Isaac Newton—friend or foe to biblical creation?

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Isaac Newton has often been cited as a six-day creationist or enrolled favourably in support of biblical creation. Moreover, his chronological writings do seem to allow for a world not much older than 6,000 years. But his less-than-literal treatment of Genesis 1-11 should make creationists cautious to appropriate Newton to this end. There is also reason to believe that Newton was possibly the first to advance the day-age theory, and inspired some of the earliest naturalistic reinterpretations of Genesis 1-11.

Newton has been called "one of the greatest creative men of genius who ever existed", the "high priest of science", and the "last of the magicians". As early as 1728, one reviewer even said that he was "the greatest man in the world, not only in this age, but in any age, since the world began". His intellectual impact in the world was such that, "it was not till a century after his death that men freed themselves from his authority sufficiently to do important original work in the subjects of which he had treated."

With a such a legacy it is only natural for creationists to seek to utilise Newton in support of biblical creation. But what were his actual beliefs and how did he treat Genesis 1–11? This paper will show that Newton's writings on creation, chronology, and the Christian faith were sometimes enigmatic and less than orthodox.

Newton's Principia Mathematica and Opticks

Most of Newton's seminal work was completed "between the ages of 21 and 23".6 In these two years, he "formulated his basic laws of mechanics, his optical observations on the nature of light, the calculus, and the law of universal gravitation".7 But his greatest literary masterpiece, published several years later in 1687, was *Philosophiæ Naturalis Principia Mathematica* (figure 1).8 This book has been praised as the "most famous scientific work of all time".9 It is therefore both surprising and significant to realise that Newton wrote more on theology than he ever did on science.10

So to what extent did Newton allow his theology to influence his science? Storr, following Keynes, ¹¹ believes that Newton "regarded the riddle of the universe in theological terms." ¹² Even if this assessment is justified, Newton apparently disapproved of the only direct reference to God¹³ in the first publication of *Principia*: "God placed the planets at different distances from the sun"; ¹⁴ because in

all subsequent editions, he changed it to "the planets were to be placed at different distances from the sun". ¹⁵ This alteration was mitigated by the fact that, to all subsequent editions of *Principia*, he also added a short theologically explicit addendum entitled "General Scholium". In the General Scholium, Newton writes:

"This most beautiful system of the sun, planets, and comets, could only proceed from the counsel and dominion of an intelligent and powerful Being This Being governs all things, not as the soul of the world, but as Lord over all; and on account of his dominion he is wont to be called *Lord God* [emphasis in original]." ¹⁶

This is followed by two more pages of theological philosophising, after which Newton concludes, "thus much concerning God; to discourse of whom from the appearances of things, *does certainly belong to natural philosophy* [emphasis added]".¹⁷ So although Newton removed any explicit theologising from *Principia*, these latter remarks appear to support the idea in principle.

His endorsement of intelligent design can also be found in the second edition of *Opticks*, where Newton wrote, "And tho' every true step made in this philosophy brings us not immediately to the knowledge of the first cause, yet it brings us nearer to it, and on that account is to be highly valued." In the fourth edition, he took this even further, saying:

"... the main Business of natural philosophy is to argue from phenomena without feigning hypotheses, and to deduce causes from effects, till we come to the very first cause, which certainly is not mechanical; and not only to unfold the mechanism of the world, but chiefly to resolve these and such like questions." ¹⁹

Newton had no time for atheism which he regards as "so senseless & odious to mankind that it never had many professors." ²⁰

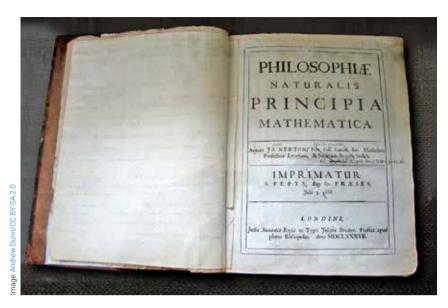


Figure 1. Isaac Newton's own first edition copy of Philosophiæ Naturalis Principia Mathematica

Newton's separation of science and theology

Outside of the Royal Society, Newton was also "unambiguously favourable" toward those who used his system in their own apologetics. For example, in 1692, Newton wrote to Richard Bentley (1662–1742): "When I wrote my treatise about our Systeme I had an eye upon such Principles as might work with considering men for the beleife of a Deity & nothing can rejoyce me more then to find it usefull for that purpose." But in another short paper, *Seven Statements on Religion*, Newton states as his first principle, "religion & philosophy are to be preserved distinct. We are not to introduce divine revelations into philosophy, nor philosophical opinions into religion." Moreover, as Manuel relates, "When Newton was President of the [Royal] Society, the journal-books record, he banned anything remotely touching on religion, even apologetics." 24

This makes it hard to ascertain, therefore, to what extent Newton allowed theology to infiltrate his science, given that he preferred—if not in principle, at least in practice—to keep the two separate. As Snobelen has observed, there is "more explicit theology in Charles Darwin's *Origin of Species* (1859) than in the first edition of Newton's great work."²⁵ That said, Snobelen still contends:

"Recent work on early modern science has demonstrated a direct (and positive) relationship between the resurgence of the Hebraic, literal exegesis of the Bible in the Protestant Reformation, and the rise of the empirical method in modern science *In this, Newton also played a pivotal role.* As strange as it may sound, science will forever be in the debt of millenarians and biblical literalists [emphasis added]".²⁶

This may be true, but Newton does not fit the classification of a traditional 'biblical literalist' easily.

Newton's heterodoxy

Whilst it is not difficult to find evidence of Newton's enthusiasm for the Bible, his theological views were often heterodox. As Thomas Hearne (1678–1735) once wrote of him:

"Sir Isaac Newton, tho' a great mathematician, was a man of very little religion, in so much that he is ranked with the heterodox men of the age."²⁷

Likewise, Snobelen concedes that although Newton was a "devoted believer", in other ways he was a "damnable heretic."²⁸ It is hard to dispute the fact that Newton was an Arian.²⁹ In his treatment on the religion of Newton, Manuel refrains from "pigeonholing" Newton like this, but still concedes that

he was anti-trinitarian.³⁰ This kind of heterodoxy can be seen in 12 propositions he made on the nature of Christ,³¹ and in *Irenicum, or Ecclesiastical Polyty tending to Peace*, where he identifies Jesus as the archangel Michael.³² Newton also questioned the reality of a literal devil and evil spirits.³³ Yet, Snobelen maintains that "Newton's demonology was an exegetical option, not a sign of the encroaching Enlightenment."³⁴ But this is hard to accept, given that, as Snobelen himself admits:

"Newton's denial of evil spirits was well outside the theological mainstream in his own day and for a long time afterward. His position would have been viewed as a runway to infidelity, a capitulation to cold, dark atheism, a disturbing disenchantment of the world or even a delusion inspired by Beelzebub himself. If only his witching-hunting colleagues at the Royal Society had known." ³⁴

Newton's radical friends

Newton's secrecy in these matters is telling. Moreover, as King and Popkin have argued, Newton's views were not untouched by the writings of seminal Enlightenment thinkers like Baruch Spinoza (1632–1677) and Richard Simon (1638–1712). As his interpretation of Genesis 36:31 shows, Newton employed the same exegetical argument used by Simon to dismiss the Mosaic authorship of certain sections of Genesis. He was also good friends of John Locke (1632–1704), widely regarded as "England's foremost Enlightenment thinker" and "father of liberalism". Newton asked Locke "in the strictest confidence" to help him translate a controversial treatise on 1 John 5:7 and 1 Timothy 3:6 into

French and have it published anonymously in the Netherlands.³⁸ The treatise was entitled *An historical account of two notable corruptions of Scripture* and was addressed to Jean Le Clerc (1657–1736),³⁹ "Europe's most tenacious protagonist of rationalist Christian theology".⁴⁰ Thus Popkin writes:

"Newton, like Spinoza and Simon, took seriously the problems that had arisen in the collection, editing, and transmission of Scripture that made it difficult if not impossible to find the pure original text. Newton, unlike the fundamentalists of the past century and a half, was not committed to claiming the inerrancy of the biblical text, but was committed to finding its message for mankind [emphasis added]".⁴¹

Whilst Popkin may be overstating the case, the fact remains that Newton was not untouched by the kind of thinking that fuelled the Enlightenment. Put more strongly, Newton's contribution to the sciences and theology did little to hinder its development. As Israel observes:

"Although down to 1750, in Europe as a whole, the struggle for the middle ground remained inconclusive, much of the European mainstream had, by the 1730s and 1740s, firmly espoused the ideas of Locke and Newton which indeed seemed uniquely attuned and suited to the moderate Enlightenment purpose." 42

So although Newton "devoted close to six decades to a passionate study of the Bible, theology, prophecy, church history and natural theology", his heterodox reading of Scripture left room for a less-than-literal interpretation of Genesis.⁴³

Newton's earlier treatment of Genesis

In 1680, Thomas Burnet (1635–1715) sent Newton a pre-publication copy of Telluris theoria sacra (1681) for review. Burnet wanted to establish scientific reasons to "justify the doctrines of the *Universal Deluge*, and of a Paradisiacal State, and protect them from the cavils of those that are no well-wishers to sacred history". 44 In the correspondence which ensued, Newton suggests that the "heat of the sun" might explain how the oceans were formed and dry land appeared on the earth. 45 This imaginative re-interpretation of Genesis 1:9 requires the "diurnal revolutions of the Earth" to be "very slow" at the beginning of creation so that "the first 6 revolutions or days might continue time enough for the whole Creation, & ye Sun in that time might convert & shrinke the parts of the Earth about the Æquator". 45 In his reply to Newton, Burnet points out that the sun was only made later in the week:

"... methinkes you forget Moses (whom in another place you will not suffer us to recede from) in this account of the formation of the Earth; for hee makes the seas & dry land to bee diuided & the Earth wholly formd before the Sun or Moon existed. These were made the fourth day according to Moses, & the Earth was finisht the 3^d day" ⁴⁶

This gives Newton cause to explain, in the letter which follows, that Genesis 1–2 was written phenomenologically to describe what Moses would have seen, had he been there to witness it himself. The point is not to read Genesis as science or as fiction, says Newton. Tinstead, Genesis is a "true description" of creation accommodated to the "vulgar" understanding of Moses' first readers. Taken on its own, Newton's overall conclusion is both conservative and orthodox:

"... me thinks one of the tenn commandments given by God in mount Sina, prest by divers of the prophets, observed by our Saviour, his Apostles & first Christians for 300 years & with a day's alteration by all Christians to this day, should not be grounded on a fiction."⁴⁹

But this stance does not preclude him from asserting that sun, moon, and stars were not created on "the fourth day nor in any one day of the creation"; that Moses might not mention their creation at all; that the duration of the first and second days might be "as long as you please"; or that Burnet's theory could allow "a year for each days work" without misinterpreting the text.⁴⁷

Newton's later treatment of Genesis

On the whole, it is possible that Newton, at this stage in his career, maintained a more literal approach to Genesis, albeit tenuously. From the mid-to-late 1680s, however, his opinions on Genesis moved in a more radical direction. In a treatise on Revelation,⁵⁰ Newton calls the story of the fall of man a "parable"; the trees in Eden, "mystical"; and the serpent, "only a symbol of the spirit of delusion".⁵¹ With regards to the six days of creation he writes:

"And so the six days of the Creation may signify not only six years but even six thousand years ... or any other six long times. ffor the history of the creation is not in all things litteral. In that Paradise the flaming sword & trees of life & knowledge may be as much figurative descriptions of something we now understand not as the tree of life is in the Paradise to come, & in a parabolical description of the creation a day may be used figuratively as well as other things are especially since there was no light till the end of the first day nor sun till the fourth—to make natural days. The evenings & mornings of Moses respect all parts of the Earth alike so that it was evening all over the Earth in the beginning of each day of Moses & morning all over it in the end of each day: & therefore his evenings & mornings were not natural ones.

ffor had they been natural ones it would have been morning in one part of the Earth when it was evening in another."⁵²

For this reason, it is evident that Newton did not advocate a literal six-day creation, 53 nor was he "committed to the literal truth of Holy Scripture". 54 Whether or not it was Burnet's writings that finally convinced him to abandon the literal historicity of the hexameron is not easy to ascertain. What is known, however, is that in Burnet's subsequent cosmological treatise, *Archaeologiae philosophicae sive doctrina antiqua de rerum originibus* (1692), he calls the story of Adam and Eve a parable; rejects the creation of Eve from Adam's rib; considers a speaking serpent to be utterly nonsensical; does not believe that Adam and Eve were capable of sewing their own clothes; denies that the Garden of Eden was guarded by real Cherubim; disbelieves that Adam had named all the animals in a single day or that the universe is less than 6,000 years old.55

Newton's chronology

That said, Newton's chronological writings do treat aspects of Genesis 1-11 as literal history. He affirms the repopulation of the world from Noah's sons and traces the origin of nations back to Babel.⁵⁶ He also asserts, in the conclusion to the first draft of his chronology of ancient kingdoms, that "mankind could not be older then [sic] is represented in scripture"57 which he later revised to "mankind could not be *much* older than is represented in Scripture [emphasis added]".58 Therefore, it is probable that Newton still believed in an earth not much older than 6,000 years. Some scholars even assert that Newton's chronology depended upon or defended James Ussher's Annales veteris testamenti, a prima mundi origine deducti (1650).59 But this claim is questionable for the following reasons: firstly, Newton's chronology does not begin with Adam, it begins with Noah; 60 secondly, the manner in which he places Scripture alongside many other historical sources suggests, as Westfall rightly points out, that "Newton's view of human history did not centre on the Bible", but that he "treated the historical books of the Old Testament as human documents to be used in concert with other human documents;"61 thirdly, Arthur Bedford (1668–1745), a contemporary of Isaac Newton, wrote one of the earliest critiques of The Chronology of Ancient Kingdoms Amended (1728) in which he demonstrates how Newton's chronology "differs toto cælo from all the learned men in the world" including, most notably, James Ussher. 62 In fact, I have also not found a single reference, positive or negative, to Ussher within the Newtonian corpus. Finally, in all his chronological writings, Newton never provides an age for the earth or a date for creation. The omission of such an obvious chronological detail is telling.

Newton (2006:191, 376), nevertheless, is helpfully critical of the Egyptian, Persian, and Syrian records, which "out of vanity" have exaggerated the antiquity of their kingdoms by "some thousands of years older than the world".63 Consequently, his stated objective is to correct these erroneous chronologies by referring to the more reliable records preserved by the Greeks and Hebrews. 63,64 But, like Bedford observes: "As to what [Newton] saith, that he hath made it agreeable with sacred history; it is hard to know, whether he was in earnest or in jest."65 This is because, in Bedford's assessment, Newton's chronology ignores, misquotes, and contradicts the biblical record in several places. 66 His conclusion is forceful: "such poison ought not to go abroad into the world" for it undermines the integrity of the sacred text.⁶⁷ For these reasons, we should be hesitant to endorse Newton's chronology uncritically.

Newton's hermeneutical legacy

Burnet was the first to attempt an explanation of Genesis 1–11 in collaboration with Newton himself and in terms of Newtonian physics. And what was the result? A cosmology that had very little to do with Genesis at all. In Burnet's estimation, "the very letter of the *Hexaemeron* [is] most absolutely contradictory to the nature of things, as well as to all philosophical reasons" and, "people could neither understand nor bear a plain and philosophical explication of it".68 What this called for, in practice, was a *scientific* hermeneutic, whereby "philosophy is the interpreter of Scripture in natural things".69 It was a principle that resonated strongly with Charles Blount (1654–1693), the "chief deist of his age", who eagerly plagiarised sections of Burnet's writings to further his radical agenda in England.70

Like Burnet, William Whiston (1667–1752) wrote his own philosophical version of Genesis 1–11, *A new theory of the Earth* (1696), which he dedicated to Newton. In it he calls literal six-day creation a "vulgar hypothesis", arguing instead that the days in Genesis should be understood as years.⁷¹ He also argues that Genesis 1 does not tell us how matter came into being or how the universe was created, being restricted exclusively to the origin of the earth.⁷² Far from disapproving of Whiston's theory of the earth, in 1702, Newton appointed him as his successor to the Lucasian chair of mathematics at Cambridge.⁷³

Edmund Halley (1656–1742), a close friend and admirer of Newton, also refused to accept that the days in Genesis should be taken as "natural days". ⁷⁴ He maintained that the Scriptures could not provide a reliable account of the age of the earth. Instead, Halley proposed that the salinity of the oceans could give a better estimate. ⁷⁵

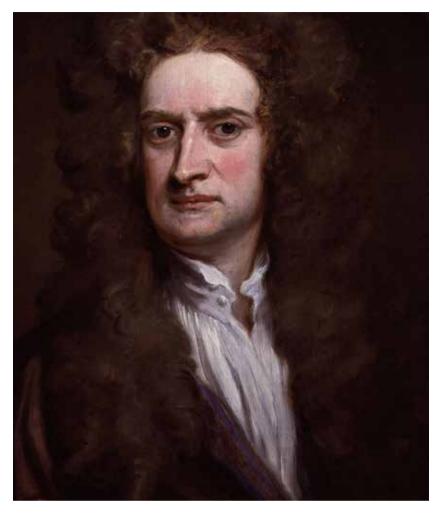


Figure 2. A portrait of Isaac Newton by Sir Godfrey Kneller (1689)

In France, Bernard Le Bovier de Fontenelle (1657–1757). the first to publish a biography of Newton,76 also rejected Genesis 1-11 as literal history. He used his editorial influence at the French Académie des sciences to actively promote geological views that precluded the biblical Flood, whilst at the same time censoring any scientific interpretations that assumed or asserted it. 77 Likewise, Voltaire (1694–1778) cites Newton in support of his claim that Genesis was not written by Moses, and calls the Pentateuch a "stupid falsehood" and "absurd fable", "written by fools, commented upon by simpletons, taught by knaves", and filled with "innumerable geographical and chronological errors and contradictions". 78 Comte de Buffon (1708-1788) also employed Newtonian physics in his rigorously naturalistic reinterpretation of Genesis 1–11.79 This is noteworthy for the simple fact that Buffon, "more than anyone else, was responsible for a new chronology of the earth, that is, for the acceptance of a vast time scale."80

In Germany, one of the most influential philosophers of the last three centuries, 81 Immanuel Kant (1724–1804),

launched his academic career with a scientific treatise entitled, General natural history and theory of the heavens, or an essay on the constitution and mechanical origin of the whole universe, treated in accordance with Newtonian principles (1755). In this controversial book, he constrains God to a first cause whilst trying to explain, on Newtonian grounds, how matter could arrange itself into the present universe over time.⁸²

Newton might never have anticipated or desired such a legacy, but his influence directly and indirectly affected how Genesis 1–11 would be read by future generations.

Conclusion

For the 1680s, Newton's treatment of Genesis was far from orthodox, and possibly the first articulation of the day-age hypothesis in history. If correct, this makes Newton a key figure in the ensuing hermeneutical revolution which shaped how Genesis 1–11 would be read for the next three centuries. This accords well with Israel's analysis for the onset of the Enlightenment, which he places within the same time period (i.e. from 1650–1680).⁸³ Thus

the timing of Newton's comments on Genesis, dated to the late 1680s, happen to correlate strongly with the inauguration of the Enlightenment period.⁸⁴ Prophetically perhaps, in the front matter of the first edition of Principia, Halley regards Newton as superior to Moses, "Who opens the treasure chest of hidden truth No closer to the gods can any mortal rise."85 The curious corollary to all this, is that Newton accepted such praise in print as the foreword to his magnum opus. Did Newton think of himself as Moses' scientific successor? Perhaps, perhaps not. Either way, Moses did not fare well in the next century. As Manuel has observed, for the Enlightenment to flourish in the 18th century, "certain basic intellectual needs" had to be met, the first being: "a replacement of Genesis."86 Newton did little to hinder such a venture. It is probable that several theologians from the next generation took their lead from him.87

For reasons such as these, Newton's legacy is a greater hindrance than help to biblical creationists. Although his science was inspired by Scripture, his view of Scripture was increasingly shaped by his science.

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- 50. Westfall claims that Newton considered Revelation to be the "fundamental book" of the Bible by which the other 65 books should be interpreted (Westfall, ref. 25, p. 131). Although I have not been able to corroborate this claim from Newton's writings, Newton did consider the study of Revelation to be "a duty of the greatest moment" for the church living in these last days (Newton, L., Untitled treatise on Revelation (section 1.1), National Library of Israel, Publisher, Jerusalem, p. 1r, 2004; newtonproject.ox.ac.uk/view/texts/normalized/THEM00135).
- 51. Newton, ref. 33, pp. 19v-21v.
- 52. Newton, ref. 33, pp. f39r-f39v.
- 53. Contra Drake, E.T. and P.D. Komar, Speculations about the earth: the role of Robert Hooke and others in the 17th century, Earth Sciences History 2(1):11–16, 1983, p. 12; Jones, F.N., The Chronology of the Old Testament: A return to the basics, 21st edn, Master Books, Arizona, p. 22, 2019; Morris, H.M., Men of Science, Men of God: Great scientists of the past who believed the Bible, Master Books, Arizona, p. 32, 2012.
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- 58. Newton, ref. 57, p. 190.
- 59. Gaukroger, S., The collapse of mechanism and the rise of sensibility: science and the shaping of modernity, 1680–1760, Oxford University Press, Oxford, p. 376, 2010; Jones, ref. 53, p. 22; Lincoln, B., Isaac Newton and Oriental Jones on myth, ancient history, and the relative prestige of peoples, History of Religions 42(1):1–18, 2002; pp. 4–5.
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- 62. Bedford, ref. 4, pp. 5-8, 145.
- 63. Newton, ref. 57, pp. 191, 376.
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- 65. Bedford, ref. 4, p. 142.
- 66. Bedford, ref. 4, pp. 142, 210-212.
- 67. Bedford, ref. 4, p. 143.
- 68. Burnet, ref. 55, pp. 29, 52.
- 69. Burnet, ref. 55, p. 58.
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