

Samuel Clarke | Encyclopedia.com

Complete Dictionary of Scientific Biography COPYRIGHT 2008 Charles Scribner's Sons
14-17 minutes

(b. Norwich England, 11 October 1675; d. London England 17, May 1729) *metaphysics mathematics*

The son of Edward Clarke, an alderman of Norwich, and Hannah Clarke, [Samuel Clarke](#) attended the Norwich Free School and entered Gonville and Caius College, Cambridge, in 1690. He became a scholar of his college in 1691 and received the B.A. in 1695. His major interests were physics and theology, and he mastered the contents of [Sir Isaac Newton](#)'s *Principia* while at Gonville and Caius. He was elected a fellow of the college in 1696 and retained the office until 1700.

The standard physics text used at Cambridge during this periods was Theophile Bonnet's clumsy Latin translation of [Jacques Rohault](#)'s *physics*. Clarke's tutor Sir John Ellis, urged him to prepare a more elegant a version of the work. Making use of his familiarity with Newtonian physics, Clarke appended to his edition a series of notes that had the novel effect of turning a Cartesian treatise into a vehicle for disseminating the ideas of Newton. His translation remained the major text at Cambridge for over forty years and was translated into English at late as 1723, by Clarke's brother, John.

A chance meeting (in a Norwich coffeehouse) with the mathematician and Arian theologian [William Whiston](#), in 1697, led to Clarke's introduction to [Dr. John](#) Moore, bishop of Norwich and Whiston's patron. In 1698 Clarke succeeded Whiston as Moore's chaplain and received his M.A. from Cambridge. His interests now turned to the primitive church, a subject of pivotal importance in the internecine quarrel between orthodox Anglicans, who accepted the [Athanasian Creed](#), and Arian churchmen, who rejected it. Clarke's Arian bent did not hinder his rise in the church at this time. Bishop Moore appointed him rector of Drayton and granted him a parish within Norwich itself.

At Norwich, Clarke gained a reputation as a preacher of clear, learned sermons; this led him to be chosen to present the Boyle lectures for 1704.¹ He made such a favorable impression that he was asked to deliver an additional series the next year. The sixteen sermons were subsequently published as *The Being and Attributes of God*.² He opposed Descartes's ideas that "motion is essential to all things" and his insistence on "an infinite *plenum*." Clarke cited Newton's concept of the void to show that matter was no more "necessary" than motion, and it was clear that "[The Self](#)-existent and original Cause of All Things is Not a Necessary Agent, but a Being indued with Liberty and Choice." Liberty stood at the very roots of the universe, for without it there could be no "Cause, Mover, Principle, or Beginning of Motion anywhere."³

Thus the evidence of the physical world confuted the ideas of atheists. Clarke's sermons of 1705 were aimed at the deists; his vindication of natural religion demonstrated not merely God's existence but His presence in the world.

In 1706 [Sir Isaac Newton](#) commissioned Clarke to translate his *Opticks* into Latin for a broader audience. He was so satisfied with Clarke's "pure and intelligible Latin" that he paid him £500. In the same year Clarke was appointed to the rectory of St. Benet's in London, was introduced to Queen Anne, and was made one of her chaplains-in-ordinary.

Clarke's move to a London parish and his contact with the court involved him in two bitter controversies in which he defended Newton's ideas as well as his own. The first began with the High Church apologist Henry Dodwell, whose *Epistolary Discourse... that the Soul is... Naturally Mortal* was a high point of the Tory revival that marked Anne's reign.⁴ Dodwell considered the soul as a material entity and appealed to the authority of Athanasius, descartes, and Spinoza in support of his position. Had he been a man of lesser repute, and of worse connections, his work might have been ignored as a ridiculous attempt to cast doubt on both natural and revealed religion. His stature forced those who disagreed with him to reply, and "Mr. Clarke was thought the most proper person for the work."⁵

Clarke denied that the soul could be mortal, since it could not possibly be material. Matter was particulate; the soul was not, and thus was totally independent of matter. At the end of his treatise he cautioned Dodwell to reconsider the implication of his ideas, for Dodwell had furnished "A Weapon for the hands of skeptical men...to make profane men rejoice."⁶

The advice was sound but was given far too late. The materialist [Anthony Collins](#) now claimed to be Dodwell's defender. In his "Remarks on a (pretended) demonstration of the immateriality and natural immortality of the soul," he maintained that men were "meer machines," incapable of exercising [free will](#).⁷ Dodwell faded from the scene, and Collins emerged as Clarke's chief antagonist. In his initial response to Collins, Clarke sought to annihilate his adversary's basic argument by denying that matter could possibly think.⁸ Collins replied that if soul existed, it needed extension; if it were extended, then it had to be corporeal.⁹

As the correspondence continued, Collins cited Descartes in support of his idea that consciousness was merely a “mode of motion,” and Clarke turned to Newton’s work in rebuttal. He accused Collins of having failed to perceive that “the present operations of nature, depending on Gravitation, cannot be Mechanical Effects of Matter in Constant Motion perpetually striking one Part against each other.”¹⁰ His final reply to Collins also revealed a debt to Newton in his assertion that the spirit makes use of space as its medium. Clarke’s attack on Collins had succeeded in defending Newton’s ideas in a metaphysical sense. Collins had had enough, and the dispute was over by 1710.¹¹

During the course of this exchange, the queen had named Clarke rector of St. James’s, Westminster, a most prestigious position. He was awarded the D.D. by Cambridge at the same time (1709) and ably defended the thesis that “no article of faith is opposed to right reason.”

Clarke’s Arianism became obvious with the publication of his *Scripture Doctrine of the Trinity* in 1712. This unitarian work led to a long pamphlet war with such orthodox dicines as Daniel Waterland¹² and to a complaint being made about it by the Lower House of Convocation in 1714. Clarke succeeded in defending himself before the Upper House and was not censured.¹³ He did, however, agree to write and preach nothing further on this topic, a course of action of which the more outspoken Arians did not wholly approve.

[George I](#)’s accession to the English throne upon the death of Anne in 1714 effectively destroyed the Tory party for fifty years. The Tory leader, Bolingbroke, who had attacked Clarke, was powerless, and the High Church faction was subdued. For Clarke, the most significant aspect of the Hanoverian succession lay not in these developments, however welcome, but in his meeting and subsequent friendship with the princess of Wales (later queen),

Caroline. A close friend of Leibniz, the princess originally sought to have Clarke translate his *Theodicy*. Clarke refused, since the work contained an attack on Newton’s concept of gravity. Impressed by Clarke’s persuasive powers, Caroline sent copies of his works to Leibniz and asked for his opinion of them. His reply, shown by the princess to Clarke, sparked an exchange of letters that lasted until Leibniz’s death in November 1716.

In the course of his five letters Leibniz accused the New tonians of having made “Natural religion itself... to decay [in England]” of turning God into a watchmaker who “wants to winds up his watch from time to time,” of making gravity either an occult quality or a “perpetual miracle and of having failed to understand the principle of “sufficient reason” by their belief in the vacuum in atoms, and in the reality of space and time. Clarke undertook to answer these charges, drawing on the writings of Newton and occasionally obtaining his advice.¹⁴ Thus, in his fourth paper Clarke cited not only Newton but the work of earlier experimenters to prove his contentions that the vacuum did exist, as did hard, impenetrable particles (“physical atoms”), or there could be “no matter at all in the Universe.” Clarke also maintained that time and space were real entities and not merely the order of successive and coexistent phenomena, respectively, as suggested by his opponent.¹⁵

Clarke saw the conflict with Leibniz as involving not merely a differing interpretation of the physical universe and its phenomena but as a far more basic one implying a struggle between freedom and necessity. Leibniz’s insistence on philosophical necessity always signified “absolute necessity “to Clarke, for Leibniz, no less than Collins, would have reduced men to “meer machines.”¹⁶

Clarke’s most direct contribution to physics during the course of this correspondence came in a footnote to his fifth paper, in which he considered the problems of computing the force of a moving body. He discusses as the product of mass and velocity (mv) and that of the Leibnizians, who expressed it as the product of mass and the square of the velocity (mv^2). He saw the issue as one between the concepts of momentum and kinetic energy. He developed these ideas in his first published paper a letter to [Benjamin Hoadly](#) “Concerning the proportion of force to velocity in bodies in motion, “in which he strongly advocated the Newtonian position.¹⁷

Despite Caroline’s continuing favor, Clarke’s heterodoxy had halted his rise in the church, and a bishopric, or an even higher position, escaped him.¹⁸ He accepted only one further office : the mastership of Wigston Hospital in Leicestershire in 1718. He had powerful friends among the more latitudinarian clergy. During the 1720’s [George Berkeley](#) [Benjamin Hoadly](#) and William Sherlock met with him frequently at court. He retained his popularity as a preacher and was much in demand to deliver sermons away from St. James’s until his death in May 1729.

Clarke used his talents as a translator to prepare editions of Caesar’s Commentaries (dedicated to the duke of Marlborough) in 1712 and by royal command of the first twelve books of the Iliad in 1729 his political convictions were strongly Whiggish for the Whigs were supporters of political liberty.¹⁹

Clarke married Katherine Lockwood and had five children who survived him,. His son Samuel became a fellow of the [Royal Society](#).

For twenty-five years Clarke had held to his position and had vindicated that of Newton. His contemporaries ranked him almost with Newton in the force of his intellect certainly of Newton circle, Clarke was best fitted for the role of defender and publicist.

NOTES

1. Founded by the Honorable [Robert Boyle](#) “to assert and vindicate the great fundamentals of Naturla Religion,” the lectures consisted of eight sermons a year preached in a London church The tone of the lectures was set by the first incument [Richard Bentley](#) who demonstrated how Newton Principia gave proof of the existence of God and off [free will](#).
2. “A Demonstration of the Attributes of God” and “A Discourse Natural and Revealed Religion Being a Collection of Sermons at the Boyle Lectures, vol. 11.
3. Ibid;pp. 21–32, passim.
4. By 1706 this movement was well under way. A long war abroad, the linking of the Whigs with the cause of dissent and [broad church](#) policies, and the queen’s undoubted preference for the rituals of High Anglican tradition led to a realliance between the Tories and the extreme Episcopalians.
5. B. Hoadly “Life of Clark prefixed to *The works of Samuel Clark, I. V.*
6. S. Clark “ALetter to Mr. Dowell,” Works III 749; of Britain Museum Add, Mss 4370 fols.1,2.
7. A. Collins “A Letter to the Learned Henry Dodwell” Works III, 752 ff.
8. S. Clark, “Defense of An Argument...” Works III 761.
9. A. Collins, “Reply to Clarke’s Defense, “Works, 111, 775.
10. S. Clarke, “Third Defense, “Works, III, 848.
11. Collins did reappear after the death of Leibniz with his Philosophical Enquiry Concerning Human Libery(1717)and again Clark Answere him.
12. Clarke was aided by his brother, John, and by [John Jackson](#): his opponents included Waterland, Edward Wells, and Joseph Clarke. The controversy is referred to briefly in H. G. Alexander, *The Leibniz-Clarke Correspondence*, pp. xli, xlii, and in detail in J. Rodhey God Freedom and the Cosmos (to be published).
13. The case is to be found in Clarke Works IV; of Britain Museum. Add. Mss 4370.
14. Cited in Alexander, op. cit., passim.
15. Ibid; pp. xiii 100.
16. Clark “Fifth Reply” in Alexander op. cit., P.110.
17. Ibid; pp. 121–125; Works IV 737–740 reprinted in Philosophical Transactions of the the [Royal Society](#)(1728).
18. Voltaire (*Oeuvres*, LV, 96) maintains that Caroline was prevented from appointing Clarke archbishop of Canterbury by Bishop Gibson’s telling her that he had but one defect: “He was not a Christian.”
19. The triumph of the Whigs in 1688 and in 1714 implies the acceptance politically of the philosophical tenet of human liberty. Clarke’s political zeal may be seen in his willingness to dedicate his work to Marlborough at a time when the duke was out of favor; he remained a friend of Sarah, Duchess of Marlborough.

BIBLIOGRAPHY

I. Original Works. Clarke’s translations of scientific works are *Jacobi Rohaulti, Physica: Latine vertit Samuel Clarke, recensuit et uberioribus, ex illustrissimi Isaac New-toni philosophia maximam partem hausti, amplificavit et ornavit* (London, 1697); and *Optice: Sive de reflexionibus, refractionibus, inflexionibus & coloribus... authore Isaaco Newton, equite aurato, uertit Samuel Clarke* (London, 1706).

His writings on theological and philosophical topics, including the full texts of the correspondence with Dodwell, Collins, and Leibniz, as well as his letter to Hoadly, are brought together in *The Works of Samuel Clarke*, John Clarke, ed., 4 vols. (London, 1738).

II. Secondary Literature. The best contemporary biographical sketch is Benjamin Hoadly's "Some Account of the Life, Writings, and Character of [Samuel Clarke]," prefixed to the 1738 ed. of Clarke's Works. [William Whiston](#)'s *Memoirs of the Life of Dr. Samuel Clarke* (London, 1730) is longer but far less reliable.

There is as yet no full-length modern study of Clarke. H. G. Alexander's *Clarke-Leibniz Correspondence* (Manchester, 1956) contains a brief sketch of Clarke's life and an analysis, of the correspondence.

Modern articles on Clarke are equally scarce: [John Gay](#)'s "Matter and Freedom in the Thought of Samuel Clarke," in *Journal of the History of Ideas* (1963), and J. Rodney's "Newton Revisited: Foes, Friends, and Thoughts," in *Research Studies, Washington State University*, **36** (1968), 351–360, are the most recent.

Joel M. Rodney