Contested Iconography: Was Isaac Newton an astrologer, a rational mechanistic scientist, or neither?

By James Frazier

Sir Isaac Newton (1642-1727 C.E.) has been used as an icon by two groups that hold a radically different vision of reality. Both astrologers and rational mechanistic scientists have made claims on Newton to support their respective belief systems. These two groups often engage in vitriolic debates over the validity of astrology. In light of this opposition and extreme polarization, it is extraordinary that both groups would claim Isaac Newton as a hero. Given Isaac Newton's exceptional contributions to what became modern science, it is obvious why the scientist would claim him as their own although this is not without its problems.[1] In this paper, the accepted image of Newton as the rational scientist fighting to rid the world of superstition through the development of rigorously applied mathematically based experimentation and methodology will be challenged. It will be argued that Isaac Newton held many beliefs and interests that would be considered heresy in the scientific world of modernity. As a result of modern scholarship, it has become increasingly difficult to classify Newton as a Newtonian in the sense that this term is understood today. The importance of Newton's work, combined with the rise of science as the respected authority in Western culture, may be what tempted some astrological writers to make unfounded claims that Newton was a proponent and practitioner of astrology. It can be shown that these claims are incorrect and, therefore, in need of revision. This paper will explore this controversy over the use of Newton as an icon by these two opposing disciplines. It will be argued that neither the astrologers

[1] Henry, John. The Scientific Revolution and the Origins of Modern Science. New York: Palgrave, 1997 (2002), p 3-4

nor their opponents, the rational scientists, may safely claim Newton as their champion unless they are willing to make unfounded claims in the first instance or repress large portions of his work in the latter.

By the end of 17th century astrology in England had declined from its once respected position as an accepted discipline among the intellectual elite and was largely forgotten by the educated classes. The reasons for the decline are a complex blend of political, religious, economic, and scientific factors as well as a fundamental change in worldview brought about by the Scientific Revolution. There is much disagreement among historians as to the extent and cause of this decline.[2] Although astrology had always had its critics, it had managed to survive and even thrive for centuries despite some very powerful intellectual and theological arguments against it. Since there was no large scale assault by the scientific community that finally caused this decline, it has been difficult to explain.[3] Whatever the ultimate reason for the decline, astrology did not disappear and neither did the debate between science and astrology.[4] Scientists and those who subscribe to scientism still regularly attack astrology.[5]

In modern times, the opposition to astrology by scientists is best exemplified by the attack launched against astrology in the American magazine the *Humanist* in 1975.[6] The scientists who were responsible for this attack stated that their concern was the dangerous influence that superstition, occult practices, and, especially, astrology would have on modern civilization. They expressed their fear that widespread gullible belief in astrology would diminish respect for the 'legitimate sciences' as well as

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[2] For two different historical takes on this see: Curry, Patrick. *Prophecy and Power, Astrology in Early Modern England*. Princeton, New Jersey: Princeton University Press, 1989, p 118-137 and Thomas, Keith. *Religion and the Decline of Magic*. New York: Scribner's Sons, 1971, p 349-357

[3] Thomas, Keith. *Religion and the Decline of Magic*, p 352

[4] Curry, Patrick. *Prophecy and Power, Astrology in Early Modern England*, p 118-137

[5] For example see: Dawkins, Richard. *Unweaving the Rainbow*. London: Penguin Books, 1998, p 115-124

[6] Bok, Bart J., Lawrence E. Jerome & Paul Kurtz. "Objections to Astrology: A Statement by 186 Leading Scientist." *Humanist*, Sept. / Oct. 1975, 4-6. Reprinted in *Philosophy of Science and the Occult*. Edited by Patrick Grim. Albany: State University of New York Press, 1982, p 14-8

leading interest away from these sciences. Although this document was neither convincing nor eloquent in its argument, especially compared to those of St. Augustine (364-430 C.E.) or the famous attack by Pico della Mirandola, (1463-1494 C.E.), it did carry considerable intellectual weight due to the fact that it was signed by 186 leading scientists. Of this group, eighteen were Nobel Prize winners which added even more prestige to the assault. In light of the current position of science in modern culture, it is perhaps understandable that astrologers would seek the approval of the scientists, just as their medieval counterparts sought the approval of the church. This is also demonstrated by some astrologers' and astrological associations' continued insistence that astrology is a science or giving their group a scientific sounding name, for example, the American astrological association, National Council for Geo-cosmic Research, N.C.G.R.. Despite the position of authority and power held by modern science, it may also be understandable why science views astrology as so threatening. Astrology and science fundamentally challenge each other's worldview. The usual result to this type of challenge is a demonizing of the perceived challenger.[7]

In 1977, Mr. T.G. Cowling (1906-1990 C.E.), Fellow of the Royal Society and Professor Emeritus of Applied Mathematics at the University of Leeds gave a lecture titled, *Isaac Newton and Astrology*. Professor Cowling set out to prove that, despite claims by some astrologers, there was no evidence that Isaac Newton had any involvement with the subject of astrology, and to counter a widely circulated story that purported to demonstrate that Sir Isaac Newton was an advocate of astrology. This story, according to Professor Cowling, had been appearing in the astrological literature since about 1910. The frequently repeated anecdote concerns something that Newton is supposed to have said to his colleague Dr. Edmund

[7] For a representative example of this debate see: Vaughan, Valerie. "Debunking the Debunkers: Lessons to be Learned." *The Mountain Astrologer*, Aug. /Sept. 1998, 1-17 quoted in Bibliography of Campion, Nicholas. "Prophecy, Cosmology, and the New Age Movement: The Extent and Nature of Contemporary Belief in Astrology." Ph.D., University of the West of England for the degree of Doctor of Philosophy at Bath Spa University College, 2003.as well as Dean, Geoffrey. "Does astrology need to be true?" In *The Hundredth Monkey and Other Paradigms of the Paranormal*, edited by Kendrick Frazier, 280-294. Buffalo, N.Y.: Prometheus Books, 1992.

Halley (1656-1742 C.E.). The story states that when Halley made disparaging remarks concerning astrology, Newton checked him by saying, “I have studied the matter, Sir, you have not.” This is taken to be proof that Isaac Newton was an advocate of astrology.[8] This ubiquitous story appears in numerous astrological textbooks. For example, a well known astrological writer, Derek Parker repeats the story as follows, "One is tempted to recall Sir Isaac Newton's reputed comment when Edmund Halley criticized (sic) him for accepting astrology: 'Sir, I have studied the subject, you have not'."[9] In this reference, Parker uses the word "reputed" as a qualifier but in a later publication co-authored with his wife he does not.[10] When it is quoted by most other writers, it is neither qualified in this way nor referenced as to its source. In addition to frequent use in astrological textbooks it also appears in numerous astrological websites.[11]

Professor Cowling has effectively countered this by demonstrating that the rebuke to Halley by Newton was about religion not astrology. Cowling refers to the following quote from Sir David Brewster's (1781-1868 C.E.) biography of Newton published in 1831. Brewster states, "When Dr. Halley ventured to say anything disrespectful to religion, he (Newton) invariably checked him and said, ' I have studied these things; you have not'." Mr. Brewster reported that the source was from a Professor Rigaud of Oxford who heard this from Dr. Maskelyne, the Astronomer Royal from 1765 to 1811.[12] Thus the story reported by astrologers appears to have been taken out of context. Mr. Cowling built a strong case against the possibility that

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[8] Cowling, T.G., F.R.S. *Isaac Newton and Astrology*. Leeds, U.K.: Leeds University Press, 1977,p 1

[9] Parker, Derek. *The Question of Astrology A Personal Investigation*. London: Eure & Spottiswoode, 1970, p 208

[10] Parker, Julia and Derek. *Parker's Astrology*. London: Darling Kindersley, 1991, p 9

[11] For examples of this story in the published astrological literature see: Sepharial, (Walter Gorn Old). *Hebrew Astrology: A Key to the Study of Prophecy*. London: W. Foulsham & Co., 1929, p 21 and Oken, Alan. *Alan Oken's Complete Astrology*. New York: Bantam Books, 1980, p 242 For a representative website example see http://wikipedia.org/wiki/Isaac_Newton's_occult_studies and www.pinoyastrologer.com/whobelivs.html

[12] Brewster, Sir David. *Memoirs of the Life, Writings, and Discoveries of Sir Isaac Newton*. Edited by 2 vols. Edinburgh: Thomas Constable, 1855, p 304

Isaac Newton would have had anything to do with astrology. Although Cowling had whiggish tendencies and an obvious bias against astrology, it appears that his reasoning was sound and grounded in factual evidence.[13]

Despite this effective refutation, the story has been continually repeated up to the present day. This is, perhaps, what motivated Dr R.H. van Gent, Conservator History of Astronomy, at the Boerhaave Museum, in the Netherlands to write, in 1993, a second rebuttal drawing on Professor Cowling's original article titled, *Isaac Newton and Astrology: Witness for the Defense or for the Prosecution*. Dr. van Gent has equaled the effectiveness of the original article and added additional evidence against Newton being involved with any astrology or practice of astrology. Dr. van Gent made a powerful argument by reporting the following,

> One of the foremost Newton scholars, the English historian of science, Derek Thomas Whiteside, has stated that he has never found any reference to astrology among the fifty million words which have been preserved from Newton's writings.[14]

Unfortunately for Dr. van Gent, the power of this quote is somewhat undermined by the fact that is incorrect. He references the quote as being from the original article by Professor Cowling but he has changed the wording slightly. In the quote given by Professor Cowling, which was regrettably not referenced in the original paper, the wording of the statement is that Mr. Whiteside had not found any references to horoscopes – not to astrology. As will be demonstrated, it is quite easy to find references to astrology in the works of Newton. However, references to astrology in Newton's writings do not prove endorsement. On the whole, these two writers make a convincing argument that Newton was not an advocate of

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[13] Cowling, T.G., F.R.S. *Isaac Newton and Astrology*, p 2-3

[14] Van Gent, Dr. R.H. "Isaac Newton and Astrology: Witness for the Defense or for the Prosecution?" *Correlation* 12, no. 1 (1993), p 33

judicial astrology, which is the judgment of horoscopes, as opposed to natural astrology, such as weather prediction and tidal effects of the moon.

The repetition of the story by modern writers of astrological instruction and theory is not limited to popular mass market texts and sun sign astrology websites. A well known psychologist and astrological writer, Dr. Glenn Perry, makes a reference to Newton and astrology that implies that Newton was a serious student of the art. Dr. Perry states, "Once considered the divine art and a study worthy of such names as Galileo, Kepler, and Newton.... "[15] Steven Arroyo repeats the story in his book, *Astrology, Psychology and the Four Elements*.[16] The distinguished writer, astrologer, and Kabbalist, Warren Kenton also repeats the story in an interview published in Parabola.[17] Some astrological writers, who include this in their text books, appear to do so in an attempt to argue that astrology is a legitimate science; the implication is that if such a great scientist as Newton believed in it, then this should dispel all scientific opposition.

This use of Isaac Newton to add validity, by association, to the "science" of astrology is not limited to twentieth century astrologers. It can be found as far back as 1828 in the "*Manual of Astrology, or The Book of the Stars*" by the astrologer Robert Cross Smith, known as Raphael (1795-1832 C.E.). He quotes Newton by saying, "The great Isaac Newton has the following remarks in regard to the *origin* of Astrology." What follows is a somewhat corrupted quote from Isaac Newton's book, the *Chronology of Ancient Kingdoms; Amended* in which Newton discusses the Egyptian's flight to Babylon and that they carried with them the art of astrology. Leaving aside the issue of the inaccurate quote, it would appear that Raphael used

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[15] Perry, Glenn, Ph.D. *Stealing Fire from the Gods: Myth and Method in Astrological Research*. San Rafael: APA Press, 1997, p 2

[16] Arroyo, Stephen. *Astrology, Psychology and the Four Elements*. Sebastopol, CA.: CRCS Publications, 1975, p 8

[17] Smoley, Richard. "Celestial Influence and Human Destiny: An Interview with Z'ev Ben Shimon Halevi (Warren Kenton)." *Parabola*, November 2000, p 60-67

this passage to show, by implication, that Newton was somehow a proponent of the art.[18]

Considering the negative impact the Newtonian worldview would eventually have on astrology due, in part, to the atheistic direction toward which it moved, it is incongruent that astrologers would claim Newton was an astrologer. This atheistic development would have surprised and disturbed such a deeply religious man as Newton. Yet, astrology was adversely affected by Newton's mechanical universe; divination became increasingly unbelievable in a world without divinity.[19] It is ironic that Newton started his mathematical quest as a result of attempting to understand an astrological textbook he had purchased at Sturbridge Fair in 1663. When he could not do the calculations, he turned to Euclid's geometry. This marks the beginning of his mathematical studies.[20] At least one author, Eugen Weber, claims that Newton stated upon his entrance to Cambridge that he wished to study mathematics in order to test judicial astrology.[21] Aside from these early tenuous connections, it is unlikely that Newton practiced judicial astrology for the simple reason that such a practice requires practice. It requires, at minimum, the reading of many astrological texts of instruction, the study of hundreds of charts and it entails working with clients. There has been no evidence to support such a serious study or practice of judicial astrology among the thousands of manuscripts left by Newton. His famous reclusiveness and dislike for social contact would have made this type of public engagement unlikely.[22] At the time of his death, he possessed only four books on astrology. Two of these were treatises on astrology, one was an almanac, and one was a refutation of astrology. Compared to his vast

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[18]Raphael, (Robert Cross Smith). *Manual of Astrology, or the Book of the Stars*. London: C.S.Arndid, 1828 (1837), p 20-21

[19] Campion, Nicholas. *The Great Year, Astrology, Millenarianism and History in the Western Tradition*. London: Arkana, 1994, 404

[20] Westfall, Richard. *Never At Rest, a Biography of Isaac Newton*. New York: Cambridge University Press, 1980 (1988), p 98

[21] Weber, Eugen. *Apocalypses: Prophecies, Cults, and Millennial Beliefs through the Ages*. London: Pimlico, 1999 (2000), p96

[22] White, Michael. *Isaac Newton, the Last Sorcerer*. London: Fourth Estate Limited, 1997, p 188

alchemical and theological library, this seems small indeed, and not nearly large enough nor containing the best of the vast literature on the subject for it to be seriously considered as a significant pursuit. Surprisingly, only about twelve percent of his library consisted of books on the scientific subjects of mathematics, astronomy, and physics. By comparison, the alchemical and theological books in his library represented over thirty-seven percent of the total number.[23]

Among the reasons that Newton was unlikely to have been an advocate of judicial astrology were his religious ideas concerning idolatry and prophecy.[24] He was a millenarian and like many, Newton saw the rapid increase in knowledge that was happening during his lifetime as being one of the signs that had been prophesied concerning the end of the world. It led him to believe it was nearing; however, he also maintained that it was impossible to predict when the end might come but only to have knowledge after the prophecies had come to pass – *post factum.*[25] He was a fanatical student of the biblical books of apocalyptic prophecy, especially Daniel and Revelation. Although both of these books contain significant amounts of astrology and veiled astrological symbolism, they are, like much of the Bible on the subject of astrology, ambiguous. The book of Daniel begins with the story of the failure of all the Babylonian astrologers, magicians, and soothsayers to interpret a dream for King Nebuchadnezzar. Careful reading of this book will reveal that Daniel was one of several Israelite children that were specially selected and trained by the Chaldean astrologers. However, Daniel does not use astrology to answer the King's query correctly; he received his information directly from God.[26] Later in the book of Daniel there is a clear message that paying too much attention to the stars offends Yahweh.[27]

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[23] van Gent, Dr. R.H. "Isaac Newton and Astrology", p 34

[24] Schaffer, Simon. "Newton's Comets and the Transformation of Astrology." In *Astrology, Science, and Society*, edited by Patrick Curry. Woodbridge: Boydell, 1987, p 241-242

[25] Bull, Malcom (ed.). *Apocalypse Theory*. Oxford: Blackwell Publishers, 1995(1996), p 125-126

[26] Daniel, Chapter 2, *the Holy Bible, King James Version*. London: Oxford University Press, p 725

[27] Campion, Nicholas. *The Great Year,* 156

Newton believed that the Chaldeans had been in possession of a pure knowledge, the *prisca sapientia*, but had lost it through corruption and idolatry. Astrology would have been likely have been viewed by Newton as dangerous idol worship.[28] Connected to this fear and hatred of idol worship was Newton's strongly anti-Catholic sentiment. He, along with many Protestants, believed that the Catholic Church was itself guilty of idol worship and of practicing magic. Rituals, veneration of saints, prayers to the Virgin, talismans, magic substances such as holy water, and especially the mass itself were seen by Protestants as magical and satanic. It can be argued that protestant religion was partially founded on and dedicated to the principle of removing magic from religion.[29] Newton believed that the prophecies contained in the Bible were not to be used for determining the future but rather for interpreting prophecies that had been fulfilled, so forecasting or telling fortunes would likely have appalled him.[30]

This is not to say that Newton disdained all astrological principles; it can be argued that this is not the case. Like his alchemical, hermetic, and astrological counterparts, Newton believed in the sacred mystical value of the number seven, a sacred number based on the then known number of planets that the ancients believed symbolized the perfection of God's design.[31] When he wrote the *Opticks* in 1704, he claimed that there were seven colors in the rainbow. Later investigation of his manuscripts revealed that when he did his experiments, he found only five and added two to make the number seven required for perfection. Newton had great respect for ancient wisdom, believing that the Jews had been given esoteric knowledge of the universe. He even speculated that the ancient followers of Pythagoras (approximately

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[28] Campion, Nicholas. *The Great Year*, p 404

[29] Thomas, Keith. *Religion and the Decline of Magic*, Chap. 3 esp. p 75

[30] Dobbs, B.J.T. *The Janus Faces of Genius, The Role of Alchemy in Newton's Thought*. Cambridge, U.K.: Cambridge University Press, 1991 (2002), p 84 see also Cowling, T.G., F.R.S. *Isaac Newton and Astrology*, p 11

[31] Weber, Eugen. *Apocalypses: Prophecies, Cults, and Millennial Beliefs Through the Ages*, p 35-36

558 B.C.E.) had an esoteric understanding of universal gravitation.[32] One example of this is shown in his book known as the *Principia* which is arguably the most important scientific work ever published. In this work he used classical geometry rather than the newly invented calculus because that is what the ancients would have had available to them.[33]

Newton, along with his colleague Edmund Halley, is said to have effectively dealt the final blow against the astrological model by proving the regularity of comets, thus removing the mystery and the association of comets as portents of evil. Newton claimed that comets served the function of stabilizing and revitalizing the universe. This is still celestial influence but it is far removed from the type of influence in day to day human affairs claimed by the judicial astrologers.[34] Newton believed that, with his work on comets, he had discovered not only how God renewed the universe but also how it might be destroyed.[35] He reasoned that comets might eventually be drawn into the sun where they would add so much heat, it would destroy life on earth. In other words, the world would be destroyed by fire just as the Bible predicted. Newton had discovered the 'how' of that future event not the exact date.[36] In actuality, he did not disprove celestial influence; he merely exchanged one idea of celestial influence for another.

Another manner in which Newton also used astrological principles was in his attempt to lay out an accurate chronology of history. Motivated by his millenarian beliefs, Newton made a serious study of history and attempted to correct what he saw as corruptions in the records. He attempted to rearrange history by using the planetary cycles as a dating device. He tried to match

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[32] Henry, John. *The Scientific Revolution and the Origins of Modern Science*, p62-63

[33] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*. New York: Free Press, 1984, p 291

[34] Schaffer, Simon. "Newton's Comets and the Transformation of Astrology.", p 241-244

[35] Webster, Charles. *From Paracelsus to Newton Magic and the making of Modern Science*. New York: Press Syndicate of the University of Cambridge, 1982, p 42

[36] Dobbs, B.J.T. "Newton as Alchemist and Theologian." In *Standing On The Shoulders of Giants*, edited by Norman J.W. Thrower. Oxford: University of California Press, Ltd., 1990, p 137

the history of the Greeks, the Romans, Babylonians, and Jews against the precession of the equinoxes. This is an example of Newton using astrological principles without advocating judgments of horoscopes or even symbolic connections between celestial and terrestrial events in terms of qualities.[37]

In using astrological principles and symbolism, Newton was not alone. It was possible for a natural philosopher to reject the practice of judicial astrology while still using astrological principles as well as the rich symbolism of astrology. The renaissance philosopher Marsilio Ficino (1433-1499 C.E.) is a good example.[38] Many of the natural philosophers may have rejected judicial astrology and the practice of such an art while at the same time holding a worldview that was in some ways closer to the astrological worldview than the strictly rational mechanical scientific paradigm of modern times. For example, Robert Hooke (1635-1702 C.E.), who publicly condemned astrology made a note of the conjunction of Mars and Saturn in his diary when a friend died and added the words “Fatal Day”, thus implying that the evil conjunction had some connection to his friend's death. John Flamsteed (1646-1719 C.E.), an openly anti-astrological astronomer, cast a horoscope for the foundation of the Royal Observatory. He was clearly ambiguous in that he scoffed at the horoscope, which begs the question of why he cast it in the first place if he was so opposed to the art. He was known to have attended similar dedications that were, like many building projects of the day, timed astrologically.[39] As late as 1704, Richard Mead (1673-1754 C.E.), who became vice president of the Royal Society in 1717, published a work that reported that epileptic fits occurred according to the phases of the moon.[40] These examples demonstrate that, even in intellectual circles, astrological principles were still in use into the 18th century.

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[37] Campion, Nicholas. *The Great Year*, p406

[38] Cornelius, Geoffrey. *The Moment of Astrology*. Bournemouth, U.K.: Wessex Astrologer, Ltd., 2003, p 2-

[39] Curry, Patrick. *Prophecy and Power, Astrology in Early Modern England*, p 140-141

[40] Curry, Patrick. *Prophecy and Power, Astrology in Early Modern England,*, p 151

To further demonstrate that Newton could and did use astrological principles, a quote from his alchemical writings is worth considering. Newton writes,

> For Antimony was called Aries with the Ancients. Because Aries is the first Zodiac Sign in which the Sun begins to be exalted and Gold is exalted most of all in Antimony.[41]

If Newton had been simply interested in chemistry there would be no need to discuss the Zodiac sign Aries or the fact that the Sun is exalted in Aries, a clear astrological principle having no basis in astronomy or chemistry.

When Newton is described the word genius is often used.[42] As Patricia Fara has pointed out, Newton is now almost universally held to have possessed one of the greatest scientific minds ever known. However, Newton was not, strictly speaking, a scientist because that word was not invented for more than a hundred years after his death. Newton had ideas and obsessions that would not fit our current day image of him. He devoted much of his life not to the study of celestial mechanics and mathematics for which he is remembered, but rather to the study of alchemy, biblical prophecy, and chronologies of ancient peoples.[43] By the standards of today, it would be difficult to classify him solely as a rational, mechanically minded scientist. His religious and alchemical studies must be taken into account because they were a major focus of his life and work. As will be shown, they also were a source of inspiration for the work which made him famous. It is perhaps most paradoxical of all that Newton, largely credited with being responsible for work which rendered magic and mysticism more untenable, did so by immersing himself in the very practices that his work is credited with destroying.[44] The now commonplace misunderstanding of Newton's

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[41] Keynes MS 19, f. lr, quoted in Dobbs, B.J.T. *The Foundations of Newton's Alchemy or ' The Hunting of the Green Lyon'*. New York: Cambridge University Press, 1975, p 152

[42] Fara, Patricia. *Newton the Making of Genius*. London: Macmillan, 2002, p xv

[43] Fara, Patricia. *Newton, The Making of Genius*, p 1

[44] White, Michael. *Isaac Newton, The Last Sorcerer*, p 106

alchemical and theological contributions to his scientific work is due to two post-seventeenth century developments- the rejection of alchemy and the divorce of religion and science.[45]

Although the full extent of Newton's alchemical research and occult beliefs may not be known, it can be safely said that the study of these subjects were of significant importance to him. The evidence from his library and manuscripts would indicate that the literature of alchemy, hermeticism, and Paracelsian philosophy remained important study for scholars of his time. Additionally, it was believed, by Newton and others that hidden in the obscure, symbolic, and allegorical alchemical texts were profound truths. Truths that might help unravel the mysteries of God's creation. It was also thought that they might help with decoding the prophecies of the bible, especially the apocalyptic texts of Daniel and Revelation. Newton and his fellow philosophers saw little difference between their scientific and their biblical quest. Both were a search for the divine plan and each might help with the other.[46] With typical obsessive devotion, Newton studied and reproduced in drawings the actual structure of Solomon's temple, believing that it was divinely inspired and contained coded secrets that reflected the very structure of the universe as well as clues to future prophecies. White claims that Newton thought of himself as the new Solomon charged with a God-given task of unlocking the secrets of the universe whether they were scientific, religious of alchemical.[47] Webster believes the worldview of the alchemical magus Paracelsus is not that far from the one that Newton held. He states,

> The more Newton's theological and alchemical, chronological and mythological work is examined as a whole corpus, set by the side of his science, the more it becomes apparent that in his moments of

[45] Dobbs, B.J.T. "Newton as Alchemist and Theologian.", p 129

[46] Webster, Charles. *From Paracelsus to Newton Magic and the making of Modern Science*, p 10

[47] White, Michael. *Isaac Newton, The Last Sorcerer*, p 158-162

> grandeur he saw himself as the last of the interpreters of Gods will in actions, living on the eve of the fulfillment of times.[48]

In the late seventeenth century an intellectual underpinning existed that could still support an animistic worldview. If the use of ritual had declined among the intellectuals as a way of manipulating the universe and making things happen, the idea that the magus might unlock the occult qualities and secrets through the use of natural magic had not. At the very least, the adept might achieve some spiritual success and transcendence of the human condition. The conceptual framework for magic as well as the actual possibility remained in place through the time of Newton.[49] It has been argued by Francis Yates and others that magic was taken over by science and that through a name change and modification became modern science.[50] Newton effectively did this in his system by splitting the occult into that which was acceptable and "scientific" and that which was "magical" and not acceptable. Science effectively separated itself from its magical, hermetic, alchemical, astrological, and philosophical roots and transformed itself into a separate discipline.[51]

Given the connections and affiliations that were Newton's, it is not surprising that he was heavily influenced by many men who held alchemical and hermetic ideas. He owned a copy of a major edition of the work of Paracelsus.[52] He also had a well worn copy of the six volume set of Elias

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[48] Manuel, Frank. *The Religion of Isaac Newton*. Oxford, 1974, p 23 as quoted in Webster, Charles. *From Paracelsus to Newton Magic and the making of Modern Science*. New York: Press Syndicate of the University of Cambridge, 1982, p 11

[49] Webster, Charles. *From Paracelsus to Newton Magic and the making of Modern Science*, p 2-5, 10-11

[50] Yates, Francis. "The Hermetic Tradition in Renaissance Science." In *Art, Science, and History in the Renaissance*, edited by Charles S. Singleton. Baltimore, Maryland: The John Hopskins Press, 1967 (1970) .p 272

[51] Curry, Patrick. *Prophecy and Power, Astrology in Early Modern England*, p 143 as well as- Hutchison, Keith. "What Happened to Occult Qualities in the Scientific Revolution?" *Isis* 73, no. 2 (1982): 233-253.

[52] Webster, Charles. *From Paracelsus to Newton Magic and the making of Modern Science*, p 9

Ashmole's alchemical collection, *Theatrum Chemicum Britanicum*.[53] He copied whole books and manuscripts by hand. According to Christiansen he read everything he could get his hands on including almost all the great alchemical masters such as Raymond Lull (1235-1315 C.E.), Paracelsus (1493-1541 C.E.), Samuel Hartlib (1600-1662 C.E.), Kenelm Digby (1603-1665 C.E.), Basil Valentine (15thC C.E.), and especially Michael Maier (1566-1622 C.E.), the German adept.[54] He also owned some of the Rosicrucian manuscripts that had created such interest early in the seventeenth century.[55]

Alchemy is difficult to define in part due to its incredibly long history as well the fact that its conceptualization was a highly individualized process. Additionally, alchemists deliberately tried to conceal their secrets. Westfall states, "Alchemy did not speak the language of ordinary mortals; it spoke in tongues, concealing its message in outlandish imagery comprehensible only to the initiated."[56] The occult, astrological, mystical, allegorical, and highly symbolic nature of alchemy has confused many who attempted to understand its nature. This obscurity was intentional and designed to keep the sacred knowledge out the hands of the uninitiated. The essence of alchemy was an animistic philosophy that stood in contrast to mechanical philosophy no matter what disguise it was clothed in. To the alchemist it was life, spontaneous activity, union of male and female, and active principles that were at the very heart of nature – not inert matter. C.G. Jung (1878-1961 C.E.) called the central idea of alchemy "the world-creating spirit that was concealed or imprisoned in matter."[57] The commonplace belief, however, is that alchemy was the attempt to turn base metals into gold and that it was merely a precursor of chemistry, a kind of pseudo chemistry. This is only

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[53] Yates, Francis. *The Rosicrucian Enlightenment*. London: Routledge and Kegan, 1972(2002), p 256

[54] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 217

[55] Yates, Francis. *The Rosicrucian Enlightenment*, p 255

[56] Westfall, Richard. *Never At Rest, A Biography of Isaac Newton*, p 20-22

[57] Jung, C.G. *Psychology and Alchemy*. Princeton, N.J.: Princeton University Press, 1980 (1968), p 293

partially correct. While it is true that alchemy developed techniques and practices that would later aid the discipline of chemistry, to frame an understanding of alchemy in this way is to misunderstand this tradition.[58] Equally, to limit it to gold making would be to miss much of its meaning. There were alchemists who were simply trying to make gold from common metals but many of the alchemists saw their art as an attempt to complete the work of God himself or at least to unlock the mystery of creation. Alchemy was seen as a path of initiation into the deep mysteries of the universe and the very processes that God used to create the world.[59]

Alchemy has roots that go back to the Egyptians and was associated with Hermeticism, mysticism, magic, and astrology as well as practical arts such as the development of metallurgy, dyes for coloring fabric, and even embalming. Essentially, "alchemy is the art of transformation" as the author Cherry Gilchrist described it.[60] Western alchemy drew heavily on Greek sources especially the elemental model of Aristotle (384-322 B.C.E.). It was Aristotle's assertion that matter was composed of four basic elements – air, earth, fire, and water – and that they had the ability to transform from one to another; this gave alchemical operations their theoretical basis. Since all things were composed of these four elements it was thought possible to transform substances by rearranging their proportions.[61]

Alchemy was not limited to a pursuit of magical and physical manipulation of the material world. It also developed into a spiritual discipline. Some alchemists began to discover that the chemicals in their retorts were not the only transformation that was occurring. Many began to realize the psycho-spiritual nature of the "Art." In the 20th century, Jung realized that alchemy was a reflection of the psyche of the alchemist, a projection screen, as it were, for unconscious structures and processes. Jung

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[58] Gilchrist, Cherry. *The Elements of Alchemy*. Shaftesbury, U.K.: Element Books Limited, 1991, p 107

[59] Jung, C.G. *Psychology and Alchemy*. Princeton, N.J.: Princeton University Press, 1980 (1968), p 246

[60] Gilchrist, Cherry. *The Elements of Alchemy*, p , 1

[61] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 206

felt that it contained a blueprint for psychological growth, a process of development and maturation which he called individuation.[62] The alchemist would not have used this language to describe what they were doing. Even so, by the 16th and 17th centuries, alchemy was being pursued by some of the greatest minds of the day and for many it had a religious, albeit unorthodox, meaning. Much of this was forgotten or repressed and written out of the histories until the pioneering work of Francis Yates. Yates was able to show that Hermeticism, astrology and alchemy all played a vital role in what eventually emerged as the Scientific Revolution. Alchemists, hermeticists and occultists like John Dee (1527-1608), Paracelsus (1493-1541), Robert Fludd (1574-1637), and Francis Bacon, (1561-1626) all contributed to the development of natural philosophy that would give rise to modern science.[63] The towering figure of Isaac Newton was one of those minds. Newton was an alchemist.

Although Isaac Newton studied alchemy from about 1668 until the second or third decade of the eighteenth century, he chose not to publish any of his alchemical works.[64] Due to various factors, occult practices such as alchemy and astrology were falling out of favor by the late seventeenth century or at least going underground. This process was neither sudden nor complete. This was partly due to their involvement in the English civil war, partly due to the politics of the restoration and partly due to the general intellectual atmosphere among natural philosophers especially as influenced by the Royal Society. The society, wishing to avoid the conflicts of the revolutionary years, had a stated policy that discussions of religious and political nature were to be avoided.[65] It was not unheard of for a particular philosopher to publicly condemn the arts while in private practicing them or for them to condemn another philosopher while engaging in the same practices – as did Henry More (1614-1687) in his ongoing debates with the

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[62] Jung, C.G. *Psychology and Alchemy*, p35

[63] Yates, Francis. *The Rosicrucian Enlightenment*, p 221-262

[64] Dobbs, B.J.T. *The Janus Faces of Genius*, p 1

[65] Yates, Francis. *The Rosicrucian Enlightenment*., p 242

alchemist Thomas Vaughn (1622-1660). More accused Vaughn of being a "philosophical enthusiast" which referred to the discredited radical sects that were so much a part of the political unrest during the period of revolution from 1640 to 1660.[66]

The reason Newton repressed this material may never be known. Perhaps it was because he never achieved the desired goal (although he did claim success) or perhaps he feared someone stealing the material and achieving the success for themselves.[67] He did show concern regarding the possible publication of some alchemical secrets by Robert Boyle (1627-1691).[68] Perhaps he feared the association of the occult with his major discoveries. Perhaps it was a concern for his public image. No doubt he was aware that the very attempt to transmute base metals into gold was an offense punishable by death. Later as Master of the Mint he would have been acutely aware of this danger.[69]

In an effort designed to protect Newton's image and standing, the deliberate suppression of his alchemical endeavors began almost immediately following his death. In 1727 Dr. Thomas Pellet (1671-1744), a respected member of the Royal Society, was given the task of sifting through Newton's manuscripts to determine which were suitable for publication. The papers were voluminous and the review was, no doubt, laborious. The alchemical and theological manuscripts were bundled together and marked by Dr. Pellet as being unsuitable for publication. This included texts and manuscripts on alchemy and theology totaling in excess of two million four hundred thousand words. All of the texts considered unfit for print were returned to the family. The Earls of Portsmouth inherited this collection from Newton's niece. They in turn allowed some scholars access to the works and to publish from the collection. One such publication that appeared in the eighteenth century was

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[66] Burnham, Frederic B. "The More-Vaughn Controversy: The Revolt Against Philosophical Enthusiasm." *Journal of the History of Ideas* #35, no. 1 (Jan-Mar) (1974): 33-49.

[67] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 231

[68] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 233 see also Gilchrist, Cherry. *The Elements of Alchemy*, p 106

[69] White, Michael. *Isaac Newton, The Last Sorcerer*, p 87

written by Bishop Samuel Horsley (1733- 1801 C.E.). It was a five volume set of books titled *Isaaci Newtoni Opera* and, continuing with the established pattern, Bishop Horsley chose not to mention a word of Newton's alchemical researches. The Bishop also elected to make no reference of Newton's heretical theological beliefs which included his deeply held belief that the Christian doctrine of the Trinity was false.[70]

The Bishop's efforts were not the first attempt at a review of Newton's life. That distinction belongs to Newton's devoted friend and admirer William Stukeley (1687-1765 C.E.). This first idolizing biography was begun while Newton was still alive. This work titled, *Memoirs of Sir Isaac Newton's Life* is unique in that much of it is an account based on first hand experience. It was, however, according to Michael White, not published in its entirety until 1936.[71]

The next major biographer was Sir David Brewster (1781-1868 C.E.); a man who was shocked at the alchemical material he discovered in Newton's manuscripts. Sir Isaac was clearly Mr. Brewster's adored hero as evidenced by the hagiographic tendency, in Christian's view, of the biography he penned.[72] Mr. Brewster was the Astronomer Royal, a strong Presbyterian, and a devoted admirer of Newton with considerable expertise in Newtonian celestial physics.[73] This must have made the discovery of Newton's alchemical works all the more difficult to bear. It appears that his intellectual honesty or his protestant conscience forced him to at least comment on this apparent anomaly,

> We cannot understand how a mind of such power, and so nobly occupied with the abstractions of geometry, and the study of the material world could stoop to be even the copyist of the most

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[70] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 203-204

[71] White, Michael. *Isaac Newton, The Last Sorcerer*. London: Fourth Estate Limited, 1997, p 1

[72] Christianson, Gale E. *In the Presence of the Creator,p 204*

[73] Dobbs, B.J.T. "Newton as Final Cause and First mover." *Isis* 85, no. #4 Dec 1994 (1994): 641

> contemptible alchemical poetry, and the annotator of a work, the obvious production of a knave and a fool.[74]

As one recent biographer so succinctly put it, "Even in the nineteenth century hero worship had its limits."[75] Brewster was, no doubt, thrown into an emotional cognitive dissonance trying to reconcile the image of Newton as the great rational scientist with that of some deluded half mad alchemical magician. Christian reports,

> Sir David Brewster's discovery that Newton had indiscriminately immersed himself in the writings of alchemical adepts therefore came as a bitter blow. He was haunted by the specter of Newton as a cloaked and bearded magus personified in literature and limelight by Marlowe's Doctor Faustus and Shakespeare's Prospero. More appalling still were the images of such real-life figures such as Dr.John Dee, an original Fellow of Newton's own Trinity College."[76]

"For Victorian biographers, candor was the least prized of virtues," – so says Gale Christian when discussing the early biographers of Newton. Although Brewster was truthful enough to mention the alchemical work, in spite of his low opinion of the subject, he did conceal the extent which Newton devoted himself to the alchemical quest.[77] Brewster tried to claim that Newton and Boyle were merely testing the pretensions of their predecessors and they were really motivated by a desire to make new discoveries in chemistry thus separating the alchemy of this trio from "common alchemy."[78] In light of later scholarship, most certainly in the case

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[74]Brewster, Sir David. *Memoirs of the Life, Writings, and Discoveries of Sir Isaac Newton*, p 373-375- Referenced by Dobbs, B.J.T. "Newton as Final Cause and First mover.", p 641 as well as by Christianson, Gale E. *In the Presence of the Creator, p 204*

[75] Christianson, Gale E. *In the Presence of the Creator, p 204*

[76] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 220

[77] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 220

[78] Dobbs, B.J.T. *The Foundations of Newton's Alchemy or ' The Hunting of the Green Lyon'*,p 11

of Newton, this argument would be difficult to sustain. Newton's researches in alchemy were connected with his search for the one God, the one divine unity hidden in matter. They were a religious quest as much as a scientific one. One indication of this is a quote attributed to an aging Newton and recorded by John Conduitt (1688-1737 C. E.), "They who search for the Philosopher's Stone [are] by their own rules obliged to a strict & religious life. That study [is] fruitful of experiments."[79]

Newton hoped to find the Philosopher's Stone and to solve the riddle of the universe, the puzzle created by God himself. He was occupied with a search for "the divine unity revealed in nature."[80] He was not simply looking to make improvements in chemistry. No doubt he made chemical discoveries; he was too meticulous a researcher to have ignored his findings. But as Christensen had demonstrated, he did not start with alchemy and proceed to chemistry. He did exactly the opposite; he started with chemistry and proceeded to alchemy.[81] Richard Westfall sees his interest in alchemy as a kind of rebellion against the mechanistic philosophy first formulated by Descartes.[82] It may have offered a way to combat the atheistic tendency of mechanical science. One of the fears of many 17th century thinkers was that the God of Descartes was in danger of becoming obsolete.[83] It was the theological problem of atheism that motivated Newton to prove the existence of God by finding the activating spirit that moved matter.[84] However much it disagrees with the inherited iconic image of Newton, there can now be little doubt that alchemy occupied much of Newton's time and effort.

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[79] Keynes MS 130, "A Conduitt notebook, King's College Library Cambridge -cited by White, Michael. *Isaac Newton, The Last Sorcerer*, p 121

[80] Yates, Francis. *The Rosicrucian Enlightenment*,p 257

[81] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 212

[82] Westfall, Richard. *Never At Rest, A Biography of Isaac Newton*, p 301

[83] Dobbs, B.J.T. "Newton as Alchemist and Theologian." In *Standing On The Shoulders of Giants*, p 135

[84]Dobbs, B.J.T. "Newton's Commentary on the Emerald Tablet." In *Hermeticism and the Renaissance-Intellectual History and the occult in Early Modern Europe*, edited by Ingrid and Debus Merkel, Allen G. London: Associated University Presses, Inc., 1988, p 187

In discussing the worldview that developed out of Newton's success in mathematics and physical science, Betty Jo Dobbs (1930-1994 C.E.) remarked,

> Thus it became a curious anomaly- and one to be explained away- that Newton's studies in astronomy, optics, and mathematics only occupied a small portion of his time. In fact most of his great powers were poured out upon church history, theology, "the chronology of ancient kingdoms," prophecy, and alchemy.[85]

The making of the Newton legend continued throughout the nineteenth century with Newton's image growing ever brighter and completely untarnished by any associations with the occult practice of alchemy much less still his theological beliefs regarding Christ and the Christian religion. Newton's obsession with alchemy and heretical theological beliefs would not have suited the Victorian sensibility. Sometimes this legend making had political motives behind it. When science began to grow more prestigious and powerful during the Industrial Revolution, it needed a hero. Newton as the great rational mathematician matched the requirements; Newton as an occultist did not. Newton's image was carefully crafted and promoted to fit what was needed, a hero who reflected the values of progress, hard work, and even British superiority. It was not so much that these 18th & 19th century scientists and historians rejected alchemy – for by that time it had been forgotten – they simply saw it as some strange flaw of character that was a minor problem compared to the other brilliant achievements of this great man.[86]

This hero worship continued unabated and very little was known about Newton's involvement with alchemy until the twentieth century. There were opportunities for the discovery of Newton's alchemical works that were

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[85] Dobbs, B.J.T. *The Foundations of Newton's Alchemy or ' The Hunting of the Green Lyon'*, p 6

[86] Fara, Patricia. *Newton The Making of Genius*. This entire book is an excellent study on the making of the image of Isaac Newton.

missed such as the donation of all of his manuscripts to Cambridge University in the 1880's by the Portsmouth family. The alchemical papers were deemed unimportant and of no scientific value so they were returned to the family. Finally in 1936, the family decided to put the remaining manuscripts up for auction at Sotheby's Gallery in London.[87]

It was this sale that made the unpublished manuscripts available to scholars and the "real life story of Isaac Newton, the neurotic, the obsessive, driven mystic," finally began to emerge.[88] The collection drew little interest at the time. Patricia Fara described it as a sale where "wealthy bibliophiles bid unenthusiastically for Newton's manuscripts."[89] A substantial portion of Newton's papers were purchased by the British economist Lord Maynard Keynes (1883-1946 C.E.). After reviewing the manuscripts he had purchased, Keynes sent shock waves through the scientific community when he delivered a speech to the Royal Society in 1942 where he painted a quite controversial picture of Newton. He stated,

> In the eighteenth century and since, Newton came to be thought of as the first and greatest of the modern age of scientists, a rationalist, one who taught us to think on the lines of cold and untinctured reason. I do not see him in this light. I do not think anyone who has poured over the contents of that box which he packed up when he left Cambridge in 1696 and which, though partly dispersed, have come down to us, can see him like that. Newton was not the first of the age of reason. He was the last of the magicians, the last of the Babylonians and Sumerians, the last great mind with the same eyes as those who began to build our intellectual inheritance rather less than 10,000 years ago. Isaac Newton, a posthumous child born with

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[87] Christianson, Gale E. *In the Presence of the Creator, p 204*

[88] White, Michael. *Isaac Newton, The Last Sorcerer*, p 3

[89] Fara, Patricia. *Newton The Making of Genius*, p 29

> no father on Christmas Day, 1642, was the last wonder-child to who the Magi could do sincere and appropriate homage."[90]

Lord Keynes also described Newton as an esoteric magician with one foot in the modern world and one foot in the Middle Ages – a blend of Copernicus and Faustus – and argued that the study of alchemy was as to him important as the study of physics.[91]

Since that time a new image of Newton has emerged showing him to be more flawed and, therefore, more human than the early biographers had led the world to believe. The previously glossed over alchemical and theological work of Newton finally began to come to light. Scholars began to uncover a dark heretical side to Newton and in the process found connections with his mathematical and scientific work. The best known of these scholars, the late American scholar Betty Jo Dobbs, convincingly argued that not only was Newton an alchemist but that alchemical ideas formed the very foundation of his work. She produced two books which treated this subject in great detail.[92] In her later work she argued even more strongly that alchemy was of considerable influence on Newton's thinking and that alchemical ideas were incorporated into his theories – especially that of universal gravitation.[93] Many other scholars have reached similar conclusions although three centuries of idealization will make overturning the accepted image of this "figurehead of science" a difficult and perhaps not universally desired process.[94] Some scholars hold different opinions and have taken issue with Dobbs. I. Bernard Cohen has objected to Dobb's conclusions.[95] Derek

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[90] Maynard Keynes, *Newton the Man*, in Royal Society, *Newton Tercentenary Celebrations*, (Cambridge: Cambridge University Press, 1947, p 27-34 quoted in White, Michael. *Isaac Newton, The Last Sorcerer*, p 3

[91] Fara, Patricia. *Newton The Making of Genius*,p 28

[92] Dobbs, B.J.T. *The Foundations of Newton's Alchemy or ' The Hunting of the Green Lyon'* and Dobbs, B.J.T. *The Janus Faces of Genius, The Role of Alchemy in Newton's Thought*

[93] White, Michael. *Isaac Newton, The Last Sorcerer*, p 4-5

[94] Fara, Patricia. *Newton The Making of Genius*,p 29

[95] Cohen, I. Bernard. *The Newtonian Revolution*. Cambridge: Cambridge University Press, 1980, p 10 referenced in Dobbs, B.J.T. *The Janus Faces of Genius, The Role of Alchemy in Newton's Thought*. Cambridge, U.K.: Cambridge University Press, 1991 (2002), p 3

Whiteside has also argued against the deductions of Dobbs.[96] On the whole, however, Dobbs makes a persuasive argument for the importance of alchemy in Newton's thought. Later biographers such as Gale Christian have also agreed with Dobbs as to the extent and influence of alchemy. When Newton first began his alchemical studies he read Robert Boyle but then quickly developed an appetite for more esoteric masters such as Michael Maier (1568-1622 C.E.), the well known German adept, physician, and aristocrat. Newton is known to have owned eight works by the German master, one of which was the *Symbola aureae mensae duodeciun natorium*. According to Christiansen, this work makes very little chemical sense but is "a great scholarly erudition in mythology and ancient history." Maier held the view that Hermes the Ancient Egyptian philosopher-king was the inheritor of ancient wisdom from Adam's son Seth and was no mere mythical figure but rather the father of alchemy, astrology, and other arts such as writing and mathematics.[97] Hermes was thought to be the author of the important *Tabula Smaragdina* or *Emerald Tablet of Alchemy*. This is the work that contains the most widely known hermetic principle – "As above so below" – which is the old doctrine of correspondences. Newton may have taken from this a clue which helped develop his theory of gravitation.[98] Newton later wrote a commentary on this text so it is without doubt he was familiar with its principles.[99]

In the article previously mentioned, Dr. van Gent claimed that no references to astrology had been found in Newton's work.[100] It is, however, quite easy to find references to astrology in Newton's *Chronology of Ancient Kingdoms, Amended*. This work was published in 1728 shortly after his

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[96] Whiteside, Derek T. "From His Claw the Green Lyon." *ISIS* 68 (1977): p 116-121

[97] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 222

[98] Dobbs, B.J.T. *The Janus Faces of Genius, The Role of Alchemy in Newton's Thought*, p 68-73

[99] Dobbs, B.J.T. "Newton's Commentary on the Emerald Tablet.", p 182-9

[100] Van Gent, Dr. R.H. "Isaac Newton and Astrology: Witness for the Defense or for the Prosecution?", p 33

death.[101] In this work, Newton not only reports on the origins of astrology, he does so three times; and by repeating the same idea places some emphasis on it. Newton relates the story of the invention of astrology in Egypt by Nichepsos, or Necepsos, who he says was one of the Kings of Lower Egypt and by Petosiris, his priest.[102] He also says that the Chaldeans in Babylonia were 'colonies of Egyptians' and after being taught by the priest of Egypt became famous for astrology.[103] Elsewhere he again lists this invention by Necepsos and Pelosiris (sic) in the year 772 (B.C.E.).[104] Then for the third time he relates the story,

> After the study of astronomy was set on foot for use of navigation.... and *Nechepsos* (sic) or *Nicepsos* (sic) King of *Sais*, by the assistance of *Petosiris* a Priest of *Egypt*, invented Astrology, grounding it upon the aspects of the Planets, and the qualities of the men and women to whom they were dedicated.... those Egyptians, who fled with him to Babylon, carried thither the *Egyptian* year of 365 days, and the study of Astronomy and Astrology.... they say that the Chaldeans *in* Babylon, *being colonies of the* Egyptians, *became famous for Astrology*, *having learnt it from the Priest of* Egypt...(Newton's italics)[105]

It is difficult to understand why Newton repeated this story so often unless he was either doing so unconsciously or was in some way drawing attention to this myth. However, this does not necessarily mean unusual importance as much of this work can be described as muddled and at times repetitive.

Newton was not above believing that, at least with comets, some celestial influence was possible. It has also been suggested by Patrick Curry

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[101] Newton, Isaac. *The Chronology of Ancient Kingdoms Amended*. London: J.Tonson, J. Osborn, T. Longman, 1728

[102] Newton, Isaac. *The Chronology of Ancient Kingdoms Amended*, p 327

[103] Newton, Isaac. *The Chronology of Ancient Kingdoms Amended*, p 27

[104] Newton, Isaac. *The Chronology of Ancient Kingdoms Amended* , p 34

[105] Newton, Isaac. *The Chronology of Ancient Kingdoms Amended,* p 251-252

that his theory of gravity is very similar to astrological influences – "universal action at a distance."[106] In fact, Newton's critics accused him of as much. He skirted the issue by claiming, "I frame no hypothesis," which was simply not true.[107] He framed many hypotheses.[108] This was simply a way around the problem. It was not that Newton was indifferent as to the nature of gravity. He spent much of his life working on the problem; his alchemical searches were partially aimed at discovering the mechanism of attraction.[109] To claim no hypothesis as to the cause of gravity allowed him to focus on the mathematical demonstration of the laws it followed. It was only necessary to explain the predictability of it. This has proven correct to a great extent. It is possible to send men to the moon using Newtonian physics without knowing the 'why' of gravity. Gravity became an acceptable "occult" quality.

When considering Newton's investigation of alchemy it is important to keep in mind that alchemy is loaded with astrological symbolism and principles. It is near impossible to separate astrology from alchemy. In considering these two arts, C.G. Jung commented, "Alchemy is inconceivable without the influence of her elder sister astrology..."[110] Another indication of the use of astrological principles by Newton is a letter he wrote to Francis Aston advising him on an upcoming trip. Newton first tells him to observe the humors of those people that he is encountering,

> When you come into any fresh company 1, observe their humours;2, suit your own carriage thereto by wch (sic) insinuation you will make their converse more free and open: 3 let your discourse bee more in

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[106] Curry, Patrick. *Prophecy and Power, Astrology in Early Modern England*, 143

[107] Newton, Isaac. *Mathematical Principles of Natural Philosophy*. London: University of California Press, 1934 (1687), p 547

[108] North, J.D. *Isaac Newton*. London: Oxford University Press, 1967, p 22

[109] Dobbs, B.J.T. *The Janus Faces of Genius, The Role of Alchemy in Newton's Thought*, p 251-5

[110] Jung, C.G. *The Collected Works of C.G. Jung, Mysterium Coniunctionis,* Vol 14 , translated by R.F.C. Hull ,Princeton, NJ: Princeton University Press, 1974, p. 179, paragraph 222

> Quarerys (sic) & doubting yn (sic) premptory(sic) assertations(sic) or disputings(sic)....[111]

This theory of the humours was a significant part of every astrologer and physician's practice even after the time of Newton. These qualities had a long tradition going back to the Greeks and were developed as a way of not only diagnosing medical problems and effecting treatment but also as a kind of psychology of personality. This would seem to be the context that Newton uses this term.[112]

Conclusion

It has been shown that the claims that Newton was a believer in judicial astrology using the misquoted remarks to Edmund Halley are incorrect and therefore the statements concerning astrology and Isaac Newton of many astrological writers are in need of revision. It has also been shown that Newton could and did use astrological symbolism and even concepts from astrology without endorsing judicial astrology. It has also been demonstrated that Newton held many beliefs and ideologies that would be incompatible with modern science. Newton was an alchemist; he studied Hermetic literature, and was heavily involved in alchemical experiments. It has been argued that alchemy influenced his thinking in a very fundamental and profound way. Newton was a devoted Christian as well as a theologically oriented historian and millenarian who spent much of his time not in the pursuit of celestial mechanics and mathematics but rather in hermetic, alchemical, and theological endeavors. He religious views, his alchemical studies, and his belief in ancient knowledge all would be incompatible with modern science. He would be shocked at the atheistic developments that resulted from the very Scientific Revolution he helped birth. In light of these factors revealed by contemporary scholarship, it has become increasingly

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[111] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 113

[112] Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*, p 113

difficult to classify Newton as a Newtonian and therefore his "scientific" image is, equally, in need of correction.

* * *

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Bibliography

Berlinski, David. *Newton's Gift*. London: Gerald Duckworth & Co. Ltd., 2001.

Bok, Bart J., Lawrence E. Jerome & Paul Kurtz. "Objections to Astrology: A Statement by 186 Leading Scientist." *Humanist*, Sept. / Oct. 1975, 4-6.

Brewster, Sir David. *Memoirs of the Life, Writings, and Discoveries of Sir Isaac Newton*. Edited by 2 vols. Edinburgh: Thomas Constable, 1855.

Bull, Malcom (ed.). *Apocalypse Theory*. Oxford: Blackwell Publishers, 1995(1996)

Burnham, Frederic B. "The More-Vaughn Controversy: The Revolt Against Philosophical Enthusiasm." *Journal of the History of Ideas* #35, no. 1 (Jan-Mar) (1974): 33-49.

Campion, Nicholas. *The Great Year, Astrology, Millenarianism and History in the Western Tradition*. London: Arkana, 1994.

Christianson, Gale E. *In the Presence of the Creator, Isaac Newton and His Times*. New York: Free Press, 1984.

Cohen, I. Bernard. *The Newtonian Revolution*. Cambridge: Cambridge University Press, 1980.

Cornelius, Geoffrey. *The Moment of Astrology*. Bournemouth, U.K.: Wessex Astrologer, Ltd., 2003.

Cowling, T.G., F.R.S. *Isaac Newton and Astrology*. Leeds, U.K.: Leeds University Press, 1977.

Curry, Patrick. *Prophecy and Power, Astrology in Early Modern England*. Princeton, New Jersey: Princeton University Press, 1989.

Curry, Patrick (Ed.). *Astrology, Science and Society*. Woodbridge: Boydell, 1987.

Curry, Patrick and Willis, R. *Astrology, Science, and Culture, Pulling Down the Moon*. Oxford, U.K.: Berg, 2004.

Dawkins, Richard. *Unweaving the Rainbow*. London: Penguin Books, 1998.

Dean, Geoffrey. "Does astrology need to be true?" In *The Hundredth Monkey and Other Paradigms of the Paranormal*, edited by Kendrick Frazier, 280-294. Buffalo, N.Y.: Prometheus Books, 1992.

Dobbs, B.J.T. *The Foundations of Newton's Alchemy or ' The Hunting of the Green Lyon'*. New York: Cambridge University Press, 1975.

———. *The Janus Faces of Genius, The Role of Alchemy in Newton's Thought*. Cambridge, U.K.: Cambridge University Press, 1991 (2002).

———. "Newton as Alchemist and Theologian." In *Standing On The Shoulders of Giants*, edited by Norman J.W. Thrower. Oxford: University of California Press, Ltd., 1990.

———. "Newton as Final Cause and First mover." *Isis* 85, no. #4 Dec 1994 (1994): 633-643.

———. "Newton's Alchemy and His Theory of Matter." *Isis* 73, no. No 4 Dec 1982 (1982): 511-528.

———. "Newton's Commentary on the Emerald Tablet." In *Hermeticism and the Renaissance-Intellectual History and the occult in Early Modern Europe*, edited by Ingrid and Debus Merkel, Allen G. London: Associated University Presses, Inc., 1988.

Fara, Patricia. *Newton The Making of Genius*. London: Macmillan, 2002.

Geneva, Ann. *Astrology and the Seventeenth Century Mind*. Manchester: Manchester University Press, 1995.

Gilchrist, Cherry. *The Elements of Alchemy*. Shaftesbury, U.K.: Element Books Limited, 1991.

Greene, Dr. Liz. *The Value of Astrology* www.astro.com, Aug 11, 2004 [cited.

Henry, John. *The Scientific Revolution and the Origins of Modern Science*. New York: Palgrave, 1997 (2002).

Hill, Christopher. *The World Turned Upside Down, Radical Ideas During the English Revolution*. New York: Viking Press, 1972.

The Holy Bible, King James Version. London: Oxford University Press.

Hutchison, Keith. "What Happened to Occult Qualities in the Scientific Revolution?" *Isis* 73, no. 2 (1982): 233-253.

Jung, C.G. *Mysterium Coniunctionis*. Edited by Herbert Read, Michael Fordham, Gerhard Adler, and William McGuire. Vol. 14, *Collected Works of C.G. Jung*. Princeton, N.J.: Princeton University Press, 1974.

Jung, C.G. *Psychology and Alchemy*. Edited by Herbert Read, Michael Fordham, Gerhard Adler and William McGuire, *Collected Works of C.G. Jung*. Princeton, N.J.: Princeton University Press, 1980 (1968).

Manuel, Frank. *The Religion of Isaac Newton*. Oxford, 1974.

Newton, Isaac. *The Chronology of Ancient Kingdoms Amended*. London: J.Tonson, J. Osborn, T. Longman, 1728.

———. *Mathematical Principles of Natural Philosophy*. London: University of California Press, 1934 (1687).

North, J.D. *Isaac Newton*. London: Oxford University Press, 1967.

Oken, Alan. *Alan Oken's Complete Astrology*. New York: Bantam Books, 1980.

Parker, Derek. *The Question of Astrology A Personal Investigation*. London: Eure & Spottiswoode, 1970.

Parker, Julia. *Parker's Astrology*. London: Darling Kindersley, 1991.

Parker, Julia and Derek. *Parker's Astrology*. London: Darling Kindersley, 1991.

Perry, Dr. Glenn. "From Paradigm To Method In Astrological Research." In *Stealing Fire From The Gods: Myth and Method In Astrological Research,* 2004.

Perry, Glenn, Ph.D. *Stealing Fire from the Gods: Myth and Method in Astrological Research*. San Rafael: APA Press, 1997.

Philosophy of Science and the Occult. Edited by Patrick Grim. Albany: State University of New York Press, 1982.

Raphael. *Manual of Astrology, or The Book of the Stars*. London: C.S.Arndid, 1828 (1837).

Schaffer, Simon. "Newton's Comets and the Transformation of Astrology." In *Astrology, Science, and Society*, edited by Patrick Curry. Woodbridge: Boydell, 1987.

Sepharial, (Walter Gorn Old). *Hebrew Astrology: A Key to the Study of Prophecy*. London: W. Foulsham & Co., 1929.

Tarnas, Richard. *The Passion of the Western Mind*. New York: Random House, 1991 (1993).

Tester, Jim. *A History of Western Astrology*. Suffolk, U.K.: Boydell Press, 1987.

Thomas, Keith. *Religion and the Decline of Magic*. New York: Scribner's Sons, 1971.

van Gent, Dr. R.H. "Isaac Newton and Astrology: Witness for the Defense or for the Prosecution?" *Correlation* 12, no. 1 (1993).

Vaughan, Valerie. "Debunking the Debunkers: Lessons to be Learned." *The Mountain Astrologer*, Aug. /Sept. 1998, 1-17.

Weber, Eugen. *Apocalypses: Prophecies, Cults, and Millennial Beliefs Through the Ages*. London: Pimlico, 1999 (2000).

Webster, Charles. *From Paracelsus to Newton Magic and the making of Modern Science*. New York: Press Syndicate of the University of Cambridge, 1982.

Westfall, Richard. *Never At Rest, A Biography of Isaac Newton*. New York: Cambridge University Press, 1980 (1988).

White, Michael. *Isaac Newton, The Last Sorcerer*. London: Fourth Estate Limited, 1997.

Whiteside, Derek T. "From His Claw the Green Lyon." *ISIS* 68 (1977): 116-121.

Yates, Francis. *Giordano Bruno and the Hermetic Tradition*. 2002 ed. London: Routledge & Kegan Paul, 1964.

———. "The Hermetic Tradition in Renaissance Science." In *Art, Science, and History in the Renaissance*, edited by Charles S. Singleton. Baltimore, Maryland: The John Hopskins Press, 1967 (1970).

———. *The Rosicrucian Enlightenment*. London: Routledge and Kegan, 1972(2002).

Sir Isaac Newton was an English physicist and mathematician, who was the key figure of the scientific revolution of the 17th century. He made a number of important scientific contributions, including laying the foundation of classical mechanics.Â But when this warm reception induced him to send the society a paper describing his experiments on light and his conclusions drawn from them, the results were almost disastrous for him and for posterity. The paper was published in the society's Philosophical Transactions, and the reactions of English and Continental scientists, led by Robert Hooke and Christiaan Huygens, ranged from skepticism to bitter opposition to conclusions which seemed to invalidate the prevalent wave theory of light. 1 Contested Iconography: Was Isaac Newton an astrologer, a rational mechanistic scientist, or neither? Bâ€¦Â Both astrologers andrational mechanistic scientists have made claims on Newton to support theirrespective belief systems. These two groups often engage in vitriolic debatesover the validity of astrology. In light of this opposition and extremepolarization, it is extraordinary that both groups would claim Isaac Newton asa hero. Sir Isaac Newton (January 4th, 1642â€“March 31, 1727) was a demigod mathematician, physicist, mystic, alchemist and philosopher. Credited with revolutionary advances in classical mechanics, optics, and mathematics, he is rated as one of the most important and influential individuals in the history of science and mathematics. Isaac Newton clearly understood the importance of experiments in scientific research, writing