

<b>Institution: UNIVERSITY OF BIRMINGHAM</b>
<b>Unit of Assessment: D30 History</b>
<b>Title of case study:</b> Promoting Public Understanding of Matthew Boulton and the Industrial Enlightenment
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>In 2009, the bicentenary of the death of Matthew Boulton, Birmingham entrepreneur and industrialist, was marked by a number of notable public events including an international conference and a series of exhibitions. Research undertaken at the University of Birmingham provided a knowledge foundation for a number of these events, and academic staff were involved in their production. Key examples of impact in the period are:</p> <ol style="list-style-type: none"> <li><b>1. Supporting and influencing the working practices of heritage professionals</b> through engagement with partner institutions: these include Birmingham Museums Trust, Birmingham History Galleries, The Birmingham Assay Office.</li> <li><b>2. Contributing to a public understanding</b> of the transformative role played by science and technology as exemplified in Birmingham's industrial history: via exhibitions, public events, lectures and popular publications.</li> <li><b>3. Influencing curriculum design and provision of educational resources</b> for teachers and children: Council of Europe's 'Shared Histories for a Europe without Dividing Lines' project.</li> <li><b>4. Contributing to the commemoration</b> of Boulton: establishment of a permanent monument in Westminster Abbey.</li> </ol> <p>These activities have promoted awareness of the importance of the regional Industrial Enlightenment within current civic, national and international heritage and educational agendas.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>Using archival material primarily from the Archives of Soho Collection at Birmingham Archives and Heritage, research has focussed on the knowledge transfer underpinnings of the British Industrial Revolution using Boulton and his associates as a case study to test the proposition that industrialisation owed much to knowledge of science and technology during the Enlightenment. Professor Peter Jones (Professor of French History) began his research in 1995, and in 2006 two AHRC collaborative PhD awards (with Birmingham Museums and Archives &amp; Heritage) focusing on Matthew Boulton, were secured. In 2007, Jones was funded by the AHRC to produce <i>Industrial Enlightenment: Science, Technology and Culture in Birmingham and the West Midlands c. 1760-1820</i> (see R2 below), which was awarded the Wadsworth prize for the best book in business history in 2010. Jones also published a number of peer-reviewed journal articles on the subject (R1, R3, R5). The research helped to vindicate the proposition that the dissemination of scientific knowledge and technical 'know how' contributed materially to the inventive culture and industrial development of the West Midlands region, and it also placed Matthew Boulton as a central figure in Britain's Industrial Enlightenment. Boulton turned out to be the key player in this process inasmuch as he managed the knowledge network centred on the Lunar Society, and converted scientific knowledge and technical 'know how' into industrial products on site in the Soho Manufactory. Opened in 1765, the Soho Manufactory was the largest single-site factory in the western world, and was where he promoted industrial innovation and improvements to steam technology in collaboration with his partner James Watt, and pioneered manufacturing processes based on the division of labour and techniques to market and sell a range of metallic fashion and consumer goods in Britain and in continental Europe.</p> <p>Jones and Dick began their Boulton collaboration in 2004, and since 2009, Dick has been Director of the Centre for West Midlands History at the University. Joint publications have resulted including a scholarly publication designed for a wide audience (R4). Both organised the international conference in 2009: 'Where Genius and the Arts Preside: Matthew Boulton and the Soho Manufactory, 1809-2009'. The conference (discussed in more detail below) pioneered a partnership approach with contributions by academics, PhD students, heritage professionals and independent scholars and resulted in a book of peer-reviewed conference papers edited by</p>

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Quickenden, Baggott and Dick (R6), to which both Jones and Dick contributed. This publication is the most substantial and wide-ranging contribution to international Boulton studies to date.

### 3. References to the research (indicative maximum of six references)

#### Research Outputs:

- R1. P.M. Jones, 'Industrial Enlightenment in Practice. Visitors to the Soho Manufactory, 1760-1820', *Midland History*, 33 (2008), 68-96 **[listed in REF2]**
- R2. P.M. Jones, *Industrial Enlightenment: Science, Technology and Culture in Birmingham and the West Midlands, c. 1760-1820* (Manchester University Press, 2008) **[listed in REF2]**
- R3. P.M. Jones, 'Becoming an Engineer in Industrialising Great Britain, 1760-1820', *Engineering Studies*, 3 (2011), 1-18 **[DOI: 10.1080/19378629.2011.618187]**
- R4. M. Dick ed., *Matthew Boulton: a Revolutionary Player* (Brewin Books, 2009) **[available from HEI on request]**
- R5. P.M. Jones, 'Knowledge and Technology Transfer during the Industrial Enlightenment: Swiss Visitors to the Soho Manufactory, Birmingham c. 1760-1820', *Traverses* 3 (2010), 37-53 **[available from HEI on request]**
- R6. K. Quickenden, S. Baggott and M. Dick eds, *Matthew Boulton – Enterprising Industrialist of the Enlightenment* (Ashgate, 2013) **[available from HEI on request]**

#### Research Grants and Workshops:

2007 AHRC grant to Jones £28,223 (matching Study leave).

2007-8 AHRC-funded Matthew Boulton workshops.

**AHRC Collaborative PhDs:** PhDs awarded to V. Loggie (2010) and S. Tungate (2011)

### 4. Details of the impact (indicative maximum 750 words)

Research led by Jones and Dick became the foundation for a number of events leading up to the bicentenary of Matthew Boulton's death which provided significant opportunities for impact.

#### Supporting and influencing the working practices of heritage professionals

In preparation for the bicentenary, beginning in November 2007 and running to March 2008, Jones and Dick co-organised 6 AHRC-funded Boulton workshops on the subject '*Investigating and Communicating the Historical Significance of Matthew Boulton (1728-1809)*'. Speakers and attendees from the UK, Australia and the USA addressed audiences (around 30-40 per workshop) drawn from academia, museums, libraries, archives, and community groups. The series helped bring together stakeholders involved in the planning of the Matthew Boulton bicentenary to share their knowledge and understanding of Boulton, of the world in which he lived, and of the challenges faced in communicating his historical significance in 2009. The workshops encouraged **effective exchanges of historical understanding** between the two groups and assessment of the challenges of 'communicating shared historical understanding of Boulton' to wider and more diverse audiences. The Steering Group included members from Birmingham Museums Trust, The Birmingham Assay Office, Birmingham City University, and Birmingham Archives & Heritage. This type of engagement was key to ensuring that the bicentenary events run by cultural partners were informed by academic knowledge, but also that partnerships between the two were sustainable, and that collaboration between academic partners and heritage practitioners resulted in a change to working practices not only amongst the academics involved but also the heritage practitioners working on the project. This **model of cultural partnership** has become recognised as best practice, and is now influencing future plans for the bicentenary of James Watt in 2019 (initial work to begin in 2014).

As a result of the workshops Jones and Dick were invited to serve on the advisory board of Birmingham Museums exhibition 'Matthew Boulton: Selling What all the World Desires' (30th May – 27th September 2009) in 2009. As members of the board, Jones and Dick were able to influence the design and delivery of the exhibition, again having impact through enriching curatorial practice in the form of a change to the working practices of heritage practitioners in terms of increasing collections knowledge, new approaches to the collections and to interpretation.

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Following the Boulton collaboration in 2009, Dick has served as a member of the Historians' Advisory Board for the new History Galleries at the Birmingham Museum and Art Gallery (an £8.9 million development project), attending quarterly meetings and meeting with curators directly to advise on content, displays and interpretation for the eighteenth-century section, based upon his research. 'The tangible results of [his] support can be seen in the new public gallery displays, where his advice to curators fed directly into text panels and interactive elements of the exhibition relating to Birmingham's history from the eighteenth to the twentieth century' (Head of Programming, Birmingham Museums [see source 1 below]). The curatorial team and the new galleries themselves have benefitted from such input to the extent that when they opened in October 2012, they have received excellent feedback from visitors to date with over 40,000 people visiting the galleries in their opening two months [1].

**Contributing to a better public understanding of Matthew Boulton and the Industrial Enlightenment**

The free exhibition 'Matthew Boulton: Selling What all the World Desires' at Birmingham Museum and Art Gallery attracted 33,000 people and achieved a consumer feedback approval rating of 99% – the highest level of any temporary exhibition in 2009-10. Most significantly, 87% of visitors indicated in feedback that they now had a '**better understanding**' of Boulton, the Lunar Society or the Industrial Revolution as a result of their visit [2]. In addition, the majority of visitors to the exhibition (around two thirds) were from outside the West Midlands, thus indicating the exhibition was a **stimulus to tourism in the region** [2].

A further legacy of the impact of Jones' and Dick's involvement in the bicentenary events can be seen in the ongoing collaboration between The Birmingham Assay Office (co-sponsor of the Boulton 2009 events) and the Centre for West Midlands History. Boulton was the founder of the Birmingham Assay Office, and in June 2012 and 2013, joint public day schools at the University of Birmingham explored aspects of industrial, scientific and artistic history and provided a reminder of Boulton's relevance. Over 50 people attended each event, including heritage professionals, graduate students, artists, employees of Jewellery Quarter businesses and members of the public. Each event was evaluated and revealed that attendees' knowledge of Boulton increased [3].

During and after the bicentenary, as a part of sustained and continued input into events for the public and special interest groups aimed at promoting understanding and awareness of Boulton and the Industrial Enlightenment, Jones and Dick also contributed to events for: The British Numismatics Society (Jones, July 2009); British Science Festival (Jones Sept. 2010); Historical Association branches in Birmingham, Isle of Wight and Durham (Dick, March 2009, April and May 2011); The Lunar Society (Dick, 21 Jan. 2010); Aston University's Boulton Discovery Day (Dick, 17 Sept. 2009); Erasmus Darwin House (Dick, 2 June 2009); Staffordshire and Warwickshire Archaeological and Historical Societies (Dick, Oct. 2009, April 2010); Selly Oak Local History Societies (Dick, 6 Nov. 2009); Birmingham Metallurgical Association (Dick, 31 Jan. 2013); Worshipful Company of Chartered Secretaries and Administrators (Dick, 30 June 2013).

Since 2008, both Jones and Dick have also contributed to books aimed at a wide audience:

- S. Mason ed., *Matthew Boulton: Selling What all the World Desires* (Birmingham City Council and Yale University Press, 2009);
- R. Clay and S. Tungate eds, *Matthew Boulton: the Art of Making Money* (Brewin Books, 2009);
- M. Dick ed., *Matthew Boulton: a Revolutionary Player* (Brewin Books, 2009).

In addition, Dick is the editor of a new quarterly magazine *History West Midlands (HWM)*, the first edition of which (May 2013) was devoted to the theme: 'The West Midlands Enlightenment'. Jones contributed the lead article on the Industrial Enlightenment. The magazine had a circulation of 5,000, and e-mails from readers reveal a very positive response [4].

**Influencing curriculum design and provision of educational resources**

Jones and Dick were invited to advise and present their research to the Education Committee of the Council of Europe as a part of the second phase of the 'Shared Histories for a Europe without Dividing Lines' project: 'The consequences of the Industrial Revolution on

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European societies' (Strasbourg, 27 – 28 Oct, 2011). The committee is tasked with producing an e-book of educational resources on the Industrial Revolution for European secondary teachers and students. Jones and Dick emphasised the significance of the West Midlands Industrial Enlightenment and industrial heritage to an audience of educators, textbook writers, heritage and business professionals and MEPs. Dick also participated in a follow-on session on a draft of the resources organised by the committee (Strasbourg, 16-17 May 2013) and will be contributing to a future event outside the impact period 'Shared Histories' event, Vienna, 9-11 April 2014). Jones and Dick's involvement demonstrates **contribution to the development of educational materials at an international level.**

**Contributing to the commemoration of Boulton**

Jones' research identified Boulton as a leading figure in the Industrial Enlightenment, and as a result of Dick's talk at the Durham Historical Association meeting in 2010, Professor Sir Arnold Wolfendale (former Astronomer Royal) approached Dick to begin a campaign to **secure a memorial in Westminster Abbey to Matthew Boulton** alongside his business partner James Watt. Dick took the proposal to interested parties in Birmingham and a campaign began, led by Marion Roberts (former chair of the Lunar Society), Sir Nicholas Goodison (former chair of the Stock Exchange) and Birmingham Museums Trust. In 2012, the Dean of Westminster gave his consent to the creation of a Boulton memorial [5]. The memorial will recognise Boulton as a figure of national standing as a result of his contribution to industrial and technological development; it will be installed in 2014.

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

- [1] Factual statement provided by Head of Programming, Birmingham Museums
- [2] BMAG evaluation documentation (available on request)
- [3] Collated feedback from attendees (available on request)
- [4] Collated feedback from readers (available on request)
- [5] <http://www.westminster-abbey.org/press/news/news/2013/march/abbey-honour-for-matthew-boulton>