MATTHEW

AND THE SOHO ENTERPRISES

Rita McLean

Matthew Boulton (1728-1809) was undoubtedly a leading figure in the West Midlands Enlightenment. During his sixty-year career he changed the face of manufacturing, was instrumental in the development of steam engineering and established a Mint to produce coins and medals. He also ventured into many other business pursuits, engaged in a range of social causes and economic campaigns and pursued a multitude of personal interests. A fascinating figure, the full story of Matthew Boulton's life and works has yet to be told.

A Thirst for Knowledge

Matthew Boulton was born in Birmingham in 1728. His father was a manufacturer of 'toys' – the name given to small articles in silver and cut steel, such as buttons, buckles and other trinkets. Samuel Smiles, the nineteenth-century biographer of Boulton and James Watt (1736-1819), records that Boulton was educated at a private academy in Deritend, Birmingham, and that before reaching adulthood he had 'introduced several important improvements in the manufacture of buttons, watch-chains, and other trinkets'.

Portrait of Matthew Boulton by J.S.C. Schaak, 1770.

Any study of Boulton's life and work reveals his continual interest in broadening his knowledge. By his late twenties he had begun to assemble a library spanning literary works and scientific treatises. No doubt he also attended some of the scientific lectures and demonstrations that were common in Birmingham.

A Meeting of Minds

By the late 1750s Boulton had begun to establish friendships with scientifically-minded individuals such as Erasmus Darwin (1731-1802), John Whitehurst (1713-1788) and Benjamin Franklin (1706-1790). By 1758, both Boulton and Darwin were conducting experiments on electricity. In the same year, Boulton met Benjamin Franklin and the two carried out electrical experiments together. Within a few years they were corresponding on the subject of Boulton's experiments on developing a steam engine, which were underway prior to him meeting James Watt. Boulton's correspondence with John Whitehurst, a clock and scientific instrument maker from Derby, illustrates their collaboration on making pyrometers and hygrometers – instruments to measure the heat expansion of metals. Whitehurst later supplied Boulton with movements for the clocks made at his Soho Manufactory and provided technical advice and assistance on the development of Watt's steam engines.

The Lunar Society

Boulton, Darwin and Whitehurst, together with other like-minded individuals formed the Lunar Society. By the late 1760s this group of 'philosophical' friends included William Small (1734-1775), Richard Lovell Edgeworth (1744-1817), Thomas Day (1748-1789), James Keir (1735-1820) and Josiah Wedgwood (1730-1795). During the next two decades James Watt, William Withering (1741-1799), Samuel Galton (1753-1832), Jonathan Stokes (1755-1831) and Robert Augustus Johnson (1745-1799) joined this circle.

In terms of Boulton's life and work, the Society's significance is the degree to which many of the members were concerned with supporting and assisting virtually all of his business activities. They provided scientific and technological advice in such fields as metallurgy, assaying, steam engineering, chemistry, mineralogy and exact measurement; and on occasion

BOULTON

contributed financial support for his projects. Furthermore, the Society provided him with a group of friends whose company was stimulating. His house at Soho became one of their regular meeting places, arranged on afternoons on or near to the time of the full moon – hence the name 'Lunar' – to benefit from the light on their journey home.

Manufacturing and Money

Boulton joined his father's business after his schooling and by his early twenties had taken over its management. We know little of his operations prior to the late 1750s, but after this his activities are documented in considerable detail. In 1759, Matthew Boulton's father died. It may well have been in the aftermath of this event that Boulton felt free to develop the business on a more grandiose scale. However, the fact that he married into money helped give him the financial means to do so. Only a month before his father's death, his first wife Mary died. She was the daughter of a wealthy Lichfield mercer and had received a marriage settlement of £3,000 (which today equates to around £250,000) as well as some land near Lichfield.

Within a few months of Mary's death, he began to court her sister Ann, who had also received £3,000. Some nine months later they married. Boulton and his second wife's financial position became further enhanced through inheritances arising from the death of Mary and Ann's brother Luke Robinson in 1764. This undoubtedly allowed Boulton to feel secure enough to invest in his manufacturing enterprises and bolstered his ability to raise capital to support these endeavours. Although the Robinson family assets were important, for many years Boulton's businesses were also financed by a staggering array of loans.

Beginning of the Soho Manufactory

The expansion of Boulton's manufacturing concerns began around 1761, when he leased thirteen acres at Soho in Handsworth – much added to over the following decades. This site provided him with a watermill to power machinery for grinding and polishing the metal components of the buttons, buckles and other toys he manufactured. Initially his activities at Soho concerned the production of toys, and the first improvements and additions to the industrial buildings were carried out to accommodate buckle and button making.

View of the Soho Manufactory from Bisset's *Magnificent Guide*, 1808.

Courtesy Birmingham Assay Office

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Within a few years, an ambitious programme of expansion began. By 1765 Boulton decided to concentrate his manufacturing operations at Soho and to diversify into producing larger articles in plated silver. He embarked on the construction of a grandiose building, which became known as the 'principal building' and was subsequently depicted in many engravings. By 1768 Matthew Boulton claimed to have established 'the largest Hardware Manufactury in the World' and in that same year a visitor from Vienna recorded seeing there 'a prodigious number of watch-chains, tortoiseshell boxes, gilt and mother-of-pearl chains, plated ware and belt clasps in the Turkish fashion'.

© Birmingham Museums Trust

Pair of Apollo and Diana candelabra in ormolu, bronze and marble, Boulton and Fothergill, c. 1775

Fothergill, Toys and Royal Patronage

Boulton's toy-making activities were conducted through a series of business partnerships, the first of these being a twenty-year alliance with John Fothergill who invested heavily in the business himself and also contributed his extensive experience of this trade throughout Europe. The buttons, buckles and other toys were sold to customers by a variety of means, through retailers, merchants or agents and in some cases by Boulton himself. He was assiduous in cultivating customers in the highest echelons of society; as the leaders of fashion, their endorsement helped promote sales.

Even before establishing the Soho Manufactory, Boulton achieved an entrée into the royal household by travelling to London in 1759 to present an inlaid sword to one of the princes. He reported to his future wife Ann that he had seen Prince Edward wear it in public, that the Prince of Wales had asked for one of a different pattern, and that he had been granted an audience with 'all the Royal family' the next day.

Despite the undoubted manufacture of a significant volume of products, Boulton's success in portraying Soho as a hive of industry which led the way in technology and production methods, and the sales made to the nobility and aristocracy, the business during his partnership with Fothergill was highly unprofitable. Behind the scenes there was disorganisation: the lack of a sound pricing structure for the products, difficulties in fulfilling orders and controlling stock as well as recovering payments from customers.

Engraved snuff box by Samuel Pemberton. An example of a Birmingham 'toy'.

Courtesy Birmingham Assay Office

Luxury Products

Alongside the larger articles in silver, Boulton started to manufacture high-quality items in Sheffield Plate and ormolu (items made from or decorated with gilt brass or bronze). The quantity of candlesticks, vases, dishes, trays, ewers, perfume burners, clocks, furniture mounts and other pieces produced at Soho was prodigious. However, although Boulton did establish a reputation for being a 'great silversmith' and was described by Josiah Wedgwood as the 'most complete manufacturer in England in metal', by and large these businesses were not highly profitable, and in some cases, notably ormolu, were loss-making concerns.

By the early 1780s, the ormolu trade had largely ceased and Boulton had turned in new directions: to developing a steam engine business in partnership with James Watt and embarking on a range of minting projects.

Silver sweetmeat basket by Boulton & Fothergill, 1774

Courtesy Birmingham Assay Office

Watt and Steam Engines

Despite the considerable difference between decorative metalwares and steam engineering, Boulton's metalworking activities lay behind the establishment of his partnership with Watt.

Soon after his arrival at Soho in 1761, Boulton grappled with the inadequate water supply at the site, which affected the efficiency of his watermill. Water was crucial to powering the machinery used to grind, scour and polish the metal components of the toys he was producing. He explored the idea of using a steam engine to provide power, though it is not clear whether he envisaged a pumping engine to feed water to his mill or an engine that directly powered the metal-working machinery.

Courtesy Birmingham Assay Office

Otaheite Medal commemorating Cook's second Pacific voyage.

The Soho Mint

Of all the enterprises Boulton pursued, his Mint business was the one he was most passionate about. He became involved in minting projects from 1772, when he was commissioned by Joseph Banks to supply medals to commemorate Captain Cook's second voyage to the Pacific. Over the following decades he established at Soho the first steam-powered Mint in the world. During the late 1790s he secured the first of a series of contracts to supply the Government with a new copper coinage, but before and beyond this turned out numerous coins, tokens and medals.

Courtesy Birmingham Assay Office

Sign for the King's Head in New Street, Birmingham. Between 1773 and 1815 the Assay Office was located in this tavern.

By 1768, Boulton had constructed some kind of experimental steam engine at Soho, but once he became aware of Watt's progress in this field his attention turned to persuading him to come to Soho. After Watt's arrival in 1774, the long process of developing steam engineering began in earnest. The 'Kinneil' engine that Watt had been developing in Scotland was transported to Soho and applied to providing a regular flow of water to the mill wheel. In time, engines were erected to directly power some of the machinery at Soho.

Matthew Boulton did not just confine his ambition to providing steam power to aid production at Soho. He recognised the potential of steam power for a wide range of applications. His often-quoted vision was 'to serve all the World with Engines of all sizes'. Between them Boulton, Watt and their successors did indeed bring this to fruition.

Understanding Boulton

Although the Soho Manufactory has not survived, his former home, Soho House, continues to exist and after a programme of restoration and refurbishment in 1995, was opened to the public as a museum. The displays at Soho House depict many of the aspects of Boulton's life and times and showcase examples of the spectacular products made at the Manufactory.

The other major survivals related to Boulton and his circle are in the 'Archives of Soho', housed in Birmingham Central Library. These papers extensively document Boulton's personal life and interests and his business endeavours.

Much has been written about Boulton, particularly in recent years, yet his story is still not fully told. The only biography exclusively devoted to Boulton is that by H.W. Dickinson in 1936. Having initially been surprised that no author had previously attempted a biography, he soon came to the conclusion that it was because 'the aspects of Matthew Boulton's life were so many that to do justice to them no single author could hope to command the qualifications that are necessary to enable him to do so'. Dickinson presented his work 'only as a step in the right direction'.

TRIBUTE TO A REMARKABLE MAN

'Had Mr B. done nothing more in the world than what he has done in improving coinage, his fame would deserve to be immortalized, & if it is considered that this was done in the midst of various other advocations, & at an enormous expense for which he could have no certainty of an adequate return, we shall be at a loss whether to admire most his ingenuity, his perseverance or his munificence.'

'Mr Boulton was not only an ingenious mechanic, well skilled in all the practices of the Birmingham manufacturers but possessed in a high degree the faculty of rendering any new invention of his own or others useful to the publick by organizing & arranging the processes by which it could be carried on, as well as promoting the sale by his own exertions & by his numerous friends & correspondents.'

These words - from James Watt's memoir of his business partner provide a sense of some of the skills that underlay Matthew Boulton's extraordinary accomplishments.

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Further Reading

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