and assent to Christianity was too difficult for individual believers. An intermediary was required. God

⁸³ John Freke and Edward Clarke to John Locke 9 April 1695, *Ibid*.

⁸⁴ See, for example, Simms, "John Toland (1670-1722)", 308; G. R. Cragg, *From Puritanism to the Age of Reason* (Cambridge: Cambridge University Press, 1966), 140-1; Leslie Stephen, *History of English Thought in the Eighteenth Century* 2 vols (London: Smith, Elder, & Co., 1902), I: 93.

⁸⁵ Biddle, "Locke's Critique of Innate Principles", 411-422. Marshall, *John Locke*, 409.

intended Jesus Christ to be such an intermediary. "The unassisted reason finds it too hard," Locke believed, "'to establish morality in all its parts', so the clear commands of a Saviour king provide a surer way to morality."⁸⁶ In contrast, Toland advocated a personal reading of the Bible without outside assistance. Armed with his Arminian and Socinian teachings, he also believed that human reason was sufficient to know the important workings of Christianity and that God has made this so. Locke dismissed such notions.

God, out of the infiniteness of his mercy, has dealt with man as a compassionate and tender Father. He gave him reason, and with it law, that could not be otherwise than what reason should dictate, unless we should think a reasonable creature, should have an unreasonable law. But considering the frailty of man, apt to run into corruption and misery, he promised a deliverer, whom in his good times he sent; and then declared to all mankind, that whoever would believe him to be the Saviour promised, and take him now raised from the dead, and constituted the Lord and Judge of all men, to be their King and Ruler, should be saved.⁸⁷

The message was clear: left to their own devices, people would not be able to live morally, nor would they be able to achieve salvation. Human reason, upon which Toland based so much of his theology, was not enough. Locke believed God sent Jesus to steer people to the correct Christian life.

Christianity not Mysterious and Locke's Philosophy

No matter how much advance warning is contained in the historical record, Toland's book caught Christian Europe off guard when it was published in 1696. Toland wisely released the book anonymously, but proudly affixed his name to the second printing. From the first page, *Christianity not Mysterious or, A Treatise Shewing, That there is nothing Contrary to Reason, Nor Above it: And that no Christian Doctrine can be properly call'd A Mystery* attacked all that orthodox Christians held true.

⁸⁶ John Locke, *The Reasonableness of Christianity* ed. I. T. Ramsey (1695; reprint, London: Adam & Charles Black, 1958), 23.

⁸⁷ *Ibid.*, 75.

Toland began his book by acknowledging previous work on the idea of mysteries in the Bible: "THERE is nothing that Men make a greater noise about, in our Time especially, than what they generally profess least of all to understand. It may be easily concluded, I mean *the Mysteries of the Christian Religion*."⁸⁸ It was the claims to be authoritative made by ecclesiastical writers who also claimed not to understand what they wrote about that infuriated Toland. He was also concerned about the lack of consistency regarding how such mysteries were read. Moreover, he objected to the use of intermediaries, no matter the form, that were invoked for understanding the supposed mysteries of Christianity. Toland saw three versions of authorities to which Christians were supposed to defer:

Some of 'em say the *Mysteries of the Gospel* are to be understood only in the Sense of the *Ancient Fathers*. ... Others tell us we must be of the mind of some *particular Doctors*, pronounc'd Orthodox by the Authority of the *Church*. ... Others to *one Man* whom they hold to be the Head of the Church universal upon the Earth, and infallible judg[e] of all Controversies.⁸⁹

As an alternative to outside assistance, Toland believed that any individual Christian could read and understand all useful parts of the Bible. All that was required of this solitary reader was the correct use of his reason.

As he would do throughout his book, Toland borrowed extensively from Locke's *Essay*, and the definition of reason is no exception. In the *Epistle to the Reader*, which preceded the *Essay*, Locke promised that people who considered for themselves the truths of the world, would know the same thrill as the hunter who chased wild-game.⁹⁰ In the opening section of his

⁸⁸ John Toland, *Christianity not Mysteriorious: or a Treatise Shewing that There is Nothing in the Gospel Contrary to Reason, Nor above it: and the No Christian Doctrine Can Be Properly Call'd a Mystery* (London, 1696), 1. Hereafter cited as CNM.

⁸⁹ CNM, 2, 3, 4.

⁹⁰ John Locke, *An Essay Concerning Human Understanding* (London, 1690), *The Epistle to the Reader*. I have chosen to use the first edition, rather than a modern edition because it is the one to which Toland referred. References are given by Book, Chapter, and Section.

book, Locke denied that the mind contained any innate principles. By denying the existence of innate ideas, Locke encouraged all people to think for themselves.⁹¹ This personal exploration of the world was done by the accumulation of ideas that came from sensory experience or reflection. An idea, for Locke, was “whatsoever is the object of the understanding when a man thinks...”⁹² Ideas were subdivided into two categories: simple and complex. Simple ideas were those which could not be broken down into anything more primary. In Locke’s words they were: “uncompounded.”⁹³ In opposition, complex ideas were composed of two or more simple ideas. Locke wrote that it was, “from EXPERIENCE; in that all our knowledge is founded, and from that it ultimately derives itself.”⁹⁴ Indeed, the only way that ideas entered the mind was via the senses. Once ideas were accumulated, “the mind comes to reflect on its own operations about the ideas got by sensation...”⁹⁵ The mental reflection upon ideas, led to Locke’s account of both knowledge and reason. Simply put, reason was the mental examination of the “agreement or disagreement of two or more ideas.” Reason was required because, according to Locke: “the greatest part of our ideas are such, that we cannot discern their agreement or disagreement by an immediate comparing them. And in all these we have need of reasoning.”⁹⁶ Therefore, propositions were either: According to Reason, Above Reason or Contrary to Reason. According to Reason, described truths found by “examining and tracing those ideas we have from sensation and reflection, and by natural deduction found to be true or possible.” Above Reason, were such things “whose truth ... we cannot by reason derive from those

⁹¹ Locke, *An Essay Concerning Human Understanding*, Bk. I, 4, 24.

⁹² *Ibid.*, Bk. I, Introduction, 8.

⁹³ *Ibid.*, Bk. II, 2, 1.

⁹⁴ *Ibid.*, Bk. II, 1, 2. See also Ian Tipton, “Locke: Knowledge and its Limits” in *Routledge History of Philosophy*. vol. V, *British Philosophy and the Age of Enlightenment* ed. Stuart Brown (London: Routledge, 1996), 72, 74, 76.

⁹⁵ *Ibid.*, Bk. II, 1, 24.

principles." Finally, Contrary to Reason, "are such propositions as are inconsistent with or irreconcilable to our clear and distinct ideas."⁹⁷ Linked to this definition of reason was Locke's concept of knowledge. One could claim knowledge when he perceived the "agreement or disagreement of any of our ideas."⁹⁸

Locke was troubled by the tendency of people to allow themselves to be led by the examples of others or by "the authority of those whom they consider good and wise," rather than being guided by their own reason.⁹⁹ This was certainly true in the relation of faith and reason. Although Locke did not think reason and faith were opposed, he did think that a separation between faith and reason should precede any religious debate. Many ideas did not require faith. For example, the idea of God did not need faith to make it believable. Nor did it require revelation. Indeed, revelation could not provide "simple ideas" — like the idea of God — that could be had by human sensation or experience.¹⁰⁰ God was known by reason. "Thus the existence of one GOD is according to the Reason; the Existence of more than one GOD, contrary to Reason; the Resurrection of the Body after death above Reason."¹⁰¹ If the idea of God required revelation, it would then be outside the realm of human experience and "quite incomprehensible."¹⁰² Of this fact Locke wrote: "In all Things of this Kind, there is little need for use of Revelation, GOD having furnished us with natural, and surer means to arrive at the Knowledge of them."¹⁰³ Where clear perception existed, revelation was not needed. Revelation, however, was not eliminated from Locke's theology.

⁹⁶ *Ibid.*, Bk. IV, 17, 15.

⁹⁷ *Ibid.*, Bk. IV, 17, 23.

⁹⁸ *Ibid.*, Bk. IV, 3, 1.

⁹⁹ Marshall, *John Locke*, 28-9.

¹⁰⁰ Locke, *An Essay Concerning Human Understanding*, Bk. IV, 10, 1.

¹⁰¹ *Ibid.*, Bk. IV, 17, 23.

¹⁰² Henning Graf Reventlow, *The Authority of the Bible and Rise of the Modern World* (Philadelphia: The Fortress Press, 1985), 274.

¹⁰³ Locke, *An Essay Concerning Human Understanding*, Bk. IV, 18, 4.

In matters that were above reason, such as the fall of angels, or the resurrection of the dead, revelation must be the informative agent.¹⁰⁴ No matter the subject of revelation, it could not contradict human reason.

Toland embraced Locke's epistemology and incorporated it into his philosophy and theology. Indeed, he asserted, reason "is the only Foundation of all Certitude; and that nothing reveal'd, whether as to its *Manner or Existence*, is more exempted from its Disquisitions, than the ordinary Phenomena of Nature."¹⁰⁵ Like Locke, Toland viewed reason as an internal mental power, claiming that:

Every one experiences in himself a Power or Faculty of forming various Ideas or Perceptions of things: Of affirming or denying, according as he sees them to agree or disagree: And so of loving and deferring what seems good unto him; and of hating and avoiding what he thinks evil. The right Use of all these Faculties is what we call Common Sense, or *Reason* in general.¹⁰⁶

To avoid ambiguity in his definition, Toland clarified exactly what did and did not constitute a belief arrived at by way of reason. The key in differentiating the two cases, was the need for internal discourse in one's mind. Toland wrote:

*When the mind, without the Assistance of any other Idea, immediately perceives the Agreement or Disagreement of two or more Ideas, as that Two and Two is Four, that Red is not Blew; it cannot be call'd Reason, though it be the highest Degree of Evidence. For here's no need of discourse or Probation, Self-evidence excluding all manner of Doubt and Darkness.*¹⁰⁷

In cases where the truth was not readily apparent, reason was the deciding element, as Toland explained:

¹⁰⁴ Reventlow, *The Authority of the Bible*, 256-7.

¹⁰⁵ CNM, 6.

¹⁰⁶ CNM, 9.

¹⁰⁷ CNM, 11.

*When the Mind cannot immediately perceive the Agreement or Disagreement of any Ideas because they cannot be brought near enough together, and so compar'd, it applies one or more intermediate Ideas to discover it: ... This Method of Knowledge is properly call'd Reason ...*¹⁰⁸

In the remainder of his book, Toland demonstrated that this process could be used to understand every important concept in the Bible. If Toland's faith in the power of individual human reason was correct, God, the creator of human reason, must intend it to be so. God required his faithful to believe only that which, reason could know: God, "who has enabled us to perceive Things, and form Judgements of them, has also endu'd us with the Power of *suspending our Judgement about whatever is uncertain, and of never assenting but to clear Perceptions.*"¹⁰⁹ Here, Toland states why Christians cannot know the mysteries of the religion. Because mysteries, by their very nature, are not "clear," God did not require their knowledge. Such a statement demonstrates the influence of Locke's *Essay* and Toland's Dutch schooling.

Toland also wished to use his book to answer the following question: if God did not want Christians to understand mysteries, why did the present state of the religion contain them? He believed the sources of mysteries in the Bible had three origins. The first was the Church Fathers. "*Fathers taught 'em to speak, to adore what we cannot comprehend. ... This famous and admirable Doctrine is the undoubted source of all Absurdities that ever were seriously vented among Christians.*"¹¹⁰ As the Christian religion grew, Toland believed that the new hierarchy of authority did not act to make the religion clear and understandable. "The clergy made all things mysterious,

¹⁰⁸ CNM, 12.

¹⁰⁹ CNM, 20.

¹¹⁰ CNM, 24.

so that Christians would have to rely on their explanations.”¹¹¹ To secure, and validate their own importance in the Christian religion, the Catholic clergy made many doctrines mysterious in order to force believers to depend on the established church for interpretations. Toland viewed such dependence as wholly unchristian. The pagans, who converted to Christianity, were the final group at fault for the mysteries that crept into the religion:

When once the *Philosophers* thought it in their Interest to turn *Christians*, Matters grew every day worse and worse: ... And while they pretended to employ their *Philosophy* in Defence of *Christianity*, they so confounded them together, that what before was plain to every one, did now become intelligible only to the Learned.¹¹²

These philosophers took the once simple and clear religion and clothed it in their technical terms and concepts. In short, they made Christianity their own religion, keeping it secret from the masses. Toland wished to make Christianity accessible to the vulgar masses.¹¹³

True Christianity was free from mysteries, just as God intended, because mysteries could not provide any knowledge of the religion.¹¹⁴ “For what I don’t conceive,” Toland wrote, “can no more give me right Notions of God, or influence my Actions, than a Prayer delivered in an unknown Tongue can excite my Devotion.”¹¹⁵ One could gain neither ideas nor knowledge from mysteries and those who claimed differently were mistaken. All knowledge of the Christian religion—including belief in God’s

¹¹¹ CNM, 26. See also Champion, *The Pillars of Priestcraft*, 149; Peter Harrision, ‘Religion’ and the Religions in the English Enlightenment (Cambridge: Cambridge University Press, 1990), 75.

¹¹² CNM, 161.

¹¹³ Toland’s sympathy to the unlearned reader is evident in his explication of philosophical terms that he gives throughout CNM. He states as much in the preface: “I have in many Places made explanatory Repetitions of difficult words, by synonymous Terms of more General and known use. This labour, I grant, is of no benefit to Philosophers, but is considerable Advantage to the Vulgar, which I’m far from neglecting...” CNM, Preface, n.p.

¹¹⁴ Nicholl, “John Toland: Religion Without Mystery”, 63–4.

existence—came from reason and not from any outside source. “For as ‘tis by *Reason* we arrive at the Certainty of God’s own Existence, so we cannot otherwise discern his *Revelations* but by their Conformity with our Notices of him, which in so many words, to agree with our common Notions.”¹¹⁶ As Locke’s *Essay* had taught him, the existence of God was a truth arrived at by the use of reason. To believe that mysteries formed the foundation of Christianity was to believe in nothing, as Toland explained. “A Man may give his verbal Assent to he knows not what, out of Fear, Superstition, Indifference, and the like feeble and unfair, Motives: but as long he conceives not what he believes, he cannot sincerely acquiesce in it, and remains depriv’d of all solid Satisfaction.”¹¹⁷ Therefore, those Christians who believed in the religion because of its mysterious content were not true Christians, because they truly believed nothing.

Toland was convinced that no mysteries existed in the true Christianity, and once this fact was acknowledged, believers could be the Christians God had meant them to be. Then, they would truly believe the Bible, because, “he that comprehends a thing, is as sure of it as he were himself the Author. He can never be brought to suspect his Profession ... The natural Result of what has been said is; That to believe that Divinity of *Scripture*, or the Sense of any Passage thereof without rational Proofs, ... is a blameable Credulity.”¹¹⁸ Such a demand for certainty of belief did not limit the power of God, as would be claimed by Toland’s detractors. “When we say then, that *nothing is impossible with God*, or that he can do all things, we mean whatever is possible in itself, however above the Power of Creatures to effect.”¹¹⁹ What God could not—or would not—do was tell of his acts in

¹¹⁵ CNM, 28.

¹¹⁶ CNM, 30.

¹¹⁷ CNM, 35.

¹¹⁸ CNM, 36.

¹¹⁹ CNM, 40.

anything but plain language. "Whoever reveals anything, that is, whoever tells us something we did not know before, *his words must be intelligible, and the Matter possible*. This rule holds good, let *God* or *Man* be the Revealer."¹²⁰ The Bible was written in accordance with such a rule.

The fact that in its present configuration Scripture was not plain was the fault of the Church Fathers, the Priests, and the Pagans. The belief that the Bible should be free from mysteries was supported in the teachings of Descartes, to which Toland was exposed at Leiden. In his *Meditations on First Philosophy*, Descartes claimed: "I recognize that it is impossible that God should ever deceive me."¹²¹ Toland's Cartesianism was evident when he wrote: "*God not being able to deceive me, as Man is,*" and, "God is not a Man that he should lie."¹²² Therefore, God was no deceiver and "all the doctrines and precepts of the New Testament must be consequently agree with Natural Reason, and our own ordinary ideas." In a statement that demonstrates the influences of Spanheim, Le Clerc, Spinoza and Furly, Toland wrote, "Nor is there any different Rule to be follow'd in the Interpretation of Scripture from what is common to all other Books."¹²³

Toland then shifted the focus of his book to reconsider why people wished to put mysteries in the Bible. Such writers, according to Toland, were "at a Pains to rob themselves (if they could) of their Liberty or Freewill, the noblest of all our Faculties." Blame for such a view was laid at the feet of the "The cunning Priests, who knew how to turn every thing to their own Advantage."¹²⁴ Indeed, "the *Priests* confess'd to the *Initiated* how these

¹²⁰ CNM, 41-2.

¹²¹ Rene Descartes, *Meditations on First Philosophy: With Selections from the Objections and Replies* ed. John Cottingham (Cambridge: Cambridge University Press, 1996), 37.

¹²² CNM, 43, 33.

¹²³ CNM, 49.

¹²⁴ CNM, 70.

Mystick Representations were instituted..."¹²⁵ Therefore, the priests deliberately made the Bible mysterious.

Toland also addressed the extent and type of knowledge that God required of Christians. "*That nothing can be said to be a mystery, because we have not an adequate Idea of it, or a distinct view of all its Properties at once; for then everything would be a Mystery.*"¹²⁶ The question of what constituted an "adequate Idea" of a thing or Biblical passage filled many pages of *Christianity not Mysterious* and influenced Toland's natural philosophy. He argued that God intended humans to use their reason to know all that was important for their time on earth, and allow for their reception in heaven. Such a view had precedent among Anglican thinkers, who advanced similar beliefs, beginning in the 1630s.

William Chillingworth's writings provide an example of an Anglican thinker, who advocated God's desire for people to understand the Bible. Chillingworth (1602-1644) graduated from Trinity College with an MA in logic and mathematics in 1623; by 1628, he was a Fellow of the College. In that year, internal strife within the Anglican Church caused him to renounce both his faith and fellowship.¹²⁷ Finding no solace in a fragmented church, he turned to Catholicism because it was a united Church. He evidently became disillusioned with Roman Catholicism because of its insistence on the absolute authority of priests to read and interpret the Bible.¹²⁸ He marked his return to Protestantism in 1638 with publication of *The Religion of Protestants, a Safe Way to Salvation*, where he stated that God commanded nothing that was unreasonable. In its pages, Chillingworth claimed that the Bible was written for all Christians, not only for the learned. Therefore, God

¹²⁵ CNM, 71.

¹²⁶ CNM, 75.

¹²⁷ Robert Orr, *Reason and Authority: The Thought of William Chillingworth* (Oxford: The Clarendon Press, 1967), 1, 4.

¹²⁸ *Ibid.*, 19.

communicated those doctrines needed for salvation in clear terms, understandable by everyone without the assistance of Catholic priests.

For to say, that when a place of Scripture, by reason of ambiguous terms lies indifferent between divers senses, whereof one is true, and the other false, that God obliges men under pain of damnation, not to mistake through error and human frailty, is to make God a Tyrant; ... the Gospel; which was demanded to be preached, not only to learned men but to all men.¹²⁹

While there may be mysteries in the Bible, Chillingworth believed that no person's salvation depends on understanding them. The influence of these beliefs was substantial, informing all Anglican debates on the clarity of Scripture for years to come.¹³⁰ Toland too was aware of these arguments and built upon them.¹³¹

To illustrate his point, of "adequate Ideas" Toland looked no further than his own desk:

I understand nothing better than this *Table* upon which I am now writing: I conceive it divisible into Parts beyond all Imagination; but shall I say it is *above my Reason* because I cannot count these Parts not distinctly perceive their Quantity and Figure?

"[K]nowing nothing of Bodies but their properties, God has wisely provided we should understand no more of these than are useful and necessary for us, which is all our present Condition needs."¹³² God intended that knowledge, which was needed during this life, was clear and simple to understand. Such a belief extended into Scripture. The useful parts of the Bible were understandable in the fullest sense. To claim that complete understanding of everything was the only form of total knowledge was misguided. "It is

¹²⁹ William Chillingworth, *The Religion of Protestants, A Safe Way to Salvation* (London, 1638), 70-1.

¹³⁰ Reedy, *The Bible and Reason*, 14-5; Barbara J. Shapiro, *Probability and Certainty in Seventeenth-Century England* (Princeton: Princeton University Press, 1983), 80-1.

¹³¹ Robert Rees Evans, *Pantheisticon: The Career of John Toland* (New York: Peter Lang, 1991), 25.

¹³² CNM, 76.

improper therefore to say a thing is above our Reason, because we know no more of it than concerns us, and ridiculous to supersede our Disquisitions about it upon that force."¹³³ "The most compendious Method therefore to acquire sure and useful Knowledge, is *neither to trouble ourselves nor others with what is useless, were it known; or what was impossible to know at all.*"¹³⁴

Toland distinguished between important and unimportant knowledge by borrowing again from the work of Locke. Locke's *Essay* provided much of the conceptual framework for Toland's argument in this section of *Christianity not Mysteriorious*.¹³⁵ Toland made no secret of this fact:

I distinguish after an excellent modern Philosopher, the *Nominal* from the *Real Essence* of a thing. *The Nominal Essence is a collection of those Properties or modes which we principally observe in any thing, and to which we give one common Denomination or Name ... But the real Essence is that intinsick Constitution of a thing which is the Ground or Support of all its Properties, and from which they naturally flow or result.*¹³⁶

The "excellent modern Philosopher" was indeed Locke. In the *Essay*, Locke differentiated between the nominal and real essences of things in the following manner:

'Tis true, there is ordinarily supposed a real Constitution of the sorts of things; and tis past doubt, there must be some real Constitution, on which any Collection of simple Ideas co-existing must depend. But it being evident, that Things are ranked under names into sorts of species, only as they agree to certain abstract ideas, to which we have annexed those names, the Essence of each Genus, or sort, comes to be nothing but that abstract Idea, which the General, or sortal ... Name stands for. And this we shall find to be that, which the word Essence imports, in its most familiar use. Those two sorts of Essence[s], I

¹³³ CNM, 78.

¹³⁴ CNM, 79.

¹³⁵ Peter Byrne, *Natural Religion and the Nature of Religion: The Legacy of Deism* (London: Routledge, 1989), 71-6; David Berman, "Enlightenment and Counter Enlightenment in Irish Philosophy" *Archiv Für Geschichte Der Philosophie* 64 (1982): 148-9.

¹³⁶ CNM, 84.

suppose, may not unfitly be termed, the one Real, the other Nominal Essence.¹³⁷

According to Locke, the real essence made a thing what it was; it consisted of the internal structure, which gave any item its true being. Real essences, however, could never be known because, Locke believed, the tools to know real essences could not exist. Neither human senses nor microscopes were powerful enough to penetrate into the internal structure of things.¹³⁸ All that could be studied were the nominal essences, which were names representing a collection of observed properties. They were concepts used to group things, but they did not necessarily correspond to the unknown real essences, and it was not known whether they describe the real nature of things.¹³⁹ As all knowledge, according to Locke, came from the senses, only nominal essences could ever be known. Although nominal essences need not accurately describe the real essence, Locke did accept a causal relationship between the two. Toland appropriated these ideas and applied them to his own method of biblical exegesis and knowledge about God.

Toland, like Locke, believed that God provided only the capacity to know nominal essences; therefore, He commanded the understanding of only them and not real essences. In Toland's words: "*It follows now very plainly, that nothing can be said to be a mystery, because we are ignorant of its Real Essence, because, since it is no more knowable in one thing than in the other, and it never conceiv'd or included in the ideas we have of things.*"¹⁴⁰ Just as Toland could not become acquainted with the atomic structure of his writing desk, so he could not become acquainted with the real essence of any other thing. Such a limitation was not a fault with the human intellect, but resulted from God's desire for humans to know what was important during this life.

¹³⁷ Locke, *An Essay Concerning Human Understanding*, Bk. III, 3, 15.

¹³⁸ John W. Yolton, *A Locke Dictionary* (Oxford: Blackwell, 1993), 70,72.

¹³⁹ E. J. Lowe, *Locke on Human Understanding* (London: Routledge, 1995), 80.

The same level of understanding also extended to knowledge of God. As Toland explained, there was only a limited amount that could be known about God:

As for GOD we comprehend nothing better than his Attributes. We know not, it's true, the Nature of that eternal *Subject* or *Essence* wherein Infinite Goodness, Love, Knowledge, Power and Wisdom coexist; but we are no better acquainted with the *real Essence* of any of his Creatures.¹⁴¹

This position had profound implications for theology and biblical criticism. For Toland, knowledge of nominal essences was sufficient for this life. Knowledge of real essences, the understanding of which God did not command, was not. By Toland's argument, God and his internal constitution could not be any more mysterious than his writing desk. "[T]he *Divine Being* himself cannot with more Reason be accounted *mysterious* in this Respect, than the most contemptible of his Creatures."¹⁴²

By pointing to God's desire for humans to use reason to achieve an understanding of only nominal and not real essences, Toland freed Christianity from mysteries, at least to his own satisfaction. He then began to conclude his book. He was confident in his success. "Any single Passage to my purpose should, one would think, give sufficient Satisfaction to all *Christian* Lovers of Truth: for the Word of God must be everywhere uniform and self-consistent." Furthermore, "I should read the *Gospel* a Million of Times before the Vulgar Notion of *Mystery* could ever enter into my Head."¹⁴³ He was careful, however, to state that God could have included mysteries into Christianity.

But 'tis affirm'd that God has a *Right to require the Assent of his Creatures to what they cannot comprehend*; and, questionless, he may

¹⁴⁰ CNM, 85.

¹⁴¹ CNM, 88.

¹⁴² CNM, 89.

¹⁴³ CNM, 130.

command whatever is just and reasonable for to [do otherwise is to] act Tyrannically do's only become the *Devil*. But I demand to what end should God require us to believe what we cannot understand?¹⁴⁴

God simply would not put mysteries into the religion: because God was good, and would not lie, he commanded nothing that was not understandable by all Christians, without the aid of any intermediaries such as priests. The true form of Christianity, the one that existed before the ambition of priests, was simple and pure. This was the religion of Jesus and his first followers. "His Disciples and Followers kept to this Simplicity for some considerable time, tho very early divers Abuses began to get footing amongst them."¹⁴⁵ This long lost simplicity was the "noblest Ornament of the Truth." In the last few pages of the book, Toland made his clearest statement on mystery and Christianity.

I'm fully convinced of myself that there is no MYSTERY in CHRISTIANITY, or the most perfect *Religion*; and that by Consequence nothing *contradictory* or *inconceivable*, however made an *Article of faith* can be contained in the *Gospel*, if it really be the Word of God.¹⁴⁶

Toland was not so naive to think that his book would be accepted without problems. He knew that it would be poorly received by those people whom he singled out as corrupters of the Bible. Such reactions did not bother him, because he wrote from the belief that his book was a service to Christianity. "Some will not thank me it's probable, for so useful an Undertaking' and others will make me a *Heretick* ... But as it is to Duty and no Body's Applause which is the rule of my Actions ... I acknowledge no other ORTHODOXY but the TRUTH..."¹⁴⁷ As a closing note, Toland

¹⁴⁴ CNM, 143.

¹⁴⁵ CNM, 158.

¹⁴⁶ CNM, 174.

¹⁴⁷ CNM, 174-5.

defended what he had written, by identifying himself with sixteenth-century reformers.

But it is visible to every one that there are the *Contradictions* and *Mysteries* unjustly charg'd upon Religion, which occasion so many to become *Deists* and *Atheists*. And it should be considered likewise, that when any, not acquainted with it, are dazl'd by the sudden Splendor of the *Truth*, their number is not comparable to theirs who see the light. Because several turned *Libertines* and *Atheists* when Priestcraft was so laid open at the *Reformation*, were *Luther*, *Calvin* or *Zwinglius* to be blamed for it?¹⁴⁸

Hostile Reception

Toland was right to be cautious about the reception of his book. The most severe response came from his native Ireland. Toland returned home, from England, to hear himself attacked from the Catholic pulpit.¹⁴⁹ Ireland did not have legislative protection for religious dissenters comparable to England's Toleration Act (1689). Therefore, Toland faced the possibility of corporal punishment. In mid-August, of 1697 *Christianity not Mysteriorious* was brought to the attention of the Irish government. The Committee of Religion, which was composed of Irish Catholics, ruled on the fate of both Toland and his book. "[O]n Saturday the 14th day of August, it was moved in the Committee of Religion, that the Book entitul'd *Christianity not Mysteriorious* should be brought before them."¹⁵⁰ After deliberating for three weeks on the heretical nature of the book, the Committee rendered its decision. Their verdict of 9 September stated

That the book entitul'd *Christianity not Mysteriorious*, containing several Heretical Doctrines contrary to the Christian Religion and the established Church of Ireland, be publickly burnt by the hands of the Common Hangman. Likewise, That the Author thereof John Toland

¹⁴⁸ CNM, 176.

¹⁴⁹ Stephen H. Daniel, "The Subversive Philosophy of John Toland" in *Irish Writing: Exile and Subversion* ed. Paul Hyland and Neil Sammells (New York: St. Martin's Press, 1991), 1.

¹⁵⁰ John Toland, *An Apology for Mr. Toland, in a Letter from Himself to a Member of the House of Commons in Ireland; Written the Day Before his Book was Resolv'd to be Burnt by the Committee of Religion* (London, 1697), 22.

be taken into the Custody of the Serjeant at Arms ... and be prosecuted by Mr. Attorney General for writing and publishing the said book.¹⁵¹

In his account of these events, Toland noted that he took "care" to prevent his arrest by fleeing and returning to England. His book was not so fortunate. The sentence was carried out on 11 September "before the Parliament-House Gate, and also in the open Street before the Town-House; the Sheriffs and all the Constables attending."¹⁵² The burning of the book was the least radical punishment proposed by the Committee.

In the Committee it was moved by one that Mr. Toland himself should be burnt, as by another that he should be made to burn his book with his own hands; and a third desir'd it should be done before the Door of the House, that he might have the pleasure of treading the Ashes under his feet.¹⁵³

Many theologians both English and Irish, who attacked Toland did so in writing; their works appeared almost immediately.¹⁵⁴ Most of the refutations addressed Toland's definitions and the title of the book, along with the similarities of his views to Socinianism.¹⁵⁵ Not one of the writers challenged Toland's conception of God.

Edmund Elys (ca. 1634 – ca. 1707) produced an early anti-Toland tract. Elys had succeeded his father, also Edmund, in the rectory of Allington. Due to reasons that have not survived, Elys was in 1659 made a prisoner of Major Blackmore in Exeter for being an enemy of the Commonwealth. Elys continued in his provocative ways refusing to take the oaths when William III took the English crown in 1689. Although not a member of their religion,

¹⁵¹ Quoted in Toland, *An Apology*, 24.

¹⁵² Toland, *An Apology*, 24.

¹⁵³ Quoted in Toland, *An Apology*, 25.

¹⁵⁴ There were over fifty refutations of Toland's book. See Robert Todd Carroll, *The Common Sense Philosophy of Religion of Bishop Edward Stillingfleet 1635-1694* (The Hague: Martinus Nijhoff, 1975), 50.

¹⁵⁵ Nicholl, "John Toland: Religion Without Mystery", 60.

Elys wrote several favourable pamphlets about the Quakers.¹⁵⁶ His criticism of Toland centred on the definition of “reason.” Elys believed that

This is no Definition of Reason, but an inadequate Description of the Humane Intellect or Understanding. Essential Reason is Infinite Wisdom or Knowledge absolutely perfect of Being absolutely infinite. Being absolutely Infinite Communication it self to the Humane Understanding, produces that Conception which we call the idea of God.¹⁵⁷

According to Elys, reason and the Bible never come into conflict. Perception of such a conflict was the construction of philosophers too in love with their own minds. “We do not say that the Reason and the Gospel do ever seem to clash, or to contradict one another, but only to those Men, who by the Perverness of their Will, averting it self from the Divine Goodness.”¹⁵⁸ It was to the divine goodness of God that philosophers should defer, not to their own limited minds. Even if Toland was correct and God was not a mystery, it did not make Him any less mysterious.

But the clearest Revelation we have of him does not make him cease to be a Mystery. Great is the Mystery of Godliness. God was manifest in the flesh, &c. the Son of God is revealed, not only as the Object of our Knowledge, but also of our everlasting Admiration.¹⁵⁹

Humanity could not grasp the infiniteness of God, therefore, Elys believed he had sufficiently dealt with this amateur theologian. However, he was not the last to challenge Toland’s book.

Some writers were extremely offended by the title of Toland’s book. It was the boldness of Toland’s statement—there were no mysteries in Christianity—which angered some authors. For example, Thomas Beverley (fl. 1670-1701), stated that his reaction was due to

¹⁵⁶ “Elys, Edmund” *Dictionary of National Biography*, VI:768-9.

¹⁵⁷ Edmund Elys, *A Letter to the Honourable Sir Robert Howard: Together with Some Animadversions Upon a Book Entitled, Christianity not Mystrious* (London, 1696), 8.

¹⁵⁸ *Ibid.*, 9.

The Boldness, and the Insolency of the Frontispiece, so very Contemptuous, and even Contradictory to the Constant Language of the New Testament Styling the Gospel, Mystery, and its Truths, Mysteries; whilst that openly bears out, Christianity not Mysterious; this favours of Too mean an Esteem of Sacred Stamp, and Superscription, and the Images it gives of things, and Highly Countenance Anti-scripturism, which yet the Writer would appear not to have any favour for.¹⁶⁰

Beverley was certain that the Bible was written in "Constant Language" which may contain mysteries, but this was as God intended. The Bible was written in the one consistent language of God, no one part was any more difficult to understand than was another. It conformed to His intellect and not that of mortal Christians. The fact that it was not readable in its entirety, meant that God wished some things withheld from humanity. According to Beverley, Christianity was "Originally [a] Mystery, should be always so, till such a state of Perfect Comprehension; as wherein All Mystery shall be Finished."¹⁶¹ This life was not the time for full revelation. Heaven was the only place where full knowledge existed. On Earth, there were indeed mysteries in the religion, but they only existed in the human mind. "Now if reason be taken in this limited sense, there may be, and, as things are, there must be mysteries; But if a Supreme Absolute sense, it is certain; as there can be no Truth Above Divine Reason, so there can be no mystery."¹⁶²

Peter Browne (d. 1735) also addressed the title of the book and Toland's supposed heresy of equating his understanding to that of God. After his education, Browne became a fellow of Trinity College, Cambridge. His attack on Toland was his first published work. Before this refutation, Browne was an unknown, but afterwards he became a religious celebrity. His

¹⁵⁹ *Ibid.*, 13.

¹⁶⁰ Thomas Beverley, *Christianity the Great Mystery. In Answer to a Late Treatise, Christianity not Mysterious* (London, 1696), 3-4.

¹⁶¹ *Ibid.*, 7.

¹⁶² *Ibid.*, 10.

new fame resulted in his appointment as Bishop of Cork and Ross in 1710, an appointment that Toland would later claim was due solely to his book.¹⁶³

Like Beverley, Browne reacted strongly to the title of Toland's book and scrutinised its various parts to prove its falsity. He began with the words "Christianity" and "Mysterious."

For by those two words, as it appears by what follows, he wo'd raise a Notion in the Heads of People that Christianity, as it is now generally taught and reciev'd among us, is a Religion made up of dark aenigmatical Allusions, and absurd irrational and unintelligible Notions; or else of the plainest things wrapt up in mysterious Rites and Ceremonies; an in short, that our most holy faith, is no other than one great Riddle. ... Whereas Christianity is so far from being Mysterious, that it is the plainest Institution in the World.¹⁶⁴

Here Browne misreads Toland, but only partially. Nowhere in his book did Toland claim that Christianity was "made up of dark aenigmatical Allusions." He did, however, intend to state that it was "wrapt up in mysterious Rites and Ceremonies." In part, Browne created a straw man, but he was clothed in some truth. The subtitles fared no better. The phrase in question read: *or, a Treatise Shewing, that there is nothing in the Gospel contrary to Reason*. Browne answered: "Who among us ever said that there was?" He, like Beverly, probably took "contrary to reason" to mean contrary to God's reason. Browne viewed the addition of this subtitle as having less to do with theology than it did with publishing concerns. "But if it had not been added, his book wo'd have been shorter by Fourteen Pages; and were it not for this, and many other things in it, as to little purpose, it had been only a stitch Pamphlet, ..." ¹⁶⁵ Therefore, Toland did not have any legitimate concerns, he only wished to make his writings a book-length treatise.

¹⁶³ "Browne, Peter" *Dictionary of National Biography*, III:53-4.

¹⁶⁴ Peter Browne, *A Letter in Answer to a Book Entitled Christianity not Mysterious* (Dublin, 1697.), 7.

¹⁶⁵ *Ibid.*, 9.

Jean Gailhard (n. d.) also viewed Toland's book as misguided. Gailhard, a Huguenot, was a professor of theology at Toland's alma mater, the University Leiden, having fled France after the revocation of the Edict of Nantes in 1685.¹⁶⁶ The refutation of Toland's views appeared as part of Gailhard's *The Blasphemous Socinian Heresie Disproved and Confuted, with Animadversions upon a late Book Call'd Christianity not Mysteriorous*. Clearly, he saw Toland as a Socinian, as his strategy of attack demonstrates. He attacked Toland on the grounds that he understood human reason to be very limited, an interpretation which clashed with how he viewed Toland's "Socinian" definition of reason. He did however, agree with Toland that reason had an important role in religion. The disagreement centred on the question of the contingency of that reason. Whereas Toland believed that reason was based on one's own experiences and inner thoughts, Gailhard advanced the view that reason was completely subservient to Scripture. "We agree with him against all human Authority, contrary to the Word, and own Scripture to be the only competent Judge, and allow of our Reason, as long as it draweth out of that Spring, and not otherwise."¹⁶⁷ The deferral to God did not destroy human reason it was the duty of all good Christians. Gailhard explained that people, "must depend upon divine reason, or else 'tis blasphemously to deny there is more of and better Reason in God than in Man; so we must own that there is in God more good reason than in us...."¹⁶⁸ Again, the refutation involves a misreading of Toland's intent. Toland did not say that human reason was superior or equal to divine reason. He did, however, claim that when God revealed anything he did so in clear terms that were knowable by human reason. It was not the strength of human reason

¹⁶⁶ H. J. De Jonge, "The Study of the New Testament in Leiden University" in *Leiden University in the Seventeenth Century*, 66.

¹⁶⁷ Jean Gailhard, *The Blasphemous Socinian Heresie Disproved and Confuted, with Animadversions upon a late Book Call'd Christianity not Mysteriorous* (London, 1697), 315.

¹⁶⁸ *Ibid.*, 316.

that Toland emphasised; rather it was the benevolent nature of God. He certainly believed in the competency of human reason.

After he attacked Toland on theoretical grounds, Gailhard turned to specific criticisms. It was the claim on page eighty-one of *Christianity not Mysteriorious* that most concerned him. There Toland had written: "I conclude that neither God himself, nor any of his attributes, are Mysteriorious to us for want of an adequate Idea: no, not Eternity. The mysterious Wits do never more expose themselves than when they treat of eternity in particular." Gailhard turned to an old axiom – what is finite cannot know that which is infinite – when he wrote: "His conclusion is false, that neither God nor Eternity, are Mysteriorious to us: But Certainly the finite cannot know the infinite..."¹⁶⁹ Matters such as infinities were concepts that were unknowable to reason but still had to be believed. To claim that such things were mysteries and therefore did not require belief was clearly false, as Gailhard explained.

They Profess not to believe the Mysteries in Religion, because their Reason cannot understand them, but there are such things as we cannot comprehend, yet must believe them, even for the same reason that we cannot comprehend them; Infiniteness is an essential attribute of God, yet that Infiniteness which God is infinite, is every way incomprehensible to me, and my very Reason...¹⁷⁰

Just as earlier theologians had stressed the limits of human reason, Gailhard had done the same in his refutation of Toland.

The emphasis on human reason perceived in Toland's book also caught the attention of John Norris (1657-1711). Norris graduated from Exeter College with a BA in 1680 and an MA four years later. He was active

¹⁶⁹ *Ibid.*, 323. Pierre Gassendi levied the same claim in his critique of Descartes' *Meditations*. He believed that: "the human intellect is not capable of conceiving of infinity, and hence it neither has nor can contemplate any idea representing an infinite thing." Quoted in Descartes, *Meditations*, 81.

¹⁷⁰ Gailhard, *The Blasphemous Socinian Heresie*, 329.

in the scholarly community corresponding regularly with the Cambridge Platonist Henry More. Norris' work was coloured by his interest in the various aspects of Platonic thought. This is evident in his belief that ideas in the human mind were the same as those in God's mind. God had an infinite number of these ideas, while humans had only a limited number of them.¹⁷¹ Norris' belief in perfect prototypes of earthly beings led him to be very critical of heterodoxy in religion. Such people were unfaithful to the worldly version of the perfect faith, that of Catholicism.¹⁷² Norris' book directly addressed *Christianity not Mysteries*, calling it "one of the most Bold, daring and irreverent pieces of Defiance of the Mysteries of the Christian Religion that even this Licentious Age has Produced." Although retired from official ecclesiastical duties, Norris felt compelled to challenge what he viewed as a rational assault on orthodox Christianity. Such an attack was causing him "a troublesome and uneasie thought in my private Retirement."¹⁷³ According to Norris, people like Toland thought too highly of their intellectual abilities. "[I]n one word, that either they Humanize God, or Deify themselves and their own Rational Abilities."¹⁷⁴ This elevation of reason led to an argument on the part of these philosophers, that Norris has only begun to understand.

By this Analysis of their argument into its Principles, it is plain, that this their Reason of disbelieving the Mysteries of the Christian Religion, viz. Because they are above their Reason, does at last resolve into this, That their Reason is the Measure of all Truth, and that they can comprehend all things.¹⁷⁵

Such a view of reason was pervasive amongst orthodox Christians. For example, a book attributed to Francis Cheynell adopted this

¹⁷¹ J. A. Redwood, *Reason, Ridicule and Religion: The Age of Enlightenment in England 1660-1750* (London: Thames and Hudson, 1976), 57-9.

¹⁷² "Norris, John" *Dictionary of National Biography*, XIV: 577-9.

¹⁷³ John Norris, *An Account of Reason & Faith: In Relation to the Mysteries of Christianity* (London, 1697), 7.

¹⁷⁴ *Ibid.*, 10.

¹⁷⁵ *Ibid.*, 12.

interpretation of the arguments presented in *Christianity not Mysterious*. Cheynell could not have written the book, however, as he died in 1665, thirty-four years before the appearance of Toland's book. The unknown author was concerned that Toland placed no limits or restrictions upon human reason. He was especially worried about what Toland defined as being contrary to reason.

[H]e introduces us with a Description of what is contrary to Reason, [viz. What is evidently repugnant to clear and distinct Ideas, or to out common notions, is contrary to Reason.] Now truly this I think is very lame, imperfect, or at least fallacious Description, unless it be balanced with some Limitations and Restrictions.¹⁷⁶

The promotion of human reason earned Toland the author's scorn. He criticised Toland's denying mysteries because of human reason. Following the same line of argumentation as other critics, he emphasised the limited nature of human reason in matters of religion.

In a word, Mystery is something shut up from our View of Cognizance, and it is not material whether this be done by a veil or other Impediments or obstructions; and consequently Mystery and an inadequate idea may be very consistent; I do not mean, that which arises from affected Ignorance, but the Intricacy of the Object, and the Weakness of Humane Reason under its highest Improvements.¹⁷⁷

The message was the same: human reason was limited in both scope and capacity. Any philosopher who denied this was only fooling him or herself.

Toland's Reaction

Were such interpretations of Toland's book accurate, and how did Toland respond to such criticisms? The first public response that Toland gave those writers who attacked his work came on the heels of the decision of the Irish Parliament to burn his book. Toland restated the claim he made in the

¹⁷⁶ Francis Cheynell[?], *The Christian Belief: Mysteries; in Answer to a Book Intituled Christianity not Mysterious* (London, 1696), 33.

¹⁷⁷ *Ibid.*, 65.

closing pages of *Christianity not Mystrious*, that his purpose was to defend Christianity, not to destroy it. He referred to himself in the third person when he stated: "When the Christian Religion is attack'd by Atheists and others, they constantly charge it with Contradiction or Obscurity; and Mr. Toland's design in the Publication of his Book was to defend Christianity from such unjust Imputations...."¹⁷⁸

Toland also addressed several writers, such as Gailhard, who identified him with the Socinians.¹⁷⁹ Toland took great care to distance himself from this heresy. Indeed, he quoted from a Socinian book to prove that they did not accept him or his book as supporting the their cause. The statement centred on a critique of Toland made by the Bishop of Worcester, who claimed Toland was a Socinian by virtue of the argument in *Christianity not Mystrious*. The Socinians jumped to Toland's defence.

I know not what it was to his Lordship's purpose to fall upon Mr. Toland's Book. But if he would needs attack the Book, he should have dealt with it fairly. He should have discuss'd the main Argument in it, and not carpt only at a few passages; and those too so mangl'd and deform'd by his Representation of them, that I dare to affirm that Mr. Toland does not know his own Book in the Bishop's Representation of it.¹⁸⁰

The Socinian defender, in this case was Toland's acquaintance at Oxford Stephen Nye, who was concerned that the attention paid to Toland's book prevented due care being given to books that *were* meant to defend Socinian doctrines:

Do we offer this Book against the Trinity of the Realists? Was it written with the intention to Serve us? Does it contain any of our Allegations from Reason, against the Trinity of Philoponous, Joachim, and Gentiles? We desire him [Worcester] to answer to the Reason in

¹⁷⁸ John Toland, *An Apology for Mr. Toland*, 27.

¹⁷⁹ See Gerard Reedy, "Socinians, John Toland, and Anglican Rationalists" *Harvard Theological Review* 70 (1977): 289, 296, 303.

¹⁸⁰ Stephen Nye, *The Agreement of the Unitarians with the Catholick Church* quoted in Toland, *An Apology for Mr. Toland*, 42.

our own books against the Trinity of the Tritheists. But to those he says no word, but only falls upon Mr. Toland's book; in which, or for which we are not in the least concern'd.¹⁸¹

Toland took such misrepresentation of his book in stride. He knew his true purpose. As he had stated in his book, he saw his project of cleansing Christianity as a continuation of the Reformation. The criticisms levelled at his book and the misrepresentation of it was the cross that men like Luther, Calvin, and himself had to bear:

The first reformers, were treated after the same manner by the Church of Rome; and when they could not seize their person, they never failed to load 'em with horrid, black, and monstrous Aspersions ... Thus we read such accounts of Luther and Calvin's Lives publish'd by the monks of those times, as paint 'em worse then Devils, and that makes their Doctrine as different from what we know it to be, as the Historians were from telling the Truth.¹⁸²

Toland's apology for himself did not put a stop to criticisms of his work. A second defence of his work appeared a few months after the first. Toland again referred to himself in the third person. "Some time ago you obliged the World with a Book, Entitled *Christianity not Mysteious*, which I perceived has given abundance of offence here in England, and has drawn upon you the censure of the Irish Parliament."¹⁸³ He still believed that the hardship with which greeted his book was due to misreading of his argument.

I am very much disposed to believe that, if they had not been too much prejudiced to read it over with due care and attention, and wanted patience to stay for the other parts you promised, they would hardly have conceived such terrible apprehensions of your performance, and consequence would have been more moderate in their resentment.¹⁸⁴

¹⁸¹ *Ibid.*, 43.

¹⁸² Toland, *An Apology for Mr. Toland*, 45.

¹⁸³ John Toland, *A Defence of Mr. Toland in a Letter to Himself* (London, 1697), 1.

¹⁸⁴ *Ibid.*, 2.

The strongest reaction to his book, according to Toland, was from the priests whose place in Christianity he attacked. Such criticism were expected. "I know very well that they are Heathen and Popish Priests, that are commonly exposed insulted in this manner."¹⁸⁵ As these were the men, who had introduced mysteries into the Bible, Toland was not worried if they did not embrace his book. Indeed, Toland found many mysteries in their works too. "For my part, I never read any one of our English Divines who talks of any Mysteries, which upon consulting the Scriptures, I did not find to be Mysteries there as well in his book."¹⁸⁶ This criticism demonstrates that Toland's rebuttals were less philosophical than in his first response and were becoming more personal. He felt that the first work was a sufficient defence. He wished his critics to realise this too. "Your late Apology for yourself, which is the only thing extant that is certainly yours, and remains to be considered, is written in such a manner as needs no further defence."¹⁸⁷ However, many writers misrepresented not only Toland's book, but also his religious affiliations. These unnamed writers made the same assessment of Toland as A_ A_ had three years earlier:

When they consider well what laudable pains you have taken to rid yourself of the first errors and prejudices of your education, they may probably be under the temptation to fear, lest in throwing off Popery, you might strip a little too far, and not leave your felt religion quite enough.¹⁸⁸

Toland took the opportunity afforded him in his defence to state again his "felt religion." In the first defence, Toland claimed he was following in the footsteps of Luther. In this subsequent version, he wrote that he might have sympathies with the Deists:

¹⁸⁵ *Ibid.*, 10.

¹⁸⁶ *Ibid.*, 11.

¹⁸⁷ *Ibid.*, 13.

¹⁸⁸ *Ibid.*, 14.

But when they mean you are look'd upon to be a Deist, or at best a narrow scanty believer of Revelation; when they assure me that not only the Priests, and some of the bigoted People that they are rid of them, have this opinion of you, but that the Deists themselves take you to be of their interests ... I should chuse rather to support that your intimate conversations with Deists and Libertines, and your seeming compliance with some of their opinions was by mistaken policy carried on, and continued with the design of winning them over to the Christian Faith...¹⁸⁹

This is exactly the purpose stated in *Christianity not Mysteries*, to win back the Deists to Christianity, which was done by demonstrating that the true version of the religion was free from mysteries.

Toland, however, did not write all of the defences of his book. In 1698, *A 2nd Apology for Mr. Toland* appeared. The title suggested Toland himself was the author, but the contents suggest that he was not. The unknown author stated his purpose as:

I intend to Apologize for at this time is a Book entitled *Christianity, &c.* and to wipe off, as well as I can, those causeless aspersions which many people have thrown upon it, and tho' it has been committed to the Flame in another Country, yet I don't doubt but I shall vindicate it from the ill opinions of my Countrymen...¹⁹⁰

The strategy that the author used to defend Toland was not to defer to the merits of human reason or the continuation of Reformation ideals – which was the path chosen by Toland. *Christianity not Mysteries'* heretical content was attributed to childish ways. Readers had to be patient with Toland's youthful expressions, because once he was sufficiently mature, he would recognise the error of his ways. In the authors own words:

In short, that I may now at last come in good earnest to make good the Title, I do say that Mr. Toland ought to be forgiven his Ignorance, Conceitedness, and want of Learning, since he is a young man; and if he hath aim'd at what he has not perform'd you should not be angry

¹⁸⁹ *Ibid.*, 16-7.

¹⁹⁰ Anonymous, *A 2nd Apology for Mr. Toland* (London, 1698), 3.

with him on that score, for he will mend one time or other, and grow either better or worse.¹⁹¹

Toland did not outgrow his heretical ways as the unknown supporter wished. Indeed, he continued in his controversial activities.

Further Apologies

Although the initial flurry of responses subsided towards the beginning of the eighteenth century, Toland remained on the defensive about the views he presented in *Christianity not Mysteriorious*. As the heretical nature of his book became widely known, Toland's former acquaintances took care to distance themselves from it. Jean Le Clerc, from whom Toland had learned much during his time in Holland, stated that he had no recollection of his former associate, though perhaps he had met Toland, but then only once.¹⁹² The reaction of Locke, whose *Essay* provided much of the conceptual framework for Toland's philosophy, was evident in his correspondence with William Molyneux. Locke was certainly aware of Toland's book; he owned a copy of it, along with two of Toland's apologies.¹⁹³ Molyneux was a philosopher from Dublin whom Locke had befriended after the former had been at pains to praise Locke's *Essay*. In 1692, Molyneux suggested some improvements that Locke included in the revised edition of the *Essay*, in a new chapter on identity.¹⁹⁴

Their exchange of letters in the spring and early summer of 1697 began with Molyneux's discussion of philosophers who had misused Locke's *Essay*, particularly, "the Author of Christianity not Mysteriorious ... his Name is Toland..."¹⁹⁵ Molyneux, who was in Ireland at this time, invited Toland to

¹⁹¹ *Ibid.*, 25.

¹⁹² Sullivan, *John Toland and the Deist Controversy*, 11.

¹⁹³ John Harrison and Peter Laslett, *The Library of John Locke* (Oxford: Oxford University Press, 1965), 250. (Item numbers: 2935, 2937, 2940.)

¹⁹⁴ Marshall, *John Locke*, 401.

¹⁹⁵ William Molyneux to John Locke, 16 March 1697, *The Correspondence of John Locke*, VI: 40-1.

his home. He found Toland to be a "Candid Free Thinker and a Good Scholar."¹⁹⁶ His opinion, however, changed as he spent more time with the Irish outcast. He became dismayed by Toland's outspoken personality, and complained to Locke: "He [Toland] raised against him the Clamours of all Partys; and this is not so much by his Difference in Opinion, as by his Unreasonable Way of Discoursing, Propagating, and Maintaining it. Coffee-houses and Publick Tables are not proper Places for serious Discourses...." In addition to these actions, "Mr T. also takes here a great Liberty on all occasions to vouch your Patronage and Friendship...."¹⁹⁷ Locke's reply revealed not only his hard feelings towards Toland, but Locke's desire to be distanced from him: "I must tell you, that he [Toland] is a man I have never writ in my life, and, I think, I shall not now begin. And, as to his conduct, 'tis what I never so much as spoke to him of."¹⁹⁸

Toland's theological views also disappointed his former patrons. Members of the Scottish Presbyterian party which had financed his Dutch studies removed themselves from the shrinking list of Toland's friends.¹⁹⁹ Toland's book proved too controversial for people to allow themselves to be even remotely associated with its author.

His new found isolation did not deter Toland from continuing to lash out against those who attacked his book. In 1698, Toland temporarily changed his tactic of rebuttal, though only slightly. Rather than correcting misreadings of his argument, he challenged the censoring of the press, which prevented his ideas from attaining a wider readership. In 1697, the "Act for the Effectual Suppressing of Blasphemy and Profaness" was made British law.²⁰⁰ In defence of his book and others like it, Toland argued that it was not

¹⁹⁶ Molyneux to Locke, 6 April 1697, in *Ibid.*, 83.

¹⁹⁷ Molyneux to Locke, 27 May 1697, in *Ibid.*, 132-3.

¹⁹⁸ Locke to Molyneux, 15 June 1697, in *Ibid.*, 143.

¹⁹⁹ Daniel, *John Toland*, 96.

²⁰⁰ David Berman, *A History of Atheism in Britain: From Hobbes to Russell* (London: Routledge, 1990), 35.

the job of the government to keep ideas from their subjects; rather it was the function of human reason to protect readers from superfluous arguments. Toland emphasised this point in *A Letter to a Member of Parliament, shewing that Restraint on the Press is Inconsistent with the Protestant Religion* (1698). Reason, as he had stated in *Christianity not Mysteriorious*, was what

[M]akes a man to differ from a Brute, wholly incapable of forming any Notion of Religion, in his Reason; which is the only Light God has given him, not only to discover that there is a Religion, but to distinguish the true from the many false ones. He therefore that employs his Reason to the best of his Ability to find out Religious Truth, in order to practice it, does all that God desires: for God, who will not command Impossibilities, can require no more of him...²⁰¹

In other words, God wished people to use reason to know what was true and what was false. It was not the job of intermediaries to do so whether they were individuals or government institutions. On the utility of reason Toland claimed: "God has oblig'd us to use it as the only means to distinguish Truth from Falsehood, that alone must be the way to find one and avoid the other."²⁰² He believed it was "wholly owing to printing, that knowledge is become, not only more diffusive, but the great deal or more useful Knowledge has been discovered..." The use of printing was a most effective way to battle superstition and falsity, especially in matters of religion. There was no improvement in knowledge, however, where the press was restricted. To prove the value of a free press, Toland again turned to the example set by the reformers of the sixteenth century. Martin Luther's challenge of the Catholic Church inspired Toland in this matter.

This the brave Luther did singly and by himself in defiance of this whole Church, and this any Man now hath the same right to do: So that it's evident the Freedom or Restraint of the Press depends on the

²⁰¹ John Toland, *A Letter to a Member of Parliament, Shewing that Restraint on the Press is Inconsistent with the Protestant Religion* (London, 1698), 3.

²⁰² *Ibid.*, 4.

Single Question, Whether we ought to be free, or Slaves in our Understanding?²⁰³

The application was different, but Toland's argument remained the same: no person should submit his or her intellect to the authority of another; reason was the only judge of truth, as God intended. God meant for individual people to know what was important, there was no place for intermediaries.

Toland did not limit his writings to his own situation; he also commented on the contemporary political scene. In 1701, Toland's *Anglia Libera* appeared in bookstores. The work included a defence of the newly decried Act of Settlement.²⁰⁴ The Act gave the Electors of Hanover legal title to the English crown by virtue of their being the closest Protestants to the line of succession.²⁰⁵ Toland's favourable review of the Act earned him a place in the mission, led by Lord Macclesfield, to present it to the Electress Sophia in Hanover. There is some debate over whether Toland was an official member of the mission. He may have been merely part of the entourage.²⁰⁶ Whatever his status, Toland travelled with the delegation and took advantage of this opportunity to cultivate a friendship with Sophia, much to the displeasure of Macclesfield. Sophia looked favourably on this unusual English philosopher and presented him with several medals of substantial value and paintings of herself and her young prince.²⁰⁷

Returning to England, with the memory of his new companion still fresh in his mind, Toland was again forced to defend *Christianity not*

²⁰³ *Ibid.*, 11.

²⁰⁴ Sullivan, *John Toland and the Deist Controversy*, 16; Gavina Luigia Cherchi, "Atheism, Dissimulation and Atomism in the Philosophy of John Toland" (PhD diss., The Warburg Institute, University of London, 1994), 14.

²⁰⁵ "Hanover Succession" in *The Columbia Companion to British History* ed. Juliet Gardiner and Neil Wenborn (New York: Columbia University Press, 1997), 365.

²⁰⁶ Cf. Alan Harrison. "John Toland and the Discovery of an Irish Manuscript in Holland" *Irish University Review* 22 (1992), 33-9, esp. 34; J. G. Simms, "John Toland (1670-1722), a Donegal Heretic" *Irish Historical Studies* 16 (1968/69), 304-19, esp. 312.

²⁰⁷ Cherchi, "Atheism, Dissimulation and Atomism", 15.

Mysterious. The impetus for this latest apology was the decision of the English Parliament to censor his book.²⁰⁸ *Vindicius Liberius* (1702) was Toland's last work the sole purpose of which was to act as a defence. His argument had not changed: hostility directed towards his book was due to claims made by his adversaries and not the actual content. The work contained a reprint of a letter Toland sent to Dr. Hooper, Prolocutor of the Lower House, which was responsible for the censorship. Toland's tone was the same familiar one of the early apologies as he redefined the intended purpose of *Christianity not Mysterious*.

As for the *Christian* Religion in general that Book so far from calling it in Question, that it was purposely written for its service, to defend it against the Imputations of Contradiction and Obscurity, which are frequently objected by its Opposers. There is nothing blameworthy in this Design, nor ought any Persons to be angry with me for professing that I understand the *Christian* Religion, how *mysterious* soever it may seem to them...²⁰⁹

Specifically, Toland defended his argument that humanity was no better acquainted with the nature of God, than with the inner construction of any of God's creatures.

Throughout his writings, Toland continued to employ Locke's theory of knowledge, especially, the distinction between nominal and real essences. *Vindicius* continued this trend. The relevant section is lengthy, but worth quoting, as its important for this present study.

[I was]showing that we knew not the real Essence of anything in the World, let alone of GOD: that Things were only known to us by their Properties, yet that we had not a distinct View even of all the Properties of any Thing at once: that every Pebble and Spire of Glass being in many of their Properties, and altogether in their Essence,

²⁰⁸ Martin Greig, "Heresy Hunt: Gilbert Burnet and the Convocation Controversy of 1701" *The Historical Journal* 37 (1994): 571.

²⁰⁹ John Toland, *Vindicius Liberius: or, M. Toland's Defence of himself, Against the late Lower House of Convocation, 1702* in *John Toland's Christianity not Mysterious: Text, Associated Works and Critical Essays* ed. Philip McGuinness et. al. (Dublin: The Lilliput Press, 1997), 159.

above our Understanding, nothing ought to be peculiarly call'd a *Mystery* on this Account, since every Thing was so: and that therefore when we knew as many of the Properties of any Thing as made us understand the Name of it, and as were useful and necessary for us, this was enough for our present Condition, and we might be reasonably said to comprehend it. Accordingly I acknowledg'd there in express Words, that *we know not the Nature of that eternal Subject or Essence wherein infinite Goodness, Love, Knowledge, Power, and Wisdom coexist: and that as we know nothing of Things but such of their Properties as were necessary and useful, we might say the same of GOD; for every Act of our Religion is directed by some of his Attributes without ever thinking of his Essence: our Love to him is knidl'd by his Goodness, and our Thankfulness by his Mercy, our Obedience is regulated by his Justice, and our Hopes are confirm'd by his Wisdom and Power.* At last from several Reasonings to this Purpose, I conclude that nothing is a *Mystery* because we know not its Essence, since it appears that it is neither knowable in it self, nor ever thought by us. In a word that it was too general a Notion, making all Things Mysteries alike; whereas something more particular was intended by the Word, since one Thing was a *Mystery* and not another. So I declar'd my self fixt in the Opinion that *what infinite Goodness has not bin pleas'd to reveal to us, we are sufficiently capable to discover our selves, or need not understand it all.*²¹⁰

This passage clearly demonstrates that in 1702 Toland was still an adherent to a Lockean system of knowledge. In Toland's view, God required that humans know only nominal essences (useful knowledge) of things he did not demand understanding of real essences (useless knowledge). That, which could not discovered by reason need not be known. Accordingly "*knowing nothing of Bodies but their properties, god has wisely provided we should understand no more of these than are useful and necessary for us, which is all our present Condition needs.*"²¹¹ Moreover, "The most compendious Method therefore to acquire sure and useful Knowledge, is

²¹⁰ *Ibid.*, 177.

²¹¹ CNM, 76.

neither to trouble ourselves nor others with what is useless, were it known; or what was impossible to know at all."²¹²

In the final pages of *Vindicius*, Toland's growing impatience with his detractors was evident.

I shall not give any more Troble [sic] to my self or others by making this *Apology* much longer: for I am so far from being concern'd at the frivolous Remarks or scurrilous Treatment of nameless, envious, and mercenary Libellers, that I have never hitherto contributed to give them any Reputation by taking notice of their Falsities, or those poor Stories, which, supposing 'em to be true, are very impertinent...²¹³

Toland did not have much time to dwell on the writings of "mercenary Libellers", as the sudden death of King William III in 1702 changed the political landscape in England. He viewed William as the protector of religious dissenters like himself and with the monarch's untimely passing, Toland feared that toleration would not continue. Therefore, Toland sailed for friendlier, and more tolerant, ports, where he took part in the natural philosophical debates concerning the construction of the created world.

Conclusion

When Toland set out to write *Christianity not Mysteriorious*, he could not have imagined the ill treatment he and his book would receive. The purpose of the book, as he stated many times, was to dispel the notion that the original Christianity had inherent mysteries. Any mysteries that presently existed in the religion, were put there by corrupters motivated by their own gain. Such people included all priests who defended their own usefulness by claiming sole authority to read the Bible. Toland was convinced that God did not intend this to be so. God wished that Christians be individual readers, who did not require their understanding be aided by intermediary agents. Based on his conception of God, as a revealer, Toland sought to cleanse Christianity,

²¹² CNM, 79.

²¹³ Toland, *Vindicus Liberius*, 193.

as Luther had done over a century before. God would only communicate with humanity in clear and distinct concepts. Any knowledge, which was relevant for this time on earth, God gave in plain language that could be known by reason. Toland divided this knowledge into two categories, which he appropriated from John Locke and then applied to suit his own needs. Christians needed to concern themselves with only the nominal essences of things. It was knowledge of the nominal essences of Scripture that God commanded. No Christian needed to know the inner workings of either the Bible or Christianity in general. Such a belief coloured both Toland's own natural philosophy and the reading that he gave the natural philosophies of Spinoza and Isaac Newton, particularly their respective conceptions of motion. The next chapter explores these themes.

Chapter Three: Self-Moving Matter and *Letters to Serena*

This chapter documents Toland's construction of a materialistic universe. Implicit in that worldview, was his belief that God intended humans to understand that knowledge and only that knowledge, which was important for this life. What was unknowable was neither important nor necessary for human existence. Toland used the distinction between real and nominal essences, taken from John Locke's *Essay Concerning Human Understanding*, to support his argument. He emphasised, as Locke before him, the impossibility of knowing real essences. This fact plays an important role in Toland's account of self-moving matter and in his assessments of contemporary natural philosophy. The chapter ends with an examination of Toland's use of Isaac Newton's *Principia* in support of his materialism.

Debates with Leibniz

After the accidental death of King William, Toland returned to the Continent and travelled to the safe confines of Berlin, where Sophia received him warmly. The Prussian Queen thought Toland lacked some common sense but that his work showed much promise. During his stay, Sophia introduced Toland to the natural philosopher, Gottfried Wilhelm Leibniz (1646-1716).¹ Leibniz, who was privy councillor, was displeased with Toland's overly familiar attitude towards Sophia. His attempts to distance the Queen from this common Englishman proved unsuccessful. Leibniz did not dismiss Toland completely, however, and corresponded with him on various philosophical subjects. During their discussions, Leibniz asked Toland to explain his metaphysics, something he declined to do. Toland's

¹ Robert E. Sullivan, *John Toland and the Deist Controversy: A Study in Adaptations* (Cambridge: Harvard University Press, 1982), 18.

refusal is not surprising, in light of his adherence to his own brand of nominalism.

Toland's reluctance to address questions about the metaphysical description of things irritated Leibniz, who expressed his frustration in a letter to Sophia, in 1702.² Leibniz's letter was a response to the views of Toland, which Sophia, passed on to him. In his letter, Toland addressed the question of whether or not ideas of things exist in the human mind independent of sensory experiences.

I have read and reread with a great deal of attention the Letters of Leibniz which your Majesty has graciously communicated to me, touching on the origin of our ideas ... There is a necessary faculty on which sensible things act, of whatever nature this faculty may be. But this is not the question. It is rather a matter of knowing if other than sensible things determine this faculty to act ... There are two views ... [one is to examine] the nature of the soul itself, but this is entirely impracticable ... Descartes himself has been obliged to have recourse to the body, and has had knowledge of his soul, Cartesian as it is, only by means of the sense and sensible things ... I draw from it this conclusion, that one does not in the least know the soul by itself, but only by the body, and consequently by the senses and sensible.³

Leibniz's criticism centred on Toland's belief that there existed no substance apart from matter. As for the question,

Whether there are immaterial substances, one must first explain it in order to answer it. Heretofore matter has been understood to mean that which includes only purely passive and indifferent concepts, such as extension and impenetrability, which need to be given determinate form or activity by something else. Thus when it is said that there are immaterial substances, one means by this that there are substances which include other concepts, namely, perception and the principle of action or of change, which cannot be explained either by extension or by impenetrability. When these have feeling, they are called souls, and

² Stephen H. Daniel, *John Toland: His Methods, Manner and Mind* (Montreal: McGill-Queen's University Press, 1984), 101.

³ John Toland to Queen Sophia, 1702, quoted in Eugene Inglish Dyche, "The Life and Works, and Philosophical Relations of John (Janus Junius) Toland" (PhD diss, University of Southern California, 1944), 296-7.

when they are capable of reason, they are called spirits. Hence if anyone says that force and perception are essential to matter, he is taking matter for the complete corporeal substance which includes form and matter, or the soul along with the organs.⁴

Leibniz's thinking on the nature of matter is elusive. As, his views changed throughout his lifetime, one can only discuss Leibniz's beliefs for a specific time. The period 1680-1700 best represents the state of his philosophy during the time of Toland's visit. Leibniz insisted that there were individually created individual substances. In contrast to the system postulated by Descartes, he claimed that extension alone was not a sufficient definition of matter. Matter, believed Leibniz, included an Aristotelian like substantial form. These substantial forms produced "the unity and individuality of individual corporeal substances, and [made] them *entia per se*."⁵ He also rejected Cartesian dualism, arguing that body considered apart from the form (or soul) was not a substance. Leibniz agreed that material substance was extended but it was not a substance because of its extension. It was a substance because of its substantial form.⁶

Toland's displeasure with this system is explained by his agreement with Locke, that real essence can never be known. Since Toland believed that knowledge comes only through the senses, it was not possible that Leibniz could know, outside of idle speculation, the internal parts of matter, or if a substantial form existed. Although, it is not known if Toland ever saw Leibniz's letter, F. H. Heinemann believed the philosophical scrutiny given

⁴ G. W. Leibniz, "On What is Independent of Sense and of Matter: (Letter to Queen Sophia Charlotte of Prussia, 1702)" *Gottfried Wilhelm Leibniz Philosophical Papers and Letters*, 2 vols. trans. and ed. Leroy E. Loemker (Chicago: University of Chicago Press, 1956), II: 896.

⁵ R. S. Woolhouse, *Descartes, Spinoza, Leibniz: The Concept of Substance in Seventeenth Century Metaphysics* (London: Routledge, 1993), 59.

⁶ *Ibid.*, 55-9, 62, 66, 94.

Toland's work by Leibniz forced Toland to articulate his emerging worldview more fully.⁷

Refuting Spinoza's Natural Philosophy

Toland first published his materialistic worldview in 1704, as a part of *Letters to Serena*. There is no evidence to suggest that the letters were part of a real correspondence, and the literary form was likely a rhetorical device. The name of Serena, in the title has caused some debate among historians. Whether it was a form of Sophia, Queen of Prussia, is a matter of speculation.⁸ The book consisted of five letters on various subjects. Among the topics were: "Origin and Force of Prejudices", "History of the Soul's Immortality among the Heathens", and "Origins of Idolatry." The last two letters contained Toland's views on matter and its inherent motion and are the subject of this present chapter.

The first letter contained an extended critique of Spinoza's natural philosophy. The choice to challenge the system of Spinoza is somewhat puzzling. Toland associated with Spinozists during his stay in Holland, and incorporated some of their teachings into *Christianity not Mysteries*. Therefore, he did not engage in a wholesale rejection of Spinoza's works: it was not the exegetical strategy of Spinoza that Toland denied, but certain aspects of his natural philosophy. In the Preface to *Letters to Serena*, Toland claimed he was forced to write this refutation of Spinoza, because of frequent debates with an unnamed "Gentleman." "*I told him once,*" remembered Toland, "*en passant, that the Whole Frabrick of the Philosophy was without any solid foundation; of which he laying immediate hold, would never let me quiet....*"⁹ This letter, Toland hoped would silence his unnamed adversary.

⁷ F. H. Heinemann, "Toland and Leibniz" *The Philosophical Review* 54 (1945): 447. See also Sullivan, *John Toland and the Deist Controversy*, 177.

⁸ Rienk Vermij, "Matter and Motion: Toland and Spinoza" in *Disguised and Overt Spinozism Around 1700* ed. Wiep Van Bunge and Wim Klever (Leiden: E. J. Brill, 1996), 276.

⁹ John Toland, *Letters to Serena* (London, 1704), C4r.

Toland was also aware of the contemporary appeal of the mechanical philosophy, and the importance its students placed on matter and motion. Finding Spinoza's explanation of motion unsatisfactory, Toland set about challenging (or repairing) the system.¹⁰

"A Letter to a Gentleman in Holland, showing SPINOSA's System of Philosophy to be without any Principle or Foundation", opened with an attack on the intellectual capacity of the Dutch scholar. "FOR my part," claimed Toland, "I shall always be far from saying that SPINOSA did nothing well, because in many things he succeeded so ill. On the Contrary, he has had several lucky Thoughts...."¹¹ He then presented the major problem, as he viewed it, with Spinoza's natural philosophy.

I am persuaded the whole system of SPINOSA is not only false, but also precarious and without any sort of Foundation. I do not mean that there are no incidental Truths in his Book, no more than that there are no mistakes carelessly crept into those that are better: but I maintain that no such things follows [sic] from his system, which if it be gratuitous and without any Principles, can not serve to explain any past of future Difficultys, nor give better Reasons for what we commonly receive.¹²

Before proceeding with Toland's critique, it is necessary to provide a brief account of both Spinoza's life and natural philosophy. Baruch Spinoza (1632-77), the irritant of orthodox scholars for generations, was raised in the Jewish community of Amsterdam. The details of his early life are incomplete at best. During his early twenties, he was probably employed as a merchant.¹³ By the middle the 1650s, he experienced a series of tragedies that shaped his thoughts, for the rest of his days. In three years surrounding 1654, he had buried both his parents and his sister.¹⁴ That same year, at the age of

¹⁰ Vermij, "Matter and Motion", 281-2.

¹¹ John Toland, "A Letter to a Gentleman in Holland, showing SPINOZA's System of Philosophy to be without any Principle or Foundation" in *Letters to Serena*, 133.

¹² *Ibid.*, 135.

¹³ Steven Nadler, *Spinoza: A Life* (Cambridge: Cambridge University Press, 1999), 47, 90.

¹⁴ *Ibid.*, 86.

22, Spinoza began to have a crisis of religion and knowledge. How could the Lord God take all the people dear to him? Finding no solace in his religion, he abandoned the strict Jewish life.

During his time as a merchant, he had associated with people who held differing religious ideas, many of whom were Protestants of various kinds, including Socinians and Arminians.¹⁵ In addition to Protestant thought, he read all the contemporary canonical writers of natural philosophy, including Francis Bacon, Galileo, and Descartes. At some point in 1656, Spinoza was asked if God had a body? He replied: "I confess, that since nothing is to be found in the Bible about non-material or incorporeal, there is nothing objectionable in believing that God is a body."¹⁶ Such a belief contradicted the generally accepted view of the immaterial nature of the Judaeo-Christian God. The suggestion of a material God likely contributed to Spinoza's expulsion from the Jewish community, although the exact reason remains unknown. The expulsion order of 27 July 1656 stated:

The Lords ... having long known of the evil opinions and acts of Baruch de Spinoza ... The Lord will not spare him, but then the anger of the Lord and his jealousy shall smoke against the man, and all the curses that are written in this book shall lie upon him, and the Lord shall blot out all the tribes of Israel, according to all the curses of the covenant that are written in this book of the law. But you that cleave unto the Lord your God are alive every one of you this day.¹⁷

Once he was excluded from the Jewish community Spinoza, was free to pursue his philosophical inquiry unfettered by the restrictions of his former religion.

The work of Descartes had the strongest impact on Spinoza's thought. He hoped to be able to fulfil Descartes' dream of absolute certainty in natural

¹⁵ *Ibid.*, 101.

¹⁶ Quoted in *Ibid.*, 135.

¹⁷ "Cherem of 27 July 1656", quoted in *Ibid.*, 120.

philosophy.¹⁸ Spinoza produced an account of the Cartesian system, along with a commentary, which was the only work he published under his own name during his life. The section that is relevant for our present purpose concerned the nature of God and his attributes. Wishing to emphasise the dependence of all creation on God, Spinoza claimed: "God understands himself and all else besides; that is he contains everything in himself objectively."¹⁹ That is everything is an attribute of God's intellect. However, there is no real difference between the attributes of God. "The attributes of God," wrote Spinoza, "are distinct only in reason. Now we can clearly conclude that all the distinctions we make among the attributes of God are only distinctions in reason, and that these attributes are not actually separated from another."²⁰ If followed to its conclusion, this philosophy claimed no separation between God and the creation. This was the position Spinoza took in the building of his worldview.

Spinoza presented his system of philosophy in *The Ethics*, the contents of which were widely known during his life, but a published version appeared only posthumously in 1677. As he did not live to complete his work, *The Ethics* as scholars have complained, is unfinished and "incompletely edited."²¹ The first part "Concerning God" is the clearest presentation of his thinking on matter and its attributes. Spinoza began with his definition of substance. "By substance, I mean that which is in itself, and is conceived through itself: in other words, that of which a conception can be

¹⁸ *Ibid.*, 200.

¹⁹ Spinoza, *The Cartesian Principles and Thoughts on Metaphysics* trans. Frank A. Hayes (Indianapolis: The Bobbs-Merrill Company, Inc., 1963), 112.

²⁰ *Ibid.*, 137.

²¹ Edwin Curley, *Behind the Geometrical Method: A Reading of Spinoza's Ethics* (Princeton: Princeton University Press, 1988), 46; Jacob Adler, "Spinoza's Physical Philosophy" *Archiv für Gesch. der Philosophie* 78 (1996): 256.

formed independently of any other conception."²² The definition of substance led to the definition of God. "By God, I mean an absolute infinite—that is a substance consisting in infinite attributes, of which each expressed eternal and infinite essentiality."²³ Therefore, everything followed from God.²⁴ The nature of substance and hence God is to exist. Existence, or reality, is predicated on the number of attributes a thing has. The more attributes a substance has, the more likely is its existence. "God, or substance, consisting of infinite attributes, of which each expresses eternal and infinite essentiality, necessarily exists."²⁵ Spinoza then presented a proof of this assertion. "If this be denied, conceive, if possible, that God does not exist then his essence does not involve existence. But this is absurd. Therefore God necessarily exists."²⁶ Mark O. Webb has constructed a schematic of this argument

God is a substance consisting of infinite attributes
Existence belongs to the nature of every substance
∴ God Exists.²⁷

While God's attributes existed in infinity, they were two in number.

"Thought is an attribute of God, or God is a thinking thing. ... Extension is an attribute of God, or God is an extended thing."²⁸ Everything existing in the universe was a mode of these two divine attributes. If Spinoza was correct that God was the only substance and that he existed everywhere, how did he explain motion in this materialist universe?

²² Spinoza, *The Ethics* in Benedict de Spinoza, *On the Improvement of the Human Understanding: The Ethics; Correspondence* trans. R. H. M. Elwes (New York: Dover Publications, Inc., 1955), 45.

²³ *Ibid.*

²⁴ Woolhouse, *Descartes, Spinoza, Leibniz*, 31.

²⁵ Spinoza, *Ethics*, 51. On the necessity of existence for increased attributes, see Woolhouse, *Descartes, Spinoza, Leibniz*, 42; Richard Mason, *The God of Spinoza: A Philosophical Study* (Cambridge: Cambridge University Press, 1997), 44.

²⁶ Spinoza, *Ethics*, 51.

²⁷ Mark O. Webb, "Natural Theology and the Concept of Perfection in Descartes, Spinoza and Leibniz" *Religious Studies* 25 (1989): 460.

Motion was the result of “infinite productive power” of matter to create itself in both motion and rest.²⁹ Motion was a mode of God; it flowed from God’s nature. This, however, only applied to simple bodies, which were part of the universal substance, that of God. Spinoza placed rest and motion of these bodies on the same ontological level. Motion was seen in the relation of one body to another it depended on the frame of reference. Its state was determined by another body, which is at motion or rest determined by another body *ad infinitum*. Both states were caused by the same principle of “causal reaction.”³⁰ Spinoza was ambiguous in his definition of motion and rest. Perhaps Spinoza’s ambiguity was due to the purpose of his work, which was epistemological and not metaphysical. Therefore he need not dwell on primary qualities, such as motion and rest, it is “enough that there are some” and that they exist.³¹

Spinoza’s lack of clear definition for the motion of matter did not escape the critical gaze of Toland. He believed that the faults with Spinoza’s philosophy were due to the ambition of its author and his, “Passion to become Head of Sect, to have Disciples and a new system of Philosophy honor’d with his Name...”³² This failure could be excused, had Spinoza recognised his mistake and rectified it. The fact that he did not, led Toland to conclude,

[W]hen a Man builds his whole System of Philosophy either without any first Principles, or on a precarious Foundation: and afterwards when he’s told of this Fault, and put in mind of the Difficultys that they attend it, yet neither supplies that Defect, nor accounts for those Difficultys by any thing he has already establihs’d not yet

²⁸ Spinoza, *The Ethics*, 83-4.

²⁹ André Lecrivain, “Spinoza and Cartesian Mechanics” in *Spinoza and the Sciences* ed. Marjorie Grene and Debra Nails (Dordrecht: D. Reidel Publishing Company, 1986), 45.

³⁰ Heine Siegbrand, “Spinoza and the Rise of Modern Science in the Netherlands” in *Spinoza and the Sciences*, 73.

³¹ Adler, “Spinoza’s Physical Philosophy”, 275.

³² Toland, “A Letter to a Gentleman in Holland”, 135-6.

acknowledged his Mistakes ; we reasonably suspect that he's too much in love with his new World[view].³³

Addressing the fictitious recipient of the letter, Toland wrote: "I need not prove to his [Spinoza's] greatest Admirer that he acknowledges but one substance in the universe..." This notion was agreeable to Toland, but Spinoza's choice of attributes for this universal matter was not.

[H]e reckons Extension and Cogitation to be the most principal; tho supposes innumerable other which he has not bin at pains to name. He has no where so much as insinuated that Motion was one of them; or if he had, we should not have believ'd it on his word, not without any convincing arguments than he given every Portion and Particle of Matter always thinks: for this is contrary to Reason.³⁴

This statement is evidence of the method of thinking that Toland advocated in *Christianity not Mysteriorious*. There he claimed that when a person reveals knowledge, "his words must be intelligible, and the matter possible."³⁵

Toland rejected the claim of thinking matter because his reason did not think it possible. There was, however, a more serious flaw in the system. Spinoza's philosophy neglected to account for the various formations of matter. "WE [Toland] agree on every side that the perpetual change in Matter are the Effects of Motion, which produces an infinity of different Figures, Mixtures, and sensible Qualities."³⁶ For Toland, motion was the key to the formation of bodies and therefore, he thought it part of the definition of matter, and hence one aspect of its nominal essence. He used the remainder of the letter prove this fact and chastise Spinoza for not recognising it.

The study of local motion lay at the heart of Toland's challenge. Local motion referred to the changing positions of individual bodies. This is evident in Toland's own description.

³³ *Ibid.*, 137.

³⁴ *Ibid.*, 138-9.

³⁵ John Toland, *Christianity not Mysteriorious* (London, 1696), 41-2.

³⁶ Toland, "A Letter to a Gentleman in Holland", 140.

[L]ocal motion is only a Change of Situation, or the successive Application of the same Body to the respective Parts of several other Bodys; so that this Motion is nothing different from the Body itself, nor any real Being in Nature, but a mere mode or Consideration of its Situation, and the effect of some Force or action without or within the Body.³⁷

A close reading of this definition reveals that Toland shared many of Spinoza's thoughts on motion. Motion was viewed against the "respective Parts of several other Body's", and "nothing different from the Body itself ... but a mere mode of Consideration of its situation", which is the same relative definition given by Spinoza. Motion or rest was defined by the frame of reference of the observer. Where Toland differed from Spinoza was assigning the cause of the motion to "Force or action." However, Toland's usage of "force" and "action" as seen below is unique to him.

Toland knew that Spinoza was not the only thinker who refused to address the nature of the motive force. "Mathematicians generally take the moving Force for granted ... without giving themselves much trouble about its Original: but the Practice of Philosophers is otherwise, or rather ought to be so."³⁸ The "Mathematician" whom Toland had in mind, was likely Leibniz. A hypothesis supported by a fragmented manuscript, written by Toland in 1703. The incomplete tract was subtitled: "Critical Remarks on the system of Preestablished Harmony of Monsr. Leibniz, where in passing it is enquired after why the Metaphysical Systems of Mathematicians have less clarity than those of [other writers]."³⁹ For Leibniz, the force of motion was measured by a relationship between the mass of the moving body and its

³⁷ *Ibid.*

³⁸ *Ibid.*, 141.

³⁹ John Toland "A writing inscribed to Queen Sophie Charlotte of Prussia" (14 January 1703) quoted in Dyche, "The Life and Works, and Philosophical Relations, of John (Janus Junius) Toland", 300.

velocity, then squared (mv^2).⁴⁰ Leibniz identified this force as *vis viva*, and suggested that it was conserved in nature. Toland did not think Leibniz engaged in speculation about the true being of this force. In Toland's view *Vis viva* was simply a mathematical description. Being a philosopher, Toland thought it was his obligation to provide a complete and in his mind correct account of motion and its cause. Despite Toland's belief in the inadequacy of Leibniz's scholarship, the latter did spill much ink on the nature of *vis viva*. It is unclear if Toland was unaware of Leibniz's efforts in this matter or chose to ignore them.

For Toland, the motion of matter was important because he viewed it as the foundation of all worldly constructions. Therefore, "WHOEVER then goes about to explain by their first Causes the Origin of the World, its present Mechanism, or the Affections of Matter, must begin with the first Causes of Motion ... this Action or Principle of Motion must be well clear'd and established, or the system must quickly [be] found defective."⁴¹ The problem with Spinoza's philosophy was that he "no where in his philosophy attempted to define Motion or Rest, which is unpardonable in a philosopher..." By not accounting for motion, Toland believed Spinoza reduced the universe to passivity.⁴² Worse yet,

Spinoza then, who values himself in his *Ethicks* on deducing things from their first Causes ... Spinoza, I say Having given no account how Matter came to be mov'd or Motion comes to be continu'd, not allowing God as the first mover, neither proving nor supposing motion to be an Attribute (but the contrary) nor indeed explaining what motion is, he cou'd not possibly show how the diversity of bodies reconcilable to the unity of Substance, or to the sameness of Matter in the whole Universe...⁴³

⁴⁰ Leibniz, "A Brief Demonstration of a Noble Error of Descartes and Others Concerning a Natural Law" (1686) in *Philosophical Papers and Letters*, I: 296-302.

⁴¹ *Ibid.*

⁴² Margaret C. Jacob, "John Toland and the Newtonian Ideology" *Journal of the Warburg and Courtauld Institutes* 32 (1969): 319; Sullivan, *John Toland and the Deist Controversy*, 193.

⁴³ Toland, "A Letter to a Gentleman in Holland", 146-7.

Toland was not entirely critical of Spinoza's writings, however; he did express admiration for Spinoza's presentation of Descartes' natural philosophy, which Toland also criticised. For Descartes the single primary quality of matter was extension. He defined matter as: "extended in length, breadth and depth."⁴⁴ Toland viewed the attribute of mere extension as an insufficient foundation upon which to build the universe.

This person [Spinoza] has done Justice to Cartesius; for tho his System is at best but an ingenious Philosophical Romance, yet he was never so careless or inaccurate as to think of deducing the variety and Difference of particular Bodys from mere extension, and therefore suppos'd God at the beginning to have given a shake to the lazy Lump [of matter].⁴⁵

Cartesian matter, as Toland rightly noted, did not move by itself, as Descartes himself explained: "In the beginning he [God] created matter, along with motion and rest; and now ... he preserves the same amount of motion and rest in the universe as he put there in the beginning."⁴⁶

Descartes' thoughts on the nature of motion need to be described here, to better establish the intellectual context for Toland's thoughts. As an adherent of the mechanical philosophy, Descartes argued that the phenomena of the universe were explicable in terms of matter and its motion. He suggested that the world was constructed of passive particles of matter, which filled the universe entirely. All particles were identical, in terms of their extension. The only differentiating factors among them were their shapes and motions.⁴⁷ As the motion of their particles was the only cause of change in this world, the only motion to study was local motion.⁴⁸ The suggestion that only local motion, or the change of position of individual

⁴⁴ René Descartes, *Principles of Philosophy* trans. Valentine Rodger Miller and Reese P. Miller (Dordrecht: D. Reidel Publishing Company, 1983), 40.

⁴⁵ Toland, "A Letter to a Gentleman in Holland", 152.

⁴⁶ Descartes, *Principles*, 58.

⁴⁷ *Ibid.*, 50.

⁴⁸ *Ibid.*

bodies, modified the natural world, was a reaction against the scholastics who held true to the Aristotelian definition of motion as change in all its forms. For an Aristotelian, motion applied equally to both a change of colour and to a change of location.

Descartes also denied the possibility of action at a distance. Motion was transferred between bodies only by contact. For Descartes a body in motion had an internal force, which keeps it moving. Upon impact with another body, the force of motion of the body that struck the other transferred its force to the second body.⁴⁹ The transferral of force was necessitated by the fact that God maintained the same amount of motion in the universe. The quantity of motion was constant being neither created nor destroyed.⁵⁰ From Toland's perspective, the problem with this system was the reliance on extension as the elementary attribute of matter, and the absence of a clear definition of force.

According to Toland's presentation of Descartes philosophy, because God had to "give a shake to lazy" matter at the creation, there was a time when matter did not move. This notion was incompatible with Toland's belief in self-moving matter. Moreover, as he would state later in the letter, Toland could not accept the Cartesian belief that God must tend to all motion at all times. Neither could he accept Spinoza's solution of making God and matter two aspects of the same substance; it also did not allow for God to impart of motion to matter: motion, was merely a direct result of God's own activity. Toland believed motion combined with extension, and not extension alone, were defining parts of matter.

The distinction between "moving force" and local motion remained the key to Toland's thinking. He believed that the "Difficultys you

⁴⁹ Richard S. Westfall, *Force in Newton's Physics: The Science of Dynamics in the Seventeenth-Century* (New York: American Elsevier, 1971), 68; Daniel Garber, *Descartes' Metaphysical Physics* (Chicago: The University Press of Chicago, 1992), 202.

⁵⁰ Descartes, *Principles*, 58. See also Garber, *Descartes' Metaphysical Physics*, 204.

mentioned, proceed from peoples confounding the Cause with the effect, or the moving Force with local Motion: and when they think they have given its true Definition, they have really said nothing but that motion is Motion..."⁵¹ Here Toland claimed philosophers confused the cause of motion with motion. Philosophers explained motion, and believed that by doing so they had explained the cause of the motion too. Furthermore, they did not address the question of the motion of the universal matter, which like Spinoza Toland believed filled the observable universe. He was dismayed that many natural philosophers engaged in the fruitless search for the causes of motion.

You say very truly that those who carefully distinguished the cause and the Effect, are yet extremely puzzl'd about the *moving force* it self, what sort of being it is; where it resides in matter or without it; by what means it can move Matter; how it passes from one Body to another; or how it is divided between many Bodys while others are at rest, and a thousand other such Riddles.⁵²

When philosophers finally admitted that they could not solve the problems Toland identified, he believed that they, like Descartes: "are forc'd at last to have recourse to God, and to maintain that as he communicated Motion to Matter at the beginning, so he still begets and continues it whenever, and as long as there's occasion for it, and he actually concurs to every Motion in the Universe."⁵³ This solution had a major problem, "they further make God the author of all the Wickedness in Nature, tho Motion were still but a Mode."⁵⁴ If God were the immediate cause of all motion, as these unnamed philosophers believed, then all actions, even evil ones, were caused by God. Toland could not accept their Occasionalism — the view that God personally carries out every act in the universe.⁵⁵ He believed that, God did not attend

⁵¹Toland, "A Letter to a Gentleman in Holland", 155-6.

⁵² *Ibid.*, 156.

⁵³ *Ibid.*, 157.

⁵⁴ *Ibid.*

⁵⁵ On "Occasionalism" especially as it pertains to Cartesian philosophy, see Daniel Garber, "Descartes and Occasionalism" in *Causation in Early Modern Philosophy: Cartesianism*,

to every single motion, no matter how trivial, for all eternity. Such constant activity was beneath the glory of the creator of Heaven and Earth. Certainly, God did not cause the motion of a mouth that spoke blasphemous words, nor the action for an arm that held a sword that killed another person. The occasionalists' appeal to the constant action of God was the refuge of writers who searched for the cause of local motion. When philosophers, claimed Toland,

are ignorant of the Cause of any thing, they presently betake themselves for refuge and sanctuary to God, which is not to explain things, but to cover their own Negligence or Shortsightedness, their Vanity not suffering them to allow any other Cause, but God's immediate Concourse to what they are not able to unfold.⁵⁶

Such philosophers were preoccupied with the cause of motion, when God required only an understanding of nominal essences, or useful knowledge. In this case, that motion was a nominal essence of matter. This was true because, as Toland triumphantly claimed: "*Motion is essential to Matter*, that is to say, as inseparable from its nature as Impenetrability or Extension, and that it ought to make a part of its Definition."⁵⁷ As motion was part of the qualities of matter known by the senses, like impenetrability and extension, it was one of the attributes of its nominal essence.

To clarify the problems he identified with confusing motion with the cause of motion in relation to the universal matter, Toland suggested the following classification.

I wou'd have this Motion of the Whole be call'd *Action*, and all local Motions, as direct or circular, fast or slow, simple or compounded, be still call'd *Motion* being only several changeable Determination of the action which is always in the Whole ... I deny that Matter is or ever was as inactive dead Lump in absolute Repose, a lazy and unweildy thing ... I hope to evince that this Notion alone accounts for the same

Occasionalism, and Preestablished Harmony ed. Steven Nadler (Pennsylvania: The Pennsylvania University Press, 1993), 9-26.

⁵⁶ Toland, "A Letter to a Gentleman in Holland", 158.

⁵⁷ *Ibid.*, 158-9.

Quantity of motion in the Universe, that it alone proves there neither needs be nor can be any Void...⁵⁸

In this important passage and the one that follows, Toland suggested that local motion is a result of the constant motion of the universal matter, which Toland labelled as "Action." This "Action" was also the cause of local motion, as he explained earlier in the letter. It is in this sense that Toland's usage of the word "action" needs to be read. Bodies move because the universe as a whole has motion, or "Action." This active matter also accounts for the conservation of motion. Moreover, he considered this account true.

[I]f I be able to prove from the nature of the thing it self, and not to favour or oppose cause, that *Action is essential to Matter*, that Matter cannot be rightly conceiv'd nor consequently be rightly defin'd without it, that nothing can be accounted for in Matter without this essential Action, and that it is easily shown to exist in the most heavy or hard Bodys; then they may quarrel (who have a mind to it) with God or Nature, and not with me, who am but their humble Interpreter.⁵⁹

Again, Toland refused to address the question of causes because he did not believe that knowledge of real essences is possible, in this case the continual cause of the motion that he claimed was inherent in matter. While his refusal to provide an account of the continual cause of motion is not necessarily identical to his denial of knowledge of Lockean real essences, it is certainly an extension of the same epistemological beliefs. Toland clearly believed that God created self-moving matter, which provided an initial cause of motion. However, the mechanism by which matter continues to move was what Toland claimed was unknowable. The motion of matter was one aspects of its nominal essence. The internal structure of this divinely created substance, which made this continual motion possible, remained an unknowable real essence. This interpretation is evident in Toland's next letter.

⁵⁸ *Ibid.*, 159.

⁵⁹ *Ibid.*, 160.

He believed that his was an interpretation, which was compatible with all world systems, as they too explain the operation of the universe by motion. The proponents of alternative philosophies should consider that perhaps God created self-moving matter. Indeed, it was something that all natural philosophers should come to acknowledge.

[E]very Party [natural philosophy] is necessitated to explain the Phenomena of Nature by Motion: and therefore such as believe Matter created, may as well conceive that God at the beginning endu'd it with Action as well as with Extension; and those who believe it [matter] eternal, may as well believe it eternally active, as eternally divisible; nor can they ever account for any Change in Nature without admitting this, as I have prov'd before against SPINOSA. My only business is to prove *Matter necessarily active as well as extended*, and thence to explain as much as I can to its affection; but not to meddle in Disputes which others may raise about its Original or Duration.⁶⁰

Disputes about the origin of motion involved things he considered unknowable and not needed for this life. Toland relied on the principles established in *Christianity not Mysteriorous*. "[We are] neither to trouble our selves nor other with what is useless, were it known; or what is impossible to be known at all."⁶¹

Sources of Materialism

Before proceeding with the next letter and Toland's evidence for claiming that motion was inherent in matter, it is worth reflecting on the foundation for that view. Although scholars remain divided over the exact source of Toland's materialistic worldview, two schools of thought dominate the historiography. The first group believes Toland constructed his views after reading the work of Giordano Bruno (1548-1600). Margaret C. Jacob is the strongest proponent of this view. The other interpretation that of a Stoic influence has no clear spokesperson but appears in most contemporary scholarship.

⁶⁰ *Ibid.*, 161.

Jacob has consistently argued that Toland was influenced in his thinking on the nature of the universe by the work of the Hermetic philosopher Bruno.⁶² In 1969, she claimed that Toland read several of Bruno's books. According to Jacob, Toland did not understand the mystical aspects of Bruno's Hermetic philosophy, and therefore she labels Toland's thought as a "'rationalized' Hermetic philosophy."⁶³ She noted that in 1698, Toland bought several books from the sale of Francis Bernard's (1627-1698) library. Bernard was a physician and a fellow of the College of Physicians, whose library of medical books was one of the largest in London. He also amassed numerous books on various philosophical topics.⁶⁴ Among the various books Toland purchased from the estate sale, four were by Bruno the most important of which was *Spaccio de la bestia trionfante*, which contained an account of Bruno's natural philosophy. In this book, Bruno claimed, "God gives to matter and the universe an inherent harmony that is, like God all pervasive. God is the spirit who is the source of all energy and change in matter..."⁶⁵ Jacob believed that Toland used these writings to build a philosophical "system capable of challenging the Newtonian philosophy."⁶⁶ Jacob supported this interpretation with her emphasis on political affiliations as the binding factor among Newtonians. She believed that Toland's insistence on self-moving matter was seen as being analogous to the ability of individuals to rule themselves. According to Jacob, this view was meant to undermine the orderly "Newtonian" style government which, then existed. Despite the fact that Toland read other philosophical systems, Jacob

⁶¹ CNM, 79.

⁶² Jacob first proposed her thesis of Bruno's influence upon Toland in her MA thesis. See: Margaret Catherine Candee (Jacob), "A Magus in the Scientific Age: An Interpretive Study of the Life and Thought of John Toland" (MA thesis, Cornell University, 1966).

⁶³ Jacob, "John Toland and the Newtonian Ideology", 309.

⁶⁴ "Bernard, Francis" in *Dictionary of National Biography*, 22 vols. (Oxford: Clarendon Press, 1917), II:380.

⁶⁵ Quoted in Jacob, "John Toland and the Newtonian Ideology", 316.

⁶⁶ Jacob, "Toland and the Newtonian Ideology", 313.

minimises their importance: "[T]he fact remains that Bruno's thought was the main source for the development of Toland's philosophy."⁶⁷ In subsequent books Jacob, has not altered this position.⁶⁸ Her work continues to influence studies of Toland. David Berman accepted the importance of Bruno's influence on Toland.⁶⁹ Michael Hunter stated that: "Toland had absorbed a mixture of heretical views, including those of the sixteenth-century thinker Giordano Bruno."⁷⁰ Most recently, Philip McGuinness agreed that Bruno's books "had a huge influence on Toland."⁷¹ This interpretation is supported by the fact that Toland is certain to have read Bruno's work. Indeed, he was the first translator of Bruno into English.⁷² Despite the enthusiastic reading of Toland's translations given by Jacob, Bruno scholars remain unimpressed. They claim that while Toland was indeed the first to translate the works, his scholarship left much to be desired, calling it "rather inadequate."⁷³ However, this modern criticism does not alter the fact that Toland did read the books and that Bruno's conception of a God who orchestrates the motion and direction of matter was certainly present in *Letters to Serena*.

Other students of Toland choose to emphasis his classical schooling as the source for his materialism. Before addressing the claim of a Stoic

⁶⁷ *Ibid.*, 316.

⁶⁸ Margaret C. Jacob, *Newtonians and the English Revolution* (New York: Cornell University Press, 1976), 232, 234; Margaret C. Jacob, *The Radical Enlightenment: Pantheists, Freemasons and Republicans* (London: George Allen & Unwin, 1981), 153.

⁶⁹ David Berman, "Toland, John" in *The Encyclopedia of Unbelief*, 2 vols. ed. Gordon Stein (Buffalo: Prometheus Books, 1985), II:670.

⁷⁰ Michael Hunter, *Science and Society in Restoration England* (Cambridge: Cambridge University Press, 1981), 169. For a similar view see: John Brooke and Geoffrey Cantor, *Reconstructing Nature: The Engagement of Science and Religion* (Edinburgh: T & T Clark, 1998), 151. Brooke and Cantor cite Jacob's *Newtonians and the English Revolution* as their source.

⁷¹ Philip McGuinness accepts Jacob's thesis of Toland's attempt to undermine the Newtonian political stability of England. See his "'Perpetual Flux': Newton, Toland, Science, and the Status Quo" in *John Toland's Christianity not Mysterious: Text, Associated Works and Critical Essays* ed. Philip McGuinness et. al. (Dublin: The Lilliput Press, 1997), 316.

⁷² Dorteia Waley Singer, *Giordano Bruno: His Life and Thought* (New York: Henry Schuman, 1950), 192n. 34.

influence for Toland, it is worth outlining the Stoic cosmology. Stoicism was founded by Zeno of Citium (335-263 BC) and was developed in the decades after Aristotle's death. Stoics postulated that the entire universe was a corporeal entity.⁷⁴ Time, place and void were incorporeal and appeared only in thought, but had no actual existence. The all-present matter was inherently passive, but had an active principle.⁷⁵ The universe gained activity from *Pneuma*, the fire of life.⁷⁶ The tension, (*Tonos*), and motion in the *Pneuma* made the universe "a living, organic whole, with each single part grown together."⁷⁷ There existed no part of the universe, which was separate from the whole. The universe was organised by a divine ruling principle identified by the Stoics as *logos*. Although modern scholars often identify *logos* with "God", and no doubt early Christians philosophers inspired this identification, it is unlikely the Stoics themselves would have done so. The *logos*, certainly was divine, and it can be seen as their god, but not identical with the immaterial Judaeo-Christian God. Since there were no incorporeals in the Stoic universe, their divine being was part of the organic universe.⁷⁸ Stoicism has many similarities to Toland's philosophy, a fact not overlooked by historians. Robert E. Sullivan believed that Toland incorporated this philosophy into his own.⁷⁹ In the most recent English language book on Toland, Robert Rees Evans saw Toland as "redeeming the Stoic cosmology."⁸⁰ Certainly, Toland knew of Stoicism through its Roman expositor Cicero (106-

⁷³ *Ibid.* See also Giordano Bruno, *The Expulsion of the Triumphant Beast* trans. and ed. Arthur D. Imerti (New Brunswick: Rutgers University Press, 1964), 281.

⁷⁴ David E. Hahm, *The Origins of Stoic Cosmology* (Ohio: Ohio State University Press, 1977), 8, 3.

⁷⁵ R. W. Sharples, *Stoics, Epicureans and Sceptics: An Introduction to Hellenistic Philosophy* (London: Routledge, 1996), 43.

⁷⁶ Marcia L. Colish, *The Stoic Tradition From Antiquity to the Early Middle Ages*, 2 vols (Leiden: E. J. Brill, 1985), I:24.

⁷⁷ Hahm, *Stoic Cosmology*, 163, 167.

⁷⁸ Colish, *The Stoic Tradition*, 23-4.

⁷⁹ Sullivan, *John Toland and the Deist Controversy*, 205.

⁸⁰ Robert Rees Evans, *Pantheisticon: The Career of John Toland* (New York: Peter Lang, 1991), 211.

43 BC). In *De Natura Deorum*, Cicero presented the philosophy in a dialogue between a Stoic and an Epicurean. The time spent in study of ancient authors during his schooling time in Holland introduced Toland to the work of Cicero. In later writings, Toland made frequent references to the Roman philosopher, indicating knowledge of his writings.⁸¹

Both Stoicism and Bruno's Hermeticism likely influenced Toland, as his worldview contained aspects of both philosophies, particularly his assigning a role to God. However, attempts to find the one essential influence on his natural philosophy do not take account of Toland's eclecticism. Concentrating on Bruno and Stoicism as the sources for Toland's materialism ignores other obvious influences. Toland's worldview—especially his theory of active matter—is remarkably similar to Spinoza's. Nowhere in his refutation of Spinoza's system did Toland challenge its basic tenets. Toland accepted Spinoza's insistence of the existence of universal matter and the belief that bodies were only divisible from that matter, by mental acts. Bodies did not exist apart from the whole. It may be more accurate to state that Toland was reforming Spinoza's philosophy. Furthermore, Toland also addressed, as did other contemporary natural philosophers, the problems associated with, and suggested solutions to, the inherent passivity of Cartesian matter.⁸² His accounts of previous attempts to explain the transfer of motion between bodies, which he views as mistaken, are certainly Cartesian. As seen in Toland's letter to Sophia in 1702, he did not accept Leibniz's notion of substantial forms. Only things that caused sensation could be known. Therefore, it is not surprising that Toland should advocate a materialistic philosophy. These notions become evident when

⁸¹ J. A. I. Champion, *The Pillars of Priestcraft Shaken: The Church of England and its Enemies, 1660-1730* (Cambridge: Cambridge University Press, 1992), 182-3; 192-4.

⁸² On attempts to improve Cartesian matter theory see John Henry, "Occult Qualities and the Experimental Philosophy: Active Principles in Pre-Newtonian Matter Theory" *History of Science* 24 (1986): 335-81. For a recent attempt to place Toland into the debates over the nature of matter see: Cherchi, "Atheism, Dissimulation and Atomism."

Toland is seen as a participant in the intellectual scene of his day and not only as a theological irritant or as a corrupter of Newtonian philosophy.

"Motion is essential to Matter"

Toland opened his fifth and final letter, "Motion is essential to Matter; in Answer to Some Remarks by a noble Friend on the Confutation of Spinosa," by saying, "You take my meaning very right in urging that if *activity ought to enter into the Definition of Matter, it ought likewise to express the Essence there of...*"⁸³ Motion ought to be included in the definition of matter because Toland believed: "Matter has bin hitherto but half, or rather a third part defin'd by Extension, from which alone many of its Modifications can follow by no means..."⁸⁴ The incomplete definition of matter that held currency for many philosophers, was the reason why its effects were not readily known.

In Toland's view, Cartesian extension alone did not suffice to characterise matter, because "the Idea of extension does not necessarily infer any Variety, Alteration, or Motion; and therefore ... it must be action, since all those Motions are but the different Modifications of Action, as all particular Bodys..."⁸⁵ Toland suggested that to claim that matter was inherently moving, "as well as extended (to which you may add solidity, with the incomparable Mr. LOCK) then all the motive Effects follow very naturally, and need not be explain'd by any other Cause, no more than the Consequences of Extension."⁸⁶ All motion then was the result of the natural state of matter. It moved because motion was part of its definition. There was no need to inquire further into the cause of motion.

⁸³ John Toland, "Motion is essential to Matter; in Answer to Some Remarks by a noble Friend on the Confutation of Spinosa" in *Letters to Serena*, 165

⁸⁴ *Ibid.*

⁸⁵ *Ibid.*, 194-5.

⁸⁶ *Ibid.*, 166.

Toland believed that, matter was everywhere the same. In his argument for the uniformity of all matter in the universe, Toland borrowed a concept from Descartes: "Tho the Matter of the Universe be every where the same, yet, according to its various Modifications, it is conceived to be divided into numberless particular Systems, Vortexes, or whirlpools of Matter..." Moreover, "All the parts of the Universe are in this constant Motion of destroying: and the greater Systems are acknowledg'd to have the ceaseless movements as well as the smallest Particles, the very central Globes of the Axis; and every Particle in the Vortex gravitating towards the Center."⁸⁷ This constant motion could be denied only when one's reason was not the source of his information about the universe.

But you appeal at the same time to my Senses, that there are some Bodys in absolute Rest, as well as some in absolute Motion; and you instance Rocks, Iron ... and such other things as do not suddenly change their situation without some external Force. To this I answer, that your Reason, and not your Senses are the true judges in this case...⁸⁸

The reliance on reason and not the senses does not contradict his earlier statements. He, like Locke, claimed that information about the world comes from the senses but then reason compares and evaluates it in the mind. In this case, the senses provide the idea of a motionless rock, but reason reconciles it with the knowledge that the universe is never at rest. Therefore, reason makes stationary stones compatible with moving matter. For example:

This vulgar Error of absolute Rest was occasioned by the Appearance of Heavy, hard, and bulky Bodys; and seeing they did not change that strong Determination ... all bodies wou'd continue in that state without some foreign Mover, which they imagin'd not to be matter, since all bodys and that what was natural to the parts, was so to the whole.⁸⁹

⁸⁷ *Ibid.*, 187, 188.

⁸⁸ *Ibid.*, 193.

⁸⁹ *Ibid.*, 203.

As noted, above, one could look at a seemingly motionless object and claim that it was at rest, however, thinkers, who made such claims, relied only on their senses and not their reason. Toland continued to point to the misinterpretation of local motion, as responsible for many of the mistaken beliefs about the universe. According to him: "the Vulgar taking local motion ... for a real being, have thought Rest a privation, or that Motion was Action, and that Rest was a Passion; whereas every Motion is as well a Passion in respect of the body that gave it the last Determination, as it is an action...."⁹⁰

There was a simple reason why motion was not recognised as a part of matter. It was frequently "abstracted from motion, as Motion is from Matter, so are Solidity and Matter, Motion and Extension, Extension and Solidity, Solidity and Motion; each of these be and is taken by itself without any Consideration of the rest, whereas in reality the motion of Matter depends on its Solidity and Extension ..."⁹¹

Realising that this brief statement would convince no one, Toland described the purpose of the remainder of the letter. "I shall produce to show that all the Matter in Nature, every Part and Parcel of it, has bin ever in motion, and can never be otherwise."⁹² Using his correspondent as a straw man, Toland challenged the accepted view that although extension was a part of the definition of matter, motion was not. "I still maintain," claimed Toland, "that Matter can no more be conceived without Motion than Extension, and that the one is inseparable from it as the other."⁹³ He then presented the counter argument,

But you affirm that the *Extension of Matter is very easily known, if not self evident, but not its Activity* ... but such as judg[e] of things from Appearances, Customs, or Authority, without consulting their own

⁹⁰ *Ibid.*, 199-200.

⁹¹ *Ibid.*, 218-9.

⁹² *Ibid.*, 167.

⁹³ *Ibid.*, 168.

Reason, arguing in with Method they may as well prove the Moon to be no bigger than a Cheshire Cheese ... Experience shows that great numbers of Adversarys are no Arguments against the Truth of anything whatsoever. The plainest things in the World have bin mighty Secrets for whole ages; and we know that it's hard to find a thing, where no body dreams of looking for it.⁹⁴

One of the same arguments Toland used to remove mysteries from Christianity is evident here. He deplored the submitting of one's reason to "Customs, or Authority;" the same way he deplored the reliance on priests for Scriptural interpretations. God-given human reason was the only judge of truth. The suppression of this reason by some philosophical "Authority" prevented natural philosophers from looking to the obvious fact that motion was an essential property of matter. Therefore, they had never dreamed of looking for it. In the same manner that priests had used obscure language in the Bible to make it a mystery, philosophical authorities had done the same to the book of nature. As was his desire in *Christianity not Mysteriorious*, Toland wished to remove any unclear statements from natural philosophy, a practice for which he would not apologise. "[N]or will I excuse my writing of the Mysteries of Philosophy in so plain a Stile, being sorry I had not time enough to render those things much more common and intelligible..."⁹⁵

Toland was convinced that the insistence on mysterious passive matter led to the establishment of a philosophical falsity: the existence of the void.⁹⁶ He claimed that void space, needed "to be grounded on the Deadness or Inactivity of Matter." The belief in a space with no corporeal body was a construction of philosophers who did not accept that matter had internal motion. In Toland's words:

The opinion of a Void is one of the numberless erroneous Consequences of defining Matter only by Extension, of making it

⁹⁴ *Ibid.*, 171.

⁹⁵ Toland, *Letters to Serena*, C3v.

⁹⁶ It is important to note that although Toland viewed passive matter as necessitating a void, Descartes – whose ideas used the idea of passive matter – denied this was the case.

naturally inactive, and of thinking it divided into real Parts every way independent of one another. On these Suppositions it is impossible there should not be a void; but 'tis as impossible that ten thousand Absurditys should not follow thence.⁹⁷

Those philosophers, who believed that bodies of matter actually existed apart from one another, needed empty space to allow for the individual motions of these particles; postulating the existence of empty, or void, space as the room for motion. Toland denied the necessity of void space by claiming that "by Bodys I understand certain Modifications of Matter, conceiv'd by the mind as so many limited Systems ... but not actually separated from the Extension of the Universe."⁹⁸ By this argument, there could be no actual individual bodies, as they were part of the "Matter". Individual particles of matter, or bodies, did not exist as mental constructs. Natural philosophers, who did not acknowledge this fact, were forced to concede the existence of the void.

Toland was not uncharitable to philosophers who did not share his views. Their systems required an incorporeal space.

[F]or it was likewise to help sluggish Matter to Motion that this Space (as the room of its action) was principally devis'd; but matter not being inactive, nor wanting to have Motion continually impressed by an external Agent, Space may be exterminated from Philosophy, as useless and imaginary.⁹⁹

It was not difficult to believe in the idea of an absolute (or real) space, existing apart from matter, when one mistakenly considered:

[T]he Parts from the whole, and imagine proper Boundaries to certain Portions of Matter, which separate and distinguish them from the rest, whence came originally the Notion of a Void: but when we consider infinite Space as impenetrable, immovable, indivisible, the place which receives all Bodys, wherein they move and are contain'd, it self being void of all change or form, or figure; then on the contrary, we abstract

⁹⁷ Toland, "Motion is Essential to Matter", 172-3.

⁹⁸ *Ibid.*, 173.

⁹⁹ *Ibid.*, 213.

the infinite subject from the finite Modifications or the Whole from the parts...¹⁰⁰

Toland then presented what he meant by space, and how his ideas did not differ greatly from that of his adversaries.

Therefore when we say, that Space is all containing; we mean it of infinite Matter, to distinguish the whole from the Parts, which yet are not different from the whole. ... and so we do, when we say it's incorporeal, not then considering it otherwise than as the Mathematicians in Points, or lines, or Surfaces. ... When we say it is the Place of all things, we signify that it is the Subject of its own modifications, whether Motions, Figures, or others. ... And lastly, when we say that finite Bodys cannot exist without an infinite space, we only say that they cannot be unless they are; for their own solidity or their Respect to other things is all their Place...¹⁰¹

When speaking of "space", therefore, Toland referred to the universal matter, "the Place of all things." Addressing the imaginary recipient of the letter Toland wrote: "You may now perceive how this notion of absolute space was form'd partly by gratuitous Suppositions, as that Matter was finite, inactive, and divisible; partly, by abstracting Extension, the most obvious Property of Matter, without considering the other Propertys, or their absolute Connection..."¹⁰² Toland did think that scholars, who mistakenly held true to the idea of absolute space could be directed to proper thinking, "if you are once persuaded, Sir, as I hope you quickly will, that Matter is active as well as extended, all your difficulties about a Vacuum must fall to the ground."¹⁰³

Toland then switched his methodology and argued against the existence of a void by way of logic. "There is nothing more certain than that of two Contradictories the one must be always be true, as the other must always false; and tho it be therefore indisputable that there is a Void, or that all is full (to use their improper Expression) tho it never be plain that the

¹⁰⁰ *Ibid.*, 216.

¹⁰¹ *Ibid.*, 217.

¹⁰² *Ibid.*, 218.

Truth is within the narrow Compress of the two short Propositions”¹⁰⁴ Since the universe, as Toland viewed it, was filled with matter, a void cannot exist.

Toland thought that philosophers who held alternative views, to those he was here advancing based them on an erroneous understanding of matter. As Toland claimed earlier in his book, matter filled the universe, and individual bodies were pieces of this larger matter but were not actually separate from it. “Indeed [in] all Treatises of the ordinary Laws of Motion, you meet with several degrees of Motion that any body loses or acquires; but those Laws concern the Quantity of the action of particular Bodys on one another, and not the action of Matter in general ...”¹⁰⁵ Their works discussed the motions of bodies but not the actual motion of the universal matter, because philosophers were too absorbed in mathematics and concerned themselves only with local motion. They did not address actual events, only those that could be considered abstractly.

Toland believed that this refusal to look at the real state of nature, and not merely abstract constructions led to mistaken ideas of space and place. To view place as a part of space into which a body may move was a mistake of which Toland accused many thinkers of his day.

To say then, as you do after a croud of Philosophers, *that if there be no void, there is consequently no place for C to remove into, nor any Elbowroom for B to push C*; for you, I repeat it, to speak in this manner, is not only to have the same gross Conception of Space with your Farmers, but also to suppose the points B and C, and all or most of the points about them, to be really fixed, and in absolute Repose.¹⁰⁶

As matter filled all space, and bodies existed as separate entities only as mental constructs, there was no actual space existing apart from matter. Moreover, place had no existence apart from body and therefore, one could

¹⁰³ *Ibid.*, 176.

¹⁰⁴ *Ibid.*, 175.

¹⁰⁵ *Ibid.*, 176-7.

¹⁰⁶ *Ibid.*, 178.

not speak of place without reference to body. The notion of place and space were, "Terms invented to very good purpose by Mathematicians; but misunderstood or perverted by others, and not seldom very wrongly apply'd by certain Mathematicians."¹⁰⁷ Toland believed that of these concepts "no Word has bin more misapply'd nor consequently has given occasion to more Disputes than Space, which is only an abstracted Notion..."¹⁰⁸ One could certainly conceive of a space that was separate from the universal matter, but its imaginary status must be maintained. Toland himself too could imagine a space separate from matter. Just as he could "with Mr. Lock conceive the motion of one body alone without any other ..." ¹⁰⁹ Toland, however was careful not to use Locke in support of his materialistic universe, because the two scholars differed greatly on the nature of space. In the *Essay* Locke concluded,

The parts of pure space, are immovable, which follows from their inseparability; Motion being nothing but change of distance between any two things ... Thus the clear and distinct Idea of simple Space distinguishes it plainly, and sufficiently from Body; since its parts are inseparable, immovable, and without reference to the Motion of Body.¹¹⁰

Despite this difference, Toland did not waver in his admiration for the English philosopher. "[N]otwithstanding my Dissent with Mr. Lock about Space," wrote Toland, "I consider his *Essay of Human Understanding* to be the most useful Book towards attaining universal Knowledge, that is extant in any Language ..." ¹¹¹

When philosophers did not maintain the imaginary status of space, problems arose. Forgetting the uniform nature of space and matter, in combination with denying self moving matter, caused natural philosophers to

¹⁰⁷ *Ibid.*, 179.

¹⁰⁸ *Ibid.*

¹⁰⁹ *Ibid.*, 222.

¹¹⁰ John Locke, *An Essay Concerning Human Understanding* (London, 1690), Bk. II, 17.

hold the false view of the universe that Toland sought to correct. According to Toland, mathematicians:

had occasion to suppose Space without Matter, as they did Duration without Things, Points without Quantity, and the like; the Philosophers, who cou'd not otherwise account for the generation of Motion in Matter which they held to be inactive, imagin'd a real Space distinct from Matter¹¹²

In a lengthy paragraph, Toland discussed the problem caused by the insistence on a space, which was different from matter, and how the supposed inactivity of matter had necessitated it. All these problems, however, disappeared when the activity of universal matter was acknowledged.

But the whole dispute depends on the action and inactivity of Matter. In the first place, if Matter it self be essentially active there's no need to help it to motion by this Invention, nor is there any Generation of Motion. Secondly, if it be infinite, it can have no separate Parts they move independently of one another in crooked or straight Lines, not withstanding those Modifications which we call particular divisible Bodys. Thirdly, Matter must be likewise homogeneous, if it has action of it self as well as Solidity or Extension, without being divided into Parts. And fourthly, if it be infinite, the Universe must be without all local Motion, there being no fix'd Points without it, to which it might be successively apply'd, nor any place into which it could possibly remove.¹¹³

In a manner similar to Hobbes,¹¹⁴ Descartes¹¹⁵ and Spinoza¹¹⁶, Toland stated: "For my part, I can no more believe an absolute Space distinct from matter, as

¹¹¹ Toland, "Motion is Essential to Matter", 226.

¹¹² *Ibid.*, 181.

¹¹³ *Ibid.*, 181-2.

¹¹⁴ Thomas Hobbes believed that time did not exist separately from that which was being timed. Time only existed as a "Phantasm" or idea in the human mind, it had no physical existence. See *Elements of Philosophy, The First Section, Concerning the Body* (London, 1656), 68, 70.

¹¹⁵ Descartes, as was seen above, claimed that matter was defined by extension. This same definition also applied to space, therefore matter and space were one in the same.

¹¹⁶ For Spinoza all that existed was the substance of God. Void space was a contradiction.

the place of it; than that there is an absolute Time, different from the things whose Duration are consider'd."¹¹⁷

There was another other problem, which Toland sought to correct. Again, his target was Spinoza, who "added Understanding [to matter] or reflex Acts, without ever removing the Difficultys apparently offering themselves against such a precarious Hypothesis, not as much as showing ... how the Several reasoning particles cou'd agree together to form the same Body or System, or to separate or join so regularly on certain occasions ..."¹¹⁸ Toland viewed Spinoza's inclusion of "understanding" to the definition of matter as an attempt to account for motion in his incomplete worldview. Having used his reason to refute this claim in the previous letter, Toland did not do so now.

Toland also addressed other attempts to explain the motion of passive matter. A recent dissertation claims that Toland's denial of inert matter was, at least in part, an extended critique of the Cambridge Platonists.¹¹⁹ Toland questioned the validity of the work of the Cambridge Platonists, as embodied in the work of Ralph Cudworth (1617-88). In 1654, Cudworth was made master of Christ's College, Cambridge. He was also part of the revival of Platonic thought, and a founder of the Cambridge Platonists. Because of theological problems that Cudworth identified in Cartesian mechanical philosophy, he reinterpreted Plato's belief in the *Anima Mundi* and formulated the concept of the "Plastic Nature."¹²⁰ This was a "formative agent" acting as an intermediary between God and nature. Plastic Natures solved two of his theological concerns. The mechanical philosophy which reduced all events in the universe to only passive matter and motion was in

¹¹⁷ Toland, "Motion is Essential to Matter", 182-3.

¹¹⁸ *Ibid.*, 210-11.

¹¹⁹ Cherchi, "Atheism, Disimulation and Atomism."

¹²⁰ Sarah Hutton, "Cudworth, Ralph (1617-88)" in *Routledge Encyclopedia of Philosophy*, 10 vols. ed. Edward Craig (London: Routledge, 1998), II:741.

danger of removing God from the world. On the other hand, Occasionalism maintained that God took part in all action in the universe, no matter how trivial. Such a belief could, in Cudworth's opinion, lead to atheism by diminishing the divine status of God. Therefore, Plastic Natures solved these problems by making God active in the universe; but God did not personally attend to all action, which he directed via the Plastic Nature.¹²¹

On the idea of a Plastic Nature as the intermediary between God and the created world, Toland wrote: "No less Romantic is the plastic life of other philosophers, which (according to its modern Reviver the universally learned Dr. Cudworth) is not material, but an inferior sort of spirit without sensation or thought ..."¹²² Toland's distaste for plastic natures is a continuation of refusal to accept the existence of intermediaries between God and the creation, be they priests or creative media.

This denial of agents between God and the world is evident in his response to a criticism from the imagined reader of the letter. Reacting to the suggestion that the inherent motion of matter removed God from the universe, Toland considered this objection was "more feeble than all the rest, That after admitting the Activity of Matter, there seems to be no need of a presiding Intelligence..."¹²³ No reason existed, believed Toland, to prevent God from creating active matter.

Besides, that God was able to create this Matter active as well as extended, that he cou'd give it the one Property as well as the other, and than no reason can be assign'd why he should not endue it with the former as well as with the latter; is there likewise no necessity that he should ever rather always direct its Motion?¹²⁴

¹²¹ *Ibid.*

¹²² Toland "Motion is Essential to Matter", 211.

¹²³ *Ibid.*, 234.

¹²⁴ *Ibid.*, 234-5.

Although matter was self-moving, it alone could not be responsible for the present state of the universe. Toland explained that God was still the architect of the world; it could not be otherwise.

Can the Formation of Animals or Plants be accounted for from the Extension of Matter? Or are you able to imagine that the Action and Reaction of Bodys, of all Particles of Matter on one another, cou'd ever have the Contrivance to make any one of those admirable vegetable or animal machines? All your skill in Mechanism can no more help you, than it did CARTESIUS, to find out Rules and Engines for making either a Man or a Mouse. All the jumbling of Atoms, all the Chances you can suppose for it, cou'd no more bring the Parts of the Universe into their present Order, nor continue them in the same, nor cause the Organization of a Flower or a Fly, than you can imagine that by tumbling together the Letters of a Printer a million of times, they shou'd ever fall at last into such Position, as to make the *Aeneis* of VIRGIL, or the *Ilias* of HOMER, or any other Book in the world.¹²⁵

Clearly, at this point in his thinking, Toland's natural philosophy did not remove God from the universe. All that existed was matter, but there was an organising principle in the universe, which could not be account for by matter. That was, God, in the Stoic *logos* sense. Matter did move by its own internal power, but it required a purpose, which could only come from God. God was an architect, who used active matter to create the world. It was also God as described by Bruno. Who claimed "God gives to matter and the universe an inherent harmony..." Matter may move by itself, but God directed its motion and direction. For Toland, motion—even inherent motion—alone did not account for the present state of the world.

Toland's inclusion of divine guidance for the universe was readily accepted by Charles Gildon (1665-1724). Gildon, himself a reformed deist, at first reacted strongly to Toland's belief that "Motion is Essential to Matter." After reading the tract in its entirety, Gildon concluded that Toland had:

[R]emov'd the Cause of my Answering him, by owning its Creation, and Supposing, that God, with its other Properties, endu'd Matter with

¹²⁵ *Ibid.*, 235-6.

this likewise; tho' I am far from being satisfied with the Reasons of his Opinion, which I cannot perswade my self to Convincing...¹²⁶

Before concluding this letter, Toland gave the clearest presentation of his reliance of nominal essences. Toland denied that he could provide a definition of the real essence of motion.

But if you demand the Definition of Motion it self, I answer that I cannot give it, nor could any other Man, tho never so able; not that we know it the less for all this, but on the contrary because we know it better than anything which is capable of a Definition. Simple Ideas, such as Motion, Extension, Color, Sound, are Self-evident, and their Names by no means definable; but the single Words which denote more complex Ideas ...¹²⁷

All that could be known about the motion of matter was its nominal essence, which like extension and solidity were understood by reason. The internal construction of matter, which caused the motion was a real essence and as such could never be known.

Toland was careful not to leave his readers with the opinion that matter had no more attributes than those he discussed. "I won't say that Matter has no other essential Property's but these three on Extension, Solidity, and Action: but I am persuaded that from the due and joint Consideration of these alone, world of its phenomena may be better accounted for than hitherto."¹²⁸ He did, however, intend to show: "That Extension, ... exhausts the Idea of Matter, I deny; since it does not imply Solidity or Motion: but all that extended is Matter, may be very true, tho matter be not barely extended, but likewise active and solid."¹²⁹ This was true because: "Action is the immediate Cause of all local motion; but Extension is the subject and measure of their distances: and tho upon Solidity depends the Resistance, Impulse,

¹²⁶ Charles Gildon, *The Deists Manual*. (1705; reprint, New York: Garland Publishing Company, 1976), b2r.

¹²⁷ Toland, "Motion is Essential to Matter", 226-7.

¹²⁸ *Ibid.*, 229.

and Protrusion of Bodys, yet 'tis action that produces them in Extension." Furthermore, "Thus one motion is always succeeded by another Motion, and never by absolute Rest, no more than in any Parcel of Matter the ceasing of one Figure is the ceasing of all, which is impossible."¹³⁰ Recalling Toland's definition of "Action" as "the Motion of the Whole," local motion was the natural result of the construction of the material universe. Matter moved because of God's design for the universe. "I may now venture to conclude," wrote Toland, "that action is essential to Matter, since it must be the real Subject of all those Modifications which are call'd local Motions, Changes, Differences, or Diversitys ..."¹³¹ Toland thus ended his letter.

Toland's Heretical Newtoniansim

Throughout his description of the inherent motion of matter, Toland made frequent references to the work of Isaac Newton. More often than not Toland used Newton to support his materialistic views. This is a peculiar use of Newton, whose natural philosophy seems, at first glance, the very antithesis of Toland's. The process by which Toland made Newton fit his views occupies the remainder of this chapter.

The first appearance of Newton's name in *Letters* was a reference to the proper method for natural philosophy. Mathematicians, whom Toland thought concerned themselves with mere abstractions, needed to be directed to this method, because they,

compute the Quantitys and Proportions of Motion, as they observe Bodys to act on one another, without troubling themselves about the physical Reasons of what every person allows ... the latter wou'd succeed better in their Reason, if they did more acquaint themselves before hand with the Observation and Facts of the former, as Mr. NEWTON justly observes.¹³²

¹²⁹ *Ibid.*, 230.

¹³⁰ *Ibid.*, 231.

¹³¹ *Ibid.*, 202.

¹³² *Ibid.*, 177.

Toland was referring to part of the scholium found on page ninety-two of the first edition of the *Principia*, a fact he acknowledged in a footnote.

There, Newton claimed:

In mathematics we are to investigate the quantities of forces with their proportions consequent upon any conditions supposed; then, when we enter upon physics, we compare those proportions with the phaenomena of Nature, that we may know what conditions of those forces answer to the several kinds of attractive bodies. And this preparation being made, we argue more safely concerning the physical species, causes, and proportions of the forces.¹³³

Toland used these words to illustrate the importance of following proper method when investigating nature. One could not confine his investigations to theory alone. The true philosopher looked to nature for instruction. This practice was also supported by Locke's insistence on sensory experience as the basis for knowledge. Toland employed Newton's work to give the argument more weight than it would have had coming from him alone.

Just as Locke's belief in real space did not deter Toland from using those parts of Locke's philosophy, he found useful, Toland did the same with Newton. Much to Toland's dismay Newton, like Locke, believed in an absolute, real, space. "Mr. Newton is thought not only to believe these things [absolute time and space], but also put them both on the same foot." Again, Toland quoted from the *Principia*:

*Times and Space, says he, are as it were their own Places, and those of all other things in the Universe are in Time as to the Order of Succession, and in Space as to the Order of Situation. 'Tis essential to 'em that they be Places; and to think these primary Places; and to think these Primary Places can be mov'd is absurd. These are therefore absolute Places, and the Translations from them are the only absolute Motions.*¹³⁴

¹³³ Isaac Newton, *Philosophiæ Naturalis Principia Mathematica* (London, 1687), 192. (hereafter, cited as *Principia*) English version: Isaac Newton *The Principia* [The Mathematical Principles of Natural Philosophy] trans. Andrew Motte (1729; reprint, New York: Prometheus Books, 1995), 154. (Here after cited as *Mathematical Principles*)

¹³⁴ *Ibid.*, 183. For the original see Newton, *Mathematical Principles*, 15.

Under the quotation, Toland claimed: "I am convinc'd that these words are capable of receiving an Interpretation favourable to my opinion ..."

Before addressing how Toland would use Newton's words, it is necessary to discuss Newton's beliefs about time and space. Both Newton's theology and his natural philosophy necessitated the existence of absolute void space.¹³⁵ However, his thoughts on space and time cannot be divorced from his theology. Newton believed that God was a being who exists, everywhere at once. Therefore, a close relationship existed between God and the idea of space in his physics. If Newton was an Arian, as B. J. T. Dobbs claimed, space was the location of the Arian Christ, the creative medium, through whom God acts.¹³⁶ Alternatively, J. E. McGuire argued that due to the activity of Newton's voluntaristic God, He himself is always present in space to govern His creation.¹³⁷ In a manuscript, that McGuire entitled "Tempus et Locus," Newton referred to God by the Hebrew word *māqôm*, (מקום, place).¹³⁸ In referring to the original use of the term by Hebrew scholars, Newton stated that they defined מקום as "the place in which we live & move & have our being [they] did not mean space is God in a literal sense."¹³⁹ In the same manuscript, Newton also defined how place and time relate to the created world. "Time and Place are common affections of all things without which nothing whatsoever can exist. All things are in time as

¹³⁵ Edward Grant, *Much Ado About Nothing: Theories of Space and Vacuum From the Middle Ages to the Scientific Revolution* (Cambridge: Cambridge University Press, 1981), 240.

¹³⁶ Betty Jo Teeter Dobbs, *The Janus Faces of Genius: The Role of Alchemy in Newton's Thought* (Cambridge: Cambridge University Press, 1991).

¹³⁷ J. E. McGuire, "Predicates of Pure Existence: Newton on God's Space and Time" in *Philosophical Perspectives on Newtonian Science*. ed. Phillip Bricker and R. I. G. Hughes (Cambridge: The M. I. T. Press, 1990), 92.

¹³⁸ The Jewish theologies of space are discussed in Braian P. Copenhaver, "Jewish Theologies of Space in the Scientific Revolution: Henry More, Joseph Raphson, Isaac Newton and Their Predecessors" *Annals of Science* 37 (1980): 489-548, esp. 489-99.

¹³⁹ Newton, "Tempus et Locus" Quoted in McGuire, "Predicates of Pure Existence", 96.

regards duration of existence, and in place as regards amplitude of presence."¹⁴⁰ Therefore, according to Newton, God exists in space and time, they are not properties of Him; space was an "unbounded mode & consequence of God's existence." All other things, be they people, plants, or animals, have only a finite existence in time and space. Whereas, for God, time and space are infinite and eternal. This absolute extension of space and time is independent of human minds, because, in Newton's opinion, "there exists a greater extension [of space] than any we can imagine."¹⁴¹ Moreover, even if all matter vanished, space would remain. It remained because God's immaterial being would still exist. Space and time are neither in, nor have reference to created matter, but are references to the place of God's eternal being.

It did not bother Toland that Newton proposed the reality of absolute space existing without reference to matter. He believed Newton's work was compatible with his own. Indeed, Toland stated that perhaps Newton shared his views. "Tho Mr. Newton be deemed an Advocate for extended incorporeal Space, yet he declares that perhaps no one Body is in absolute rest, that perhaps no immovable bodily Centre is to be found in Nature..."

In demonstrating the similarity of his and Newton's views, Toland quoted from Definition III in the *Principia*. As the first edition of the *Principia* was written in Latin, Toland had to translate the definition, before including it in his book. Larry Stewart has suggested that Toland claimed agreement with Newton, based on his translation this passage. Toland's translation emphasised the relative "impressions of motion and rest"; where the "official" English translation made by Andrew Motte in 1729 is subtler. Stewart's claim centres on the translation of *vulgus/ vulgo*, which he noted

¹⁴⁰ Newton, "Tempus et Locus" Quoted in J. E. McGuire "Existence, Actuality and Necessity: Newton on Space and Time" *Annals of Science* 35 (1978): 465.

¹⁴¹ McGuire, "Existence, Actuality and Necessity", 468-9; Grant, *Much Ado About Nothing*, 243.

has an “eristic quality.”¹⁴² *Vulgus* is defined as “commonly”, “usually” or “generally.” Motte used it in this sense. To illustrate the difference in translation, both passages, Toland’s (left) and Motte’s (right) are present side by side.¹⁴³

<p><i>The Vulgar attribute Resistance to quiescent, and Impulse to move Bodys; but Motion and Rest, as commonly conceive’d, are only respectively distinguished from one another, nor are those things always in true Respose, which are vulgarly consider’d as quiescent</i></p>	<p>Resistance is usually ascribed to bodies at rest, and impulse to those in motion; but motion and rest, as commonly conceived, are only relatively distinguished; nor are those bodies always truly at rest, which are commonly taken to be so.¹⁴⁴</p>
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Stewart believed Toland’s translation allowed him to state Newton supported the arbitrary division of rest and motion.¹⁴⁵ The translation emphasised that Newton believed motion and rest are not absolute terms but only relative designations. In his translation, Toland stated:

Thus far that deservedly admir’d Author, who has seen the farthest of all Men living into the actual State of Matter; and indeed all Physicks ought to be denominated from the Title he has given to the first Book of his Principles, viz. *Of the Motion of Bodies*.¹⁴⁶

It seems that if Toland could demonstrate convincingly that his work agreed with Newton, it could lead to instant respect among the other virtuosi.

Toland pointed to the fact that Newton titled the first book of the *Principia*

¹⁴² Larry Stewart, “Samuel Clarke, Newtoniansim , and the Factions of Post-Revolutionary England” *Journal of the History of Ideas* 42 (1981): 54 n.4.

¹⁴³ The original Latin reads: “Vulgus Resistentiam quiescentibus et Impetum moventibus distinguuntur ab invicem, neq; semper vere quiescunt quae vulgo tanquam quiescentia spectantur.” Newton, *Principia*, 2.

¹⁴⁴ Newton, *Mathematical Principles*, 10.

¹⁴⁵ Stewart, “Samuel Clarke, Newtonianism”, 54; Larry Stewart, *The Rise of Public Science: Rhetoric, Technology, and Natural Philosophy in Newtonian Britain, 1660-1750* (Cambridge: Cambridge University Press, 1992), 87.

¹⁴⁶ Toland, “Motion is Essential to Matter”, 201-2.

"Of the Motion of Bodies," as if to state that Newton did not think they ever were in a state of actual rest.

For his part, Newton, in the aforementioned Definition III, was referring to the claims made by contemporary mechanical philosophers—likely Descartes¹⁴⁷—that motion could only be achieved by the impact of one body on another. Alternatively, Newton argued that bodies changed their motion due to the action of force(s). Newton built his physics on the concept of inertia. Inertia maintained the state (either of motion or of rest) of a body, it did not generate motion.¹⁴⁸ In Newton's words: "The vis insita, or innate force of matter, is a power of resisting, by which every body, as much as in it lies, endeavours to preserve in its present state, whether it be of rest, or of moving uniformly forward in a right line;" furthermore, "This vis insita, may, by a most significant name, be called vis inertiae, or force of inactivity..."¹⁴⁹ This definition was the rationale behind Newton's first Law of Motion: "Every body perseveres in its state of rest, or of uniform motion in a right line, unless it is compelled to change that state by forces impressed thereon."¹⁵⁰ The suggestion that a body will continue to move in a straight line, by virtue of inertia, unless "it is compelled to change" is a further reason why Newton believed in actual infinite space. A body could not keep its rectilinear motion in a finite universe, because eventually it would overcome the space for its action.

The action of force cause bodies changed from their inertial state.¹⁵¹ Newton identified the mathematical description of the change in inertial motion or rest as force. The second law of motion defined force as follows:

¹⁴⁷ See Westfall, *Force in Newton's Physics*, 346; I. Bernard Cohen, *The Newtonian Revolution* (Cambridge: Cambridge University Press, 1980), 171-2.

¹⁴⁸ P. M. Harman, *Metaphysics and Natural Philosophy: The Problem of Substance in Classical Physics* (Sussex: The Harvest Press, 1982), 8; Henry, "Occult Qualities", 353.

¹⁴⁹ Newton, *Mathematical Principles*, 9-10.

¹⁵⁰ *Ibid.*, 19.

"The alteration of motion is ever proportional to the motive force impressed; and is made in the direction of the right line in which that force is impressed."¹⁵² Books I and II of the *Principia* dealt with the mathematical description of force but did not address its actual being or cause. The force, or cause of change of motion, did not persist in the body it acted in an instant. Inertia alone maintained the new motion.¹⁵³ As we saw, Descartes viewed force as that which kept a body in motion. Upon an impact, the motion of one body was transferred to the second body. In contrast, the force that Newton described was a different species. Along with impact forces, Newton also wrote of attractions, which were suggestive of action at a distance. As seen below Newton denied his physics promoted action at a distance. He proposed universal gravitation as the unifying factor in physics. Simply put, Newton believed that everything in the universe attracted everything else. To use the most famous Newtonian example: the apple fell because the Earth attracted it. However, the apple also attracted the Earth, though due the difference between their masses, the effect of the apple was minute. This accounts for the third and final law of motion: "To every action there is always opposed an equal reaction: or the mutual actions of two bodies upon each other always equal, and distinct to contrary parts."¹⁵⁴ The revolutionary nature of Newton's natural philosophy was the mathematical description of this universal gravitation. The modern expression of the law is:

$$F_g = \frac{m_1 \times m_2 \times G}{d^2}$$

¹⁵¹ I. B. Cohen, "Newton's Second Law and the Concept of Force in the *Principia*" *Texas Quarterly* 10 (1967):127.

¹⁵² Newton, *Mathematical Principles*, 19.

¹⁵³ Harman, *Metaphysics and Natural Philosophy*, 14.

¹⁵⁴ Newton, *Mathematical Principles*, 19.

In plain words: the force of gravity (F) is equal to the product of the masses (m_1, m_2) of two separated bodies, multiplied by the gravitational constant (G), all divided by the square of the distance (d) between the two bodies.

The action of the universe was explicable by the interactions among several Newtonian forces. Consider the orbit of the Earth around the Sun. To begin, the Earth maintains its motion through space in a straight line due to its inertia. The Earth would move even if the Sun did not exist. The Earth, however, is attracted to the Sun, by universal gravitation. The attraction of the Sun on the Earth is a centripetal force, or tendency of the Earth to be drawn to the centre. The Earth resists this centripetal force with its centrifugal force, its endeavour to move away from the centre. Because of the great distance between the Sun and Earth, the attractive force of the Sun is not able to overcome the rectilinear motion of the Earth, which it keeps due to inertia. The Sun, however, exerts a continuous force on the Earth, which cause the Earth to deviate from its straight path. The Earth therefore is drawn into closed curve orbit, or a continuous fall around the Sun. The force by which the Sun impels the Earth towards it, however, is not present in the Earth; it acts then is gone. Inertia alone maintains the new motion. Newton explained this fact by viewing continuous force as an infinite series of finite impulses of force. With this interpretation, Newton claimed that bodies cannot alter their own motion, neither the force of gravity, not any other force, was inherent in bodies.¹⁵⁵

Despite having identified gravity through the mathematical description of force, Newton refused to speculate—at least publicly—on its actual nature. In his early years, Newton was a Cartesian. That is, he believed motion was communicated only through the physical contact of

¹⁵⁵ Cohen, "Newton's Second Law", 137.

bodies.¹⁵⁶ He postulated the existence of a subtle material aether, which acted as the mechanism of all action in the universe, thereby preventing action at a distance. When Newton was composing the *Principia* in 1684/5, he abandoned explanations given in term of a material aether. He realised that his mathematical descriptions of the orbits of the planets fit too closely with Kepler's laws. If a material aether existed, the two calculations would not agree so closely. Newton began to search for a new causal mechanism for gravitation.¹⁵⁷ It is here that a fusion between Newton science and theology took place. Newton searched for the cause of gravity, not in texts on natural philosophy, but in the Old Testament. He quoted from Jewish theologies of space. Newton, as we saw earlier, believed that space was the location of God. If there was not a material aether, then there was only God. Therefore, gravity was the constant action of God. If Newton was an Arian, then gravity was caused by Jesus Christ, the creative medium, through whom God acts in the universe. In Newton's theological physics, action at a distance did not occur because a divine being, who filled all space, controlled the motion of bodies by way of gravity. For Newton gravity was more than a mathematical description, it was the key to divine activity.

¹⁵⁶ This section on Newton's search for the cause of gravity relies on Dobbs, *The Janus Faces of Genius*, 185-192.

¹⁵⁷ The shift in Newton's thought is made evident by comparing the original edition of the *Principia* (1687) with the changes, which Newton wrote in the early 1690s. The proposed alteration to the corollaries of Proposition 1, Theorem 1, of Book I, are most telling. In the *Principia* Newton wrote of "non-resisting media". In the revisions he wrote of "non-resisting spaces." Compare the two passages: "Corol. 1 In *mediis non resistentibus*, si areal non sunt temporibus proportionales, vires non tendunt ad consursum radiorum." "Corol. 2. In *mediis omibus*, si arearum descriptio acceleratur, vires non tendunt ad concursum radiorum, sed inde declinant in consequentia" (my emphasis) in Newton, *Principia*, 38. The revisions are prefaced by "Dele Corollaria duo et eorum vice scribe haecce" "Corol. 1. Velocitas corporis in centrum immobile est in *spatijs non resitantibus* reciproce ut per pendiculum a centro illo in orbis tangentem rectilineam demissum." "Corol. 2. Si arcum duorum aequalibus temporis in *spatijs non resistentibus* descriptorum chordae ..." (my emphasis) See "De Motu Corporum Liber Primus' Remodelled" in Isaac Newton, *The Mathematical Papers of Isaac Newton* 8 vols. ed. D. T. Whiteside (Cambridge: Cambridge University Press, 1967), VI: 542. All subsequent editions of Book I in the *Principia* refer to "non-resisting spaces." See Newton, *Mathematical Principles*, 40.

Toland seized upon Newton's statements, which at first glance seemed to support his worldview, without understanding their metaphysics. He was very impressed with the notion of universal gravitation and used it to support his claim of inherent motion for matter.

It may not be difficult to persuade even Persons of moderate Capacity, that there cou'd be no Levity or Gravity in the suppos'd Chaos, and that these Qualities wholly depend on the Constitution and Fabrick of the Universe; which is to say, that they are the Consequences of the World in actual being ... To imagine that any Parcel of Matter has Levity or gravity of itself, because you see those Effects in the Fabrick of the World; or to deduce it from the common Laws of Gravitation, is not only to imagine Matter alike in all place, but that the Wheels, and Springs, and Chains of a Watch can perform all those Motions separately which they do together.¹⁵⁸

As we have seen, Toland believed the universe to be composed entirely of a universal matter that was mentally divisible into separate bodies. Since, according to Newton, gravity depended on the "Fabrick of the Universe", which in Toland's philosophy was material, it was also part of these imagined bodies. The interconnectedness of the universe made gravity possible, in the same way than the "action" of the whole accounted for local motion. The universe operated as a clock, all the "Springs, and Chains" worked in harmony. If separate parts did exist, they would be as the spring removed from a watch. It could do nothing, until it was inserted back among the other pieces. The same was true of the universe separate pieces did not move until they were part of the whole. This is what Toland took to mean "The Fabrick of the Universe" and this is partly what Toland meant when he claimed Newton's work fit his worldview. Toland seized upon the notion of universal gravitation and its role in binding the universe. It did not matter that Newton envisioned gravity, as an active force that operated in God's space the strength of which was described mathematically as inversely

¹⁵⁸ Toland, "Motion is Essential to Matter", 184.

proportional to the square of the distances between bodies.¹⁵⁹ Toland was only concerned with taking those parts from Newtonian mechanics that supported his thinking.

The action of gravity, which Toland viewed as part of the universal matter, also seemed to be strong evidence for denying the notion of absolute rest.

Notable Effects depend on these Forces the nearer they are to being equal, or the stronger one of 'em is then the other; wherefore the centripetal being much greater than the centrifugal Force of the Parts of the Earth, taking in likewise the Atmosphere, is one main reason that it never loses any of its Matter, and that it always continues of the same Bulk or Dimensions, the centripetal Force of Gravity detains the Several Bodys in their Orbit, being considerably stronger than the centrifugal Force of Motion, by which they strive to fly off in the Tangent. Let the causes of these Forces be what they will, they are unanswerable arguments to my purpose of a perpetual Motion in all things.¹⁶⁰

While Toland, at least here, refused to speculate on the cause of “these Forces” he viewed the action of them as supporting his hypothesis of constant universal motion. In his mind, the fact that the centripetal force always drew the Earth, and all its “Matter”, into orbit around the Sun and that the centrifugal force was always too weak to overcome the attraction of Sun implied that the Earth and everything upon it was every truly at rest. The Sun constantly exerted a force on the Earth, therefore, it was always in motion, because as Newton claimed only force altered—or in Toland’s reading, caused—motion. The constant motion of the Earth, which Toland demonstrated through his adoption of Newton’s natural philosophy; was seen by him as evidence of the constant motion of the universe and the matter of which it was built. Toland’s adoption of the centripetal force, is the other way, in which he thought Newton’s compatible with his ideas. As we have

¹⁵⁹ On Newton’s search for the cause of gravity, see Dobbs, *The Janus Faces of Genius*.

¹⁶⁰ Toland, “Motion is Essential to Matter”, 206-7.

seen throughout this study, Toland was concerned only with the nominal essence of motion it is therefore not surprising that he did not address the cause of these forces. Such information, like the mysteries of Scripture, was not needed for this life. This reasoning is seen in his interpretation of the action of gravity.

This is my own opinion, whatever be my reasons for it; besides, that were Gravity an essential Attribute, and not a particular Mode of Matter, the same things would equally penetrate in all places and circumstances, as they are every where equally solid or equally extended; nor would they vary in the Retardation or Acceleration of their Descent in various Distances from the Centre. With me therefore Gravity infers no Vacuum ... and is but one of the many Modes of Action, however this determination happens, which at present we shall not examine its real Existence being deny'd by no body ...¹⁶¹

From this passage it is clear that Toland mistakenly viewed Newtonian gravity as an innate part of matter. As he claimed earlier, gravity was part of the universe; it was one piece of the cosmic watch.¹⁶²

If the action of force, which Toland viewed as evidence of constant motion, could be used to explain all phenomena in the universe, then he would succeed in proving that the universe is never at rest. He again found support in the *Principia*. "Mr. Newton, in the Preface of his *Mathematical Principles of Natural Philosophy*," Toland wrote, "has spoken of Gravity, Elasticity, Resistance, Impulse, and Attraction, and of Explication of the mundane System by these Principles"

I wish adds he that we co'd by the Same Method of reasoning be able to explain the other Phenomena of Nature from mechanical Principles! for I am induc'd by divers Considerations to suspect a little, that all these may depend on Certain Forces, wherby from causes yet undiscover'd the Particles of Bodys are mutually impell'd against each other, and cohere accordingly to regular Figures, or whereby they

¹⁶¹ *Ibid.*, 208.

¹⁶² This point is tentatively made by John W. Yolton. See his *Thinking Matter: Materialism in Eighteenth-Century Britain* (Minneapolis: University of Minnesota Press, 1983), 105n.17.

*reced and are driven from one another: which Forces being yet unknown, the Philosophers have hitherto attempted Nature in vain.*¹⁶³

Toland, with his belief in a material space, which was the place of gravity, combined with the constant action of the centripetal force of universal gravity, had accounted for all motion in the universe. This realisation suggested to Toland that perhaps he had solved the question of the cause of gravity. He wrote: "What those particular Forces and Figures may be, with their Reasons and Degrees, none in the World is so well able to discover and reduce into an intelligible System, as the most excellent Author: but as for the general of moving Force of all matter, I would flatter my self, that I had done something towards it in this letter."¹⁶⁴ Toland was attempting to contribute to the debates about natural philosophy: what was the nature of the universe? How and why did bodies move? It is unlikely he was, as Jacob claimed, building a world system capable of challenging that of Newton. Indeed, it is evident that Toland believed that he was complementing what Newton had done.

In the above quotations, Toland claimed that gravity was an innate part of matter. He was not the only contemporary of Newton to draw that mistaken conclusion from the *Principia*. In his preface to the second edition of the *Principia*, Roger Cotes considered gravity to be an innate part of bodies. He stated: "That the attribute of gravity *was found in all bodies*, others suspected, or imagined before him [Newton], but he was the only and the first philosopher that could demonstrate it from appearances..."¹⁶⁵

¹⁶³ Toland, "Motion is Essential to Matter", 233-4.

¹⁶⁴ *Ibid.*, 234.

¹⁶⁵ Roger Cotes, "Preface to the Second Edition" in Isaac Newton, *The Mathematical Principles of Natural Philosophy* (1729) trans. Andrew Motte, rev trans. Florian Cajori (Berkeley: University of California Press, 1947), xxi. (My emphasis) On Cotes as editor of the second edition see: I. Bernard Cohen, *Introduction to Newton's "Principia"* (Cambridge: Cambridge University Press, 1971), 227-32.

Richard Bentley (1662-1742) drew the same conclusion. Bentley was the first Boyle Lecturer.¹⁶⁶ He was a classical scholar and chaplain to Bishop Edward Stillingfleet, and later Master of Trinity College. The lectures, which took place in 1692, attacked philosophers who claimed God was not needed for the continual operation of the universe. To support his belief in the divine handiwork of the creation and recurrent action of God in the world, Bentley relied on the contents of the *Principia*. Before publishing his sermons, Bentley wrote to Newton in late 1692 and early 1693, to be sure that he had correctly interpreted the latter's meaning.

Newton advised Bentley that gravity on its own could not be responsible for the operation of the universe. "I do not think," wrote Newton, "[the present state of the universe] explicable by mere natural causes but am forced to ascribe it to ye counsel & contrivance of a voluntary Agent."¹⁶⁷ Bentley agreed that the universe was divinely constructed and maintained, but evidently, he did not heed all of Newton's words, because a month later, Newton wrote a corrective. "You sometimes speak of gravity as essential and inherent to matter: pray do not ascribe that notion to me..."¹⁶⁸ In February 1692/3 Newton stated: "Gravity must be caused by an agent acting constantly..."¹⁶⁹ In his lectures Bentley had stated—as would Cotes—that gravity was perhaps an attribute of matter. Bentley however differed from Toland by maintaining that this matter moved within an absolute void space. This digression has two purposes. First, it demonstrates that Toland

¹⁶⁶ The Boyle lectures were established by the will of Robert Boyle. The lectures were to be preached eight times a year for the purpose of "proveing the Christian Religion agt notorious Infidels (viz) Atheists, Theists, Pagans, Jews and Mohomentans, not descending lower to any Controversies that are among Christians themselves...." See "Boyle's will" in R. E. W. Maddison, *The Life of Robert Boyle* (London: Taylor & Francis Ltd., 1969), 274. Scholars commonly view the lectures as the first public dissemination of Newton's natural philosophy.

¹⁶⁷ Newton to Bentley, 10 December 1692, in *Correspondence of Isaac Newton* 7 vols. ed. H. W. Turnbull (Cambridge: Cambridge University Press, 1959-77), III:234.

¹⁶⁸ Newton to Bentley, 17 January 1692/3, in *Ibid.*, 240.

¹⁶⁹ Newton to Bentley, 25 February 1692/3, in *Ibid.*, 253-4.

was not alone in thinking Newtonian gravity was a part of matter. Second, it serves as an introduction to the Boyle Lecturers, who used their position to challenge the claims made by Toland in his *Letters to Serena*.

Defenders of Orthodox Newtonianism

Like his thoughts on the Christianity, Toland's natural philosophy inspired many rebuttals. The best known of these challenges came from Samuel Clarke (1675-1729), who used his Boyle Lecture in 1704 to attack the notion of self-moving matter. He was determined to refute atheistic worldviews that mistakenly attributed motion to matter. Following the precedent set by Bentley, Clarke based his writings on Newtonian philosophy. Clarke, himself, was very familiar with Newton's arguments, as he was in 1704, in the process of translating Newton's *Opticks* into Latin at Newton's request.¹⁷⁰ Although his famous correspondence with Leibniz was still a decade in the future, Clarke was already proving himself a devoted Newtonian. According to the biography prefaced to the 1738 edition of his collected works, Clarke was, "Master of the Chief parts of the *Newtonian Philosophy*."¹⁷¹ Clarke thought Toland's obvious misreading of Newton could not go unanswered. The lecture delivered in 1704 but published in 1705 was titled *A Demonstration of the Being and Attributes of God*. Matter, believed Clarke, was passive. It did nothing of its own volition; only God could grant motion to matter and remove it, if he so desired. Toland had failed to prove inherent motion for matter, a fact Clarke was pleased to demonstrate.

One late Author [Toland] indeed has ventur'd to assert, and pretend to prove, that Motion, that is the Conatus to Motion, is essential to all Matter: But how philosophically, may appear from this one consideration. The essential conatus to motion of every one or any one particle of matter in this Author's imaginary infinite Plenum, must be

¹⁷⁰ Stewart, *The Rise of Public Science*, 85.

¹⁷¹ Samuel Clarke, *The Works* 4 vols (1738; reprint, New York: Garland Publishing, Inc., 1978), Ii.

either a conatus to move from one determined way at once, or move every way at once. [B]ut must arise from some external cause; because there is nothing in the pretended necessary Nature of any Particle, to determine its motion necessarily and essentially ... could prove nothing in matter but an external Rest of all and every one of its parts.¹⁷²

Clarke was not the only writer who rebuked Toland on the grounds of the theological implication for active matter. Indeed, according to Jacob and others, Newton himself responded to Toland's writings. Although his library did not contain any of Toland's books, Newton probably had access to *Letters to Serena* from Clarke's library.¹⁷³ As Stephen Snobelen has noted, Newton and Clarke shared many aspects of theology and engaged in frequent conversations about it.¹⁷⁴ There can be little doubt that Clarke discussed his forthcoming refutation of Toland with Newton. During the period 1704-6, Newton was revising the *Opticks* in preparation for the Latin edition, translated by Clarke. Appended to the Latin *Optice* were twenty-three queries that addressed various concerns in natural philosophy. The twenty-third query, later the thirty-first, provided Clarke with much of his argument against Toland. There, Newton examined the question of action at a distance. By studying the draft versions of this query, Jacob suggested that it was actually a response by Newton to the use of his philosophy by Toland.¹⁷⁵ The draft version states:

By what means do bodies act on one another at a distance? ... For we find in ourselves a power of moving our bodies by our experience. Life and will are active principles by which we move our bodies and thence arise other laws of motion unknown to us.

¹⁷² Samuel Clarke, *A Demonstration of the Being and Attributes of God* (London, 1705), 46-7.

¹⁷³ John Harrison, *The Library of Isaac Newton* (Cambridge: Cambridge University Press, 1978); Stephen Snobelen, "The Library of Samuel Clarke" *Enlightenment and Dissent* 16 (1997): 190.

¹⁷⁴ Stephen Snobelen, "Caution, Conscience and the Newtonian Reformation: The Public and Private Heresies of Newton, Clarke and Whiston" *Enlightenment and Dissent* 16 (1997): 160-5.

¹⁷⁵ Jacob, "Toland and Newtonian Ideology", 322-4; Stewart, *The Rise of Public Science*, 89.

And since all matter duly formed is attended with signs of life and all things are framed with perfect art and wisdom and nature does nothing in vain; if there be an universal life and all space be the sensorium of a thinking being...¹⁷⁶

Jacob pointed to the curious phrase that all matter "is attended with signs of life." She believed Newton chose not to publish this version because its contents could lead to identification with thinkers like Toland. The published version reads markedly differently, with no mention of "signs of life."¹⁷⁷

George Cheyne, also took up the cause of defending the Newtonian worldview from Toland's materialist attack.¹⁷⁸ Cheyne used his *Philosophical Principles of Religion: Natural and Revealed*, first published in 1705, to argue that matter did not have inherent motion. In opposition to Toland's reading of the *Principia*, Cheyne claimed, "Hence it is evident that no Particle of Matter, nor any Combination of Particles that is, no Body, can either move of themselves ... Matter is not endowed with Self motion ..."¹⁷⁹ His eloquent defence of Newtonianism was translated into Italian in 1729, indicating that concerns about the correct reading of Newton's *Principia* were not only an English phenomenon.¹⁸⁰

It is evident that while Newtonians did not consider Toland a worthy philosopher, they could not simply ignore his work, and they could not afford to be associated with it. The danger in Toland's unique reading of the *Principia* became manifest in the critique of Newtonian natural philosophy made by John Hutchinson (1674-1737). Hutchinson was an Anglican

¹⁷⁶ Cambridge MSS., British Museum, MS. Add. 3970. Fols. 619r. quoted in Jacob, "Toland and Newtonian Ideology", 323.

¹⁷⁷ For the published version of "Query 31" see: Isaac Newton, *Opticks* (1730; reprint, New York: Dover Publications, Inc., 1952), 375-406.

¹⁷⁸ Vincenzo Ferrone, *The Intellectual Roots of the Italian Enlightenment: Newtonian Science, Religion, and Politics in the Early Eighteenth Century*. trans Sue Brotherton (New Jersey: The Humanities Press, 1995), 82.

¹⁷⁹ George Cheyne, *Philosophical Principles of Religion: Natural and Revealed: In Two Parts*. 2nd ed. (London, 1715), 10.

¹⁸⁰ Ferrone, *The Intellectual Roots of the Italian Enlightenment*, 82.

Churchman, who saw Newton's work as a serious threat to orthodoxy. He believed the spectre of materialism followed Newton. Hutchinson partly supported this interpretation of Newtonian philosophy after meeting with and reading the natural philosophy of John Toland.¹⁸¹

Conclusion

John Toland grounded his natural philosophy on the level of understanding God demanded of him. Toland believed God required philosophers to know only the nominal essence of things. Therefore, Toland merely had to prove that matter had motion as part of its nominal definition. Whether he actually achieved this, is debatable, but he was confident in his success. Toland believed in his work so much that he attempted to supplement Newton's *Principia*. By doing this, Toland gained knowledge that was useful for this life. He did not engage in the fruitless search, for the cause of motion, which he understood to be a real essence. This realisation of Toland's theological intentions gives insight into his early natural philosophy.

¹⁸¹ John C. English, "John Hutchinson's Critique of Newtonian Heterodoxy" *Church History* 68 (1999): 584. The irony of an Anglican priest using Toland's work, which at its heart was anti-clerical, is noted by John Gascoigne. See his *Cambridge in the Age of the Enlightenment: Science, Religion and Politics From the Restoration to the French Revolution* (Cambridge: Cambridge University Press, 1989), 171.

Chapter Four: Conclusion

At the outset of this examination of John Toland, I claimed that he was a natural philosopher; that is, Toland was guided in his examination of the created world by his conception of God and His powers. I borrowed this classification from the work of Andrew Cunningham, who argued that “science” is an inappropriate term for describing early modern studies of nature. While the success of his thesis is apparent in the work of such an obviously theologically minded philosopher as Isaac Newton, the real test for the natural philosophy argument comes from a thinker like Toland. In the context of deist natural philosophy, Cunningham’s thesis is more difficult to prove, because the deist conception of God, by its very nature, does not allow for direct divine action. However, it is clear that a deist like Toland too based his investigations of the created world on his belief in God. In this case, a God who was rational and communicated his message to all people, educated and not, in clear and distinct terms.

The other guiding factor in this study was Peter Harrison’s assertion that the different reading of the Bible, which became possible after the Reformation, led to different hermeneutics for “reading” nature. In the case of Toland, did his rational reading of the Bible, lead to his rational reading of the book of nature? There is little doubt that the answer is yes.

For Toland, God granted people the ability to understand all knowledge, which was important for this life. Toland used the epistemological scheme described in John Locke’s *Essay Concerning Human Understanding* to buttress his arguments. Locke’s distinction between nominal and real essences became Toland’s labels for the dichotomy of useful and useless knowledge. Furthermore, Toland used Locke’s definition of

reason to differentiate between what was knowable and what was not. In Chapter Two, I demonstrated how Toland incorporated these ideas into his theology and his belief that the true Christian religion, the one practised by Jesus and his disciples, was free from mysterious content. Toland published these views in his polemical *Christianity not Mysteriorous*.

In Chapter Three I discussed how Toland's theology, based as it was on reason, manifested itself in his materialistic worldview. In *Letters to Serena*, Toland claimed that matter had motion as part of its definition. The inclusion of motion as a defining quality of matter allowed Toland to do two things. First, like other contemporary scholars, he could prove the poverty of Cartesian extension as the only attribute of matter. Second, by making motion part of matter's definition, Toland made it part of the nominal essence of matter. This approach combined with Toland's repeated insistence that God provided philosophers with the capacity to understand only the nominal essences of the created world, allowed Toland to cease his investigation into the inner nature of matter. He was able to do so because God did not command knowledge of real essences, of either the inner content of the Bible or the cause of the motion. Toland's use of Newton's *Principia*, which has long attracted the attention of historians of science, is better understood when viewed as part of his natural philosophy. Rather than seeing Toland as a political subversive, who used Newton's work to undermine the political status quo of England, I demonstrated that Toland read Newton in the only way, which his natural philosophy would allow. Toland saw in Newton both support and opportunity: support in the claim that universal gravitation fit nicely into his materialistic worldview, and opportunity that a positive reception of his additions to the metaphysics of the *Principia* would yield.

Besides advocating Toland's membership among the natural philosophers of the late seventeenth and early eighteenth centuries, this study leads to some under-explored areas in the history of science. According to

Richard S. Westfall the eighteenth century saw a transformation from faith based natural philosophy to investigations of nature supported by reason. This study has called his assertion into question, but a more complete examination of deist natural philosophers would likely render his interpretation obsolete. Another avenue of further research concerns Toland's use of Newton. Many studies have examined Newtonians, like William Whiston, Samuel Clarke and Richard Bentley, to name a few.¹ However, few studies have looked at philosophers like Toland who used Newton's work to support a non-Newtonian worldview. The study of "Heretical Newtonians" would yield a fuller picture of early modern natural philosophy.

Looking back on his intellectual achievements of his early life, John Toland was not impressed. When he reminisced in 1706, he referred to the years between 1696 and 1704 as my "Juvenile Thots."² The meaning of this characterisation is evident to scholars who see Toland's life work culminating in his account of a secret Socratic Society, which he described in *Pantheisticon* (1720). For them, Toland's mature philosophy is in the pages of that book. Although I do not deny that Toland shifted his philosophy from the deist materialism of *Letters to Serena* to the pantheism of *Pantheisticon*, the works that led up to this pantheism should be given serious treatment on their own merits. Often Toland's earlier writings are seen as part of a creative process, the goal of which was to write *Pantheisticon*. This belief has caused Toland's pre-pantheist works to be subsumed into later ones; *Christianity not Mysteriorious* and *Letter to Serena* have often been treated this way. By

¹ Margart C. Jacob, *The Newtonians and the English Revolution* (New York: Cornell University Press, 1976); James E. Force, *William Whiston: Honest Newtonian* (Cambridge: Cambridge University Press, 1985); Stephen Snobelen, "Caution, Conscience and the Newtonian Reformation: The Public and Private Heresies of Newton, Clarke and Whiston" *Enlightenment and Dissent* 16 (1997): 185-97; Larry Stewart, "Samuel Clarke, Newtonianism, and Factions of Post-Revolutionary England" *Journal of the History of Ideas* 42 (1981): 53-72.

examining each of Toland's books in its historical context, rather than as pieces of the pantheist puzzle, the theological foundations of his natural philosophy is evident.

In the last days before his death, Toland dictated his epitaph.

Here Lyeth John Toland.
 Who born near Derry in Ireland
 Studyed young in Scotland and Holland
 Which, growing riper, he did also at Oxford,
 And, having more than once seen Germany
 Spent his Age of Manhood in, and about London.
 He was an assertor of Liberty
 A lover of all sorts of Learning
 A Speaker of Truth
 But by no means follower, or dependant,
 Nor could frowns, or fortune bend him
 To decline from the ways he had chosen
 His spirit is join'd with the aithereal father
 From whom it originally proceeded,
 His body yielding likewise to nature
 Is laid against in the Lap of its Mother.
 But he's frequently to rise to himself again,
 Yet never to be the same Toland more.
 Born ye 30 of Novemb. 1670
 Dy'd the 11th of March 1722.
 If you would know more of him
 Search his Writings.³

The last two lines are most telling, in the two and two-thirds centuries since Toland gave this advice, historians are still searching for him.

² Quoted in: Robert Rees Evans, *Pantheisticon: The Career of John Toland* (New York: Peter Lang, 1990), 209.

³ British Library, Add. MS 4295, f. 76. Quoted in Stephen H. Daniel, *John Toland: His Methods, Manners, and Mind* (Montreal: McGill-Queens' University Press, 1984), 13-4.

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