Introduction to the Newton Manuscripts Catalogue

At his death on 20 March 1727, Isaac Newton left papers relating to all areas of the intellectual pursuits he had followed since arriving at Trinity College, Cambridge, in the summer of 1661. His friend, relative by marriage (to Newton's half-niece Catherine Barton) and successor at the Mint, John Conduitt, posted a bond for Newton's debts and claimed entitlement to this material, Newton having died intestate. The appraisers, Comyns and Ward, felt that only the papers later published as Newton's Chronology of Ancient Kingdoms Amended were fit to be published, and they valued the work at £250. Between 20 and 26 May 1727, Thomas Pellet drew up an inventory listing 81 items of which he considered only five fit to be printed, namely no. 33 ('de Motu Corporum or the liber secundus, in 56 half sheets in folio'); no. 38 ('31 half sheets in folio being paradoxical questions concerning Athanasius'); no. 61 ('an imperfect mathematical tract'); no. 80 ('an abstract of the Chronology being 12 half sheets in folio & the Chronology being 92 half sheets in folio'), and no. 81 ('40 half sheets in folio being the History of the Prophecies in 10 chapters & part of the 11th unfinished').

As is evident from a number of manuscripts adorned with Conduitt's notes and corrections -- for example the manuscript of 'An historical account of two notable corruptions of Scripture in a Letter to a Friend' (now New College, Oxford, Ms. 361.4) -- he took a serious scholarly interest in the papers he had acquired, although this was also partly directed towards the possibility of their publication. Given Newton's unique eminence, as well as his known religiosity, a substantial number of contemporaries (with varying degrees of knowledge of their real content) continued to speculate about the theological views expressed in his manuscript legacy. In 1740 Conduitt's collection came into the possession of the Portsmouth family following the marriage of Conduitt's daughter Catherine to John Wallop (Viscount Lymington after 1743). In 1755, a batch of theological and chronological papers was sent to Arthur Ashley Sykes, who compiled a 'digest' of them according to a codicil in the will of Catherine Conduitt senior (made in 1737, two years before her death) directing that the executor 'should lay all the Tracts relating to Divinity before Dr Sykes ... in hopes he will prepare them for the press ... all of them I ordain shall be printed and published, so they be done with care and exactness'. Except for the 'Two notable corruptions' manuscript, however -- a version of which had appeared in 1754 --, Sykes considered that almost none of the papers sent to him was suitable for publication. These papers next passed into the hands of the Reverend Jeffrey Ekins, whose family in turn passed them on to New College, Oxford in 1872.

Aside from the existence of well-founded rumours about his unorthodox theological interests and the aforementioned publications of theological material, a number of Newton's philosophical, optical and mathematical papers, as well as a large number of his letters, had for some time been circulating among the cognoscenti, though the alchemical material remained almost wholly unknown except to a very few intimates such as John Locke and Fatio de Duillier. In particular, the mathematician William Jones (who had brought out a collection of some of Newton's mathematical works in 1711) had access to many of Newton's papers as well as to the transcripts made by John Collins of Newton's early work. Various people such as Thomas Birch approached Jones for access to these
papers which, given the relative difficulty of seeing the Conduitt material, provided the best source for investigating Newton's private mathematical researches until the Portsmouth Collection (the papers originally acquired by Conduitt) was made available in the 1880s. Similarly, in the light of the various hints dropped in the 'Queries' to the successive editions of his Opticks (1704, 1706 (Latin) and 1717), natural philosophers were keen to divine Newton's private views on the nature of matter, the aether and the cause of gravitation. Significant material appeared in Birch's edition of Bayle's Dictionary in the late 1730s, in his first edition of the Works of the Honourable Robert Boyle in 1744, in his History of the Royal Society in 1757, and in Four Letters from Sir Isaac Newton to Doctor Bentley containing some arguments in proof of a Deity (London, 1756), which for the first time printed the now famous correspondence of the early 1690s concerning gravitation and natural theology.

In response to this fascination with things Newtonian, Bishop Samuel Horsley edited a supposedly 'Complete Works' (1779-85) which, for well over a century, conveyed the most influential impression of Newton's astonishingly broad intellectual achievements. In preparation for this, Horsley and William Mann Godschall compiled a manuscript catalogue of Newton's papers at Hurstbourne Park (the home of the Portsmouth family and the location of their collection) in 1777, marking certain items with a star, presumably to indicate their fitness for publication. Despite Horsley's claims of comprehensiveness in his edition ('All the works of Isaac Newton which exist'), by modern standards the production was extremely conservative and concentrated largely on republishing material which was already in the public domain. In particular, he shied away from publishing any evidence of Newton's alchemical interests and he unsurprisingly suppressed the texts (such as the 'third letter' to Locke which supplemented the 'Two notable corruptions') which betrayed the heretical nature of many of Newton's religious beliefs. Nevertheless, despite the somewhat wishful thinking of the title, the work largely satisfied the demands of his readership and prompted Edward Gibbon, for instance, to seek out various manuscripts relating to early Church history in preparation for his Decline and Fall of the Roman Empire.

For nearly a hundred years after Horsley's visit, only a very few scholars went to Hurstbourne to investigate the papers there, though scholars such as Joseph Edleston made superb use of other archives -- primarily those of the Royal Society and the University and Trinity College libraries at Cambridge. In the nineteenth century, J.H. Monk, Francis Baily and David Brewster had access to the Hurstbourne collection after Henry Fellowes, nephew of the Third Earl of Portsmouth, gave them permission to consult the archive for the preparation of their respective editions of the lives and works of Richard Bentley, John Flamsteed and Newton. Notoriously, Brewster's biography of Newton glossed over the ubiquitous evidence of his alchemical interests and perversely claimed that Newton's theological views were not unorthodox. Along with the then equally unpalatable evidence that Newton had suffered what would now be called a nervous breakdown in 1693, which forced Brewster into further biographical contortions, his view of the heroic Newton was threatened both by Baily's eulogium of Flamsteed (the Astronomer Royal, Newton's treatment of whom was less than edifying) and by the potent barbs aimed at Brewster by Augustus de Morgan. As Newton's character and private life began to be discussed in unprecedented detail, individuals such as William Whewell at Trinity College became deeply concerned at this dismantling and indeed demolition of their hero's personal moral reputation. If Newton himself could no longer be held up as the unblemished knight of Enlightenment myth, however, his intellect and scientific legacy were still generally seen (and
indeed still are) as virtually unassailable.

In 1872, the 5th Earl of Portsmouth generously decided to donate the scientific papers in his possession to Cambridge University in order 'to advance the interests of science by placing these Papers at the service of the University', although he stated that he wished to keep the personal papers. A committee was set up and the scientists John Couch Adams and George Stokes were given the task of sorting through the scientific papers, which together with the 'non-scientific' manuscripts were taken to Cambridge for easier inspection. H.R. Luard, a medievalist and University administrator, and G.D. Liveing, Professor of Chemistry, were deputed to analyze the theological and alchemical papers. The inspection and classification of the entire archive took much longer than had been envisaged, and a Catalogue of the papers only appeared in 1888. To an unavoidable extent, Adams and Stokes divided up the scientific papers according to the classifications prevalent in late nineteenth century science, and by rearranging the archive according to those classifications, the committee inevitably destroyed a host of clues which might have suggested how various manuscripts interrelated.

The report stated that many of the papers 'were found to be in great confusion -- mathematical notes being often inserted in the middle of theological treatises, and even numbered leaves of MSS having got out of order'. Apart from Newton himself, some of the blame for the disordered state of large parts of the archive can probably be laid at the feet of Conduitt, although others almost certainly failed to leave manuscripts in the state in which they had found them. It may well be, however, that some of the juxtapositions -- of theology and mathematics, for instance -- which appeared 'disorderly' to nineteenth-century academic minds in fact made perfectly good sense to Newton. In the catalogue, papers were split up into 'Mathematics', 'Chemistry', 'Chronology', 'History', 'Miscellaneous Papers, chiefly on theological subjects', 'Letters', 'Books', 'Miscellaneous Papers', 'Correspondence' and smaller sections dealing with personal material. Papers deemed to be 'alchemical' as opposed to 'chemical' (a distinction Newton himself would almost certainly not have recognized) nonetheless appeared under the heading of 'Chemistry', but these, along with 'five parcels containing transcriptions from various alchemical authors in Newton's handwriting' and two other 'packets' with alchemical notes and recipes were returned to Hurstbourne as being 'of very little interest in themselves'. Liveing was flummoxed by the vast array of alchemical transcriptions and concluded that Newton had 'striven in vain to trace a connected system in the processes described' by these writers.

Along with the papers relating to Newton's service at the Mint (from 1696 to his death in 1727), the items catalogued under the headings of 'Chronology', 'History' and 'Theology' were also returned to Hurstbourne. The 'Chronological' material consisted mainly of eighteenth century work while the 'Historical' manuscripts were almost entirely composed of papers concerned with Newton's defence of Sidney Sussex College, Cambridge in the spring of 1687 when James II attempted (unsuccessfully) to enforce the conferral of an MA on a Roman Catholic friar, Alban Francis, without his having to take the statutory oath abjuring 'popery'. Luard added three other items to this section, namely 'Egyptian mythology', 'Original of Monarchies' and some 'Antiquarian fragments'. Under 'Miscellaneous papers, chiefly on theological subjects' he included chronological material as well as apocalyptic treatises, material relating to the important essay 'Paradoxical questions concerning the morals and actions of Athanasius', and notes for and drafts of the 'Theologiae Gentiles
Origines Philosophicae'. Like many others who have commented on Newton's extraordinary theological treatises, Luard noted that they appeared to be prepared for the press, although given the presence of multiple drafts and the lack of any evidence of their subsequent publication, he somewhat perversely argued that they were composed 'apparently from the mere love of writing. His power of writing a beautiful hand was evidently a snare to him'.

As far as we are aware, only Louis Trenchard More subsequently made use of the remaining portion of the Hurstbourne archive (which survived a serious fire in 1891) for scholarly purposes, doing so in preparation for his 1936 biography of Newton. The same year that saw the publication of More's biography also witnessed the sale of this material at Sotheby's which broke up the archive and finally revealed the full extent of Newton's interests in alchemy and unorthodox theology. Viscount Lymington decided to sell off the collection and the sale took place on 13 and 14 July. The task of organising a new catalogue of these papers in an extremely compressed period fell to J.C. Taylor, Sotheby's Chief Cataloguer in the department of Books and Manuscripts. Although the present publication is intended to give a more accurate and scholarly account of these papers, Taylor's catalogue is in many ways a magnificent achievement, especially given the intense pressure of time he was working under, and for over six decades it has been the most significant resource for scholars attempting to keep track of individual items sold at the sale. The event itself was overshadowed by the equally remarkable sale of Henry Oppenheimer's collection of Impressionist art at Christie's, and the entire collection raised what must be considered the relatively miserly sum of just over £9,000 -- substantially less than the $18,000 paid by an unknown buyer for a single sheet from one of the 'Paradoxical Questions' manuscripts at an auction in 2001.

Having been alerted to the sale only at the last minute by his brother, the economist John Maynard Keynes failed to realize the full significance of what was on offer until the sale had been largely completed. Having realized it, he immediately set about buying up Newton manuscripts from both individuals and dealers, the most notable of whom were Maggs Brothers of London. As the notes to the individual items in this catalogue attest, Keynes soon found himself in competition for many lots with the Jewish scholar and businessman Abraham Yahuda, a man of broad learning who was especially interested in the theological material. Though also fascinated by Newton's religiosity, Keynes ultimately concentrated on building up the alchemical papers, in some cases exchanging theological papers he had acquired for alchemical ones owned by Yahuda. Keynes generously bequeathed his collection to King's College, Cambridge at his death in 1946.

The story of the Yahuda archive is more complicated. Believing that a history of Old Testament chronology composed by someone like Newton might still have value, and no doubt intrigued by the comparatively low status accorded to Christ in Newton's version of Christianity, Yahuda strove for a unified collection of Newton's theological material, though he sold or attempted to sell a number of the manuscripts he had assembled. Following his death, the fate of the archive was decided only after a number of disputes. The papers were eventually given to the Jewish National and University Library, and having been ably catalogued by David Castillejo, they became generally accessible to scholars at the end of the 1960s.

The difference this made to Newton scholarship is well exemplified by the work of Frank Manuel, who had published the seminal Isaac Newton, Historian in 1963, before the Yahuda material became
accessible. Manuel had noted with regard to the material he then had to hand (mainly the Keynes manuscripts in King's College, Cambridge and the New College manuscripts in the Bodleian Library, Oxford) that Newton's later historical, theological and chronological efforts could not 'in good faith be recommended for their liveliness to a reader of the second half of the twentieth century', and he surmised that 'Repetitions are so frequent as to make it doubtful that the remaining pieces would alter the general propositions set forth in this book'. However, he changed his mind after consulting the Yahuda archive in the early 1970s and incorporated much of the new material in his The Religion of Isaac Newton in 1974. Although there are important documents in other libraries that are listed in this catalogue -- notably the huge manuscript in the Fondation Martin Bodmer in Geneva and the Grace K. Babson collection now housed in the Dibner Institute, Massachusetts --, it is clear that the astonishing material in the Yahuda collection is by far the most significant for the understanding of Newton's earlier religious and intellectual development.

After years of trying to find a suitable public position in the metropolis in the wake of the Glorious Revolution (1688), Newton was given the position of Warden of the Mint in 1696, and was transferred at his own request to the nominally less prestigious but in fact much more influential and lucrative Mastership of the Mint late in 1699. His papers relating to these activities were classified first by John Conduitt and then by the Portsmouth Committee in 1888, after which they were sold as lots 327, 328 and 329 at the Sotheby sale of 1936. They went to two separate dealers, but were all subsequently purchased by Lord Wakefield, who presented them to the Royal Mint. The papers in lot 327 had also been calendared in 1881 by the Royal Commission on Historical Manuscripts in the Appendix to their Eighth Report, sections 64a to 92b.

Though no one could claim for these papers an intellectual or historical significance comparable to that of the alchemical and theological papers, many of them are much more than dry administrative documents. A good number -- particularly those relating to the silver recoinage of 1696-8 and the reorganization of the Scottish Mint following the Act of Union in 1707 -- are important source documents for British economic history. Others, such as those relating to Newton's innumerable disputes with his fellow Mint officers and with the Ordnance officers and troops with whom the Mint shared the Tower of London, are rich in human interest and provide many insights into his character and mental habits. As such, they have been extensively drawn on by Newton's biographers Frank Manuel and Richard Westfall. His obsessive attention to detail, his determination to maintain control of whatever situation he found himself in, and his almost fetishistic habit of revising and recopying are perhaps even more apparent here than in his loftier intellectual undertakings. It is not uncommon to find ten or more virtually identical holograph drafts of often quite insignificant routine documents that most people in his position would have had dealt with entirely by a secretary.

From the Mint, these documents passed to the Public Record Office, Kew, where they now reside (PRO, Mint 19/1-5). The section of this catalogue dealing with them stands on the shoulders of the unpublished calendar produced in the late 1950s by the Mint historian John Craig, the typescript of which now comprises PRO, Mint 19/6 (reproduced on reel 31 of the Chadwyck-Healey microfilm). Craig's greatest achievement was to establish which documents in this jumbled mass relate to which -- a truly Herculean labour. Two or more closely related documents, or variant drafts of the same one, often appear hundreds of pages apart, sometimes even in different volumes. It is doubtful, however, that Craig would have wanted his work published in the somewhat rough-hewn form in
which he left it.

The account given here relies too heavily on Craig for every specific debt to be acknowledged. His descriptions have, however, been completely re-ordered and rewritten, hopefully in a more logical and accessible fashion. Every entry has been rechecked against the original document, and a number of errors and omissions made good. References have been added to the extensive research (not least Craig’s own) that has since been done, and to the transcripts that have since been published of a large number of these documents, principally in The Correspondence of Isaac Newton, vols 4–7. It should be stressed that this catalogue covers only Newton’s personal collection of Mint papers, and does not attempt to list the huge number of relevant documents housed in PRO, T1 (these are in any case already admirably calendared in the Calendar of Treasury Papers), PRO, Mint 10/2 and PRO, Mint 15/17, though these are referenced where appropriate.

Aside from Craig’s meticulous listing of the Mint papers, the main sources for this catalogue, besides the documents themselves, have been the 1936 Sotheby sale catalogue produced by John Taylor, the 1991 catalogue of the Chadwyck-Healey microfilm of Newton’s papers compiled by Peter Jones, and the list of books that once comprised Newton’s library published by John Harrison in 1978. In addition to this, many of the items listed have been published (with varying degrees of accuracy) in the Newton Correspondence and elsewhere. Although the existence of such resources has facilitated the groundwork for this undertaking, the creation of a comprehensive reference work has required completely new descriptions of all the manuscripts in question, a laborious analysis of the history and present location of each document, and the correction of various errors that have arisen in previous reference sources. Moreover, many of the lots bought at the 1936 sale were re-ordered by their purchasers: Yahuda in particular seems — probably with some justification — to have regarded his collection as a jigsaw puzzle which he took it upon himself to solve. Other lots were broken up and sold piecemeal, and indeed many are now wholly or partly ‘lost’; it is unfortunate that, for all its merits, the 1936 Sotheby catalogue is occasionally no more informative about a given manuscript than the Portsmouth catalogue produced in 1888. Where possible, each manuscript is described with the following details:

* Where relevant, the number of the lot (or lots) under which the document was sold at the Sotheby sale of 1936, and the number of the reel on which the manuscript was published on microfilm by Chadwyck-Healey in 1991. (This does not apply to the Mint papers, for which a separate collation of Sotheby Lot numbers and Chadwyck-Healey reel numbers is provided.)

* Any title of the document, with an approximate word count and date(s) of composition where verifiable or reasonably conjecturable. Where possible, dating by other means is complemented by analysis of water- and counter-marks.

* An account of the contents of the document, including information (e.g. chapter-headings) about what Newton took to be the current and proposed structure of the work.

* The relation of the document to other manuscripts in the Newton archive or elsewhere (e.g. if it is a copy or digest of another text).

* Reference to all publications or editions of the document.

* A history of the location and changing ownership of the manuscript, along with the price paid for the document (in particular regarding the disposal of lots at the 1936 Sotheby sale). In the comparatively straightforward case of the Mint papers, however, this is dealt with in the introduction.
to the relevant section of the catalogue.

The Newton Project would be extremely grateful if individuals or institutions would inform us of any Newton documents in their possession that are currently listed as 'whereabouts unknown'. Any privately owned texts that are permitted to be catalogued or reproduced as part of the Newton Project will be described as 'in private possession' and confidentiality will of course be guaranteed. We would also welcome any corrections or additions to the information provided here, or notification of relevant research not yet referenced or listed in the bibliography.