

**BRITISH ACADEMY
OF MANAGEMENT**

BAM
CONFERENCE

3RD-5TH SEPTEMBER

ASTON UNIVERSITY BIRMINGHAM UNITED KINGDOM

This paper is from the BAM2019 Conference Proceedings

About BAM

The British Academy of Management (BAM) is the leading authority on the academic field of management in the UK, supporting and representing the community of scholars and engaging with international peers.

<http://www.bam.ac.uk/>

Developmental Paper Submission

British Academy of Management Annual Conference,

Aston University, 3-5 September 2019

Conference Theme: Building and Sustaining High Performance Organisations During Uncertain Times: Challenges and Opportunities

Paper Title: Lessons from history on dealing with crisis and uncertainty: a cluster's response

Introduction

This developmental paper addresses the conference theme by examining how a historical industrial cluster, and the firms within it, responded to a period of uncertainty and substantial challenges to its operational context. The case for this paper is the English pottery industry during the late eighteenth and early nineteenth centuries, specifically the cluster of firms operating in the six-by-three mile region known as the Potteries in North Staffordshire. The region, originally named outsiders, became so successful and ubiquitous with high-quality earthenware that 'Staffordshire-ware' quickly became a familiar and established feature of English pottery production.¹ Indeed by Josiah Wedgwood's death in 1795, wares produced in the region were truly global goods with exports reaching Continental Europe, the West Indies, the Americas, the Far East, Russia, and Africa.² The English pottery industry continued to grow substantially during the early nineteenth century with records showing over sixty million pieces being exported in 1836 with a declared value of over £830,000.³ Much of the capital and production was in North Staffordshire; the higher number and larger average size of firms in the region accounted for almost eighty percent of the total labour force employed in English earthenware manufacture by 1820.⁴ The region, then, displayed characteristics of an intensely concentrated and successful industrial cluster that witnessed a long period of dynamic growth.

The availability of trade directories for the period 1781-1850 allow for a firm-level analysis of the cluster following two research questions.⁵ The first seeks to reconstruct the cluster over this period in order to examine the organisational structure over time and set the empirical groundwork. The second question then seeks to use this to determine how the cluster responded to uncertainty, shocks and crisis over almost a century of sustained growth. This allows findings and contributions to be discerned at both the firm level, and the functional level of the cluster as a whole.

¹ Harold Owen, *The Staffordshire Potter* (Grant Richards: London, 1901), p. 1.

² Lorna Weatherill, *The growth of the pottery industry in England 1660-1815* (Garland Publishing Inc.: London, 1986), pp. 132, 306-11, 353-6.

³ *Tables of the Revenue, Population, Commerce, &c. of the United Kingdom and its Dependencies, Part VI, 1836*

⁴ Weatherill, *The growth of the pottery industry*, p 453, table A1-9

⁵ Trade Directories were published for the region well into the twentieth century, although for the present, the analysis remains focused pre-1851.

Methodology

This paper uses 22 trade directories published between 1781 and 1851 that cover North Staffordshire in order to reconstruct the number and type of firms in the district to a reasonable level of accuracy.⁶ A single directory offers a snapshot of an industry or region at a given point in time, a useful tool for identifying businesses and producers. Using a range of directories covering a single region over the long-run allows the character of that region to be observed and the dynamism of structural changes that a single directory cannot reveal. This methodology follows several large-scale historical research projects which have used trade directories to reconstruct the occupational structures of urban regions during the eighteenth- and nineteenth-centuries. For example, Tilley *et al* conducted a study of the ‘changing business environment’ of London during a period of urbanisation from 1759 to 1828 using Kent’s Business Directories.⁷ Corfield and Kelly also examined major urban areas in Britain 1727-87 using directories by different publishers. This study uses directories by different publishers, shown in Table 1.

Table 1: Trade Directories Covering North Staffordshire, 1781-1850

Publication Year	Author(s)
1781	William Bailey
1783	William Bailey
1784	William Bailey
1796	Chester & Mort
1798	Peter Barfoot & John Wilkes
1800	Thomas Allbut
1802	Thomas Allbut
1805	William Holden
1809	William Holden
1811	William Holden
1816	Thomas Underhill
1818	W. Parson and T. Bradshaw
1818	James Pigot and R. & W. Dean
1822	James Pigot
1822	Thomas Allbut
1828	James Pigot
1830	James Pigot
1834	William White
1835	James Pigot
1841	James Pigot
1846	J. Williams
1850	W. Kelly & Co

Such variety in the authorship of the directories does have the potential to be problematic in terms of coverage and accuracy, as we cannot account for the potential differences in methodologies and rigour between authors. However, regional and trade directories at this

⁶ To the author’s knowledge this is every known trade directory in the period which sufficiently covered North Staffordshire.

⁷ Erica Stanley, ‘Kent’s Directories of London, 1759-1828: A Guide to the Machine-readable Transcription’, *Inter-university Consortium for Political and Social Research*, (1983), p. 1.

time were commercial ventures, and as such, were intended to make money for the author and publisher. There was competition between publishers and a commercial incentive to maintain coverage and accuracy. The use of directories with different authors also helps mitigate a further potential problem in time-series analysis of this type: the potential to capture trends in the source itself rather than the subject. The use of a broad range of authors is common practice in local and regional economic and business studies using trade directories.⁸

There is one outstanding limitation of using trade directories during this period: the time periods between the publication of each directory are unequal.⁹ The length between publications of directories that cover North Staffordshire ranges from one to twelve years. There is no way of knowing with certainty why directories were published in a given year. To be useful, trade directories need to accurately reflect the business communities they serve, and are thus intimately connected with the fate and fortunes of businesses and producers. As a region's business community and character changes, so a new trade directory will be required to reflect those changes in order to maintain accuracy. Unfortunately, the largest gap between publications is twelve years between the directories of William & Bailey in 1784 and Chester & Mort in 1796. This substantial gap cannot be mitigated statistically and is unfortunately a problem inherent to the use of trade directories. However, the rest of the period has good enough coverage to allow for robust conclusions to be drawn.

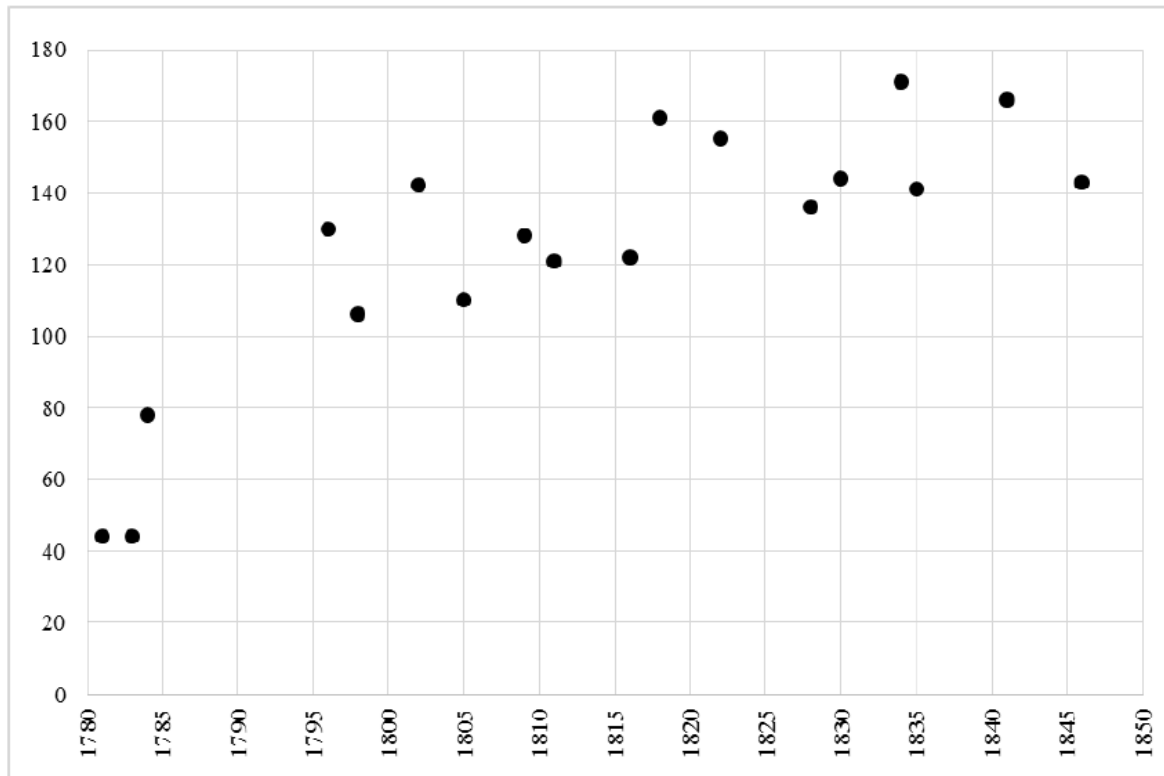
Preliminary Findings

The directories provide a wealth of information on the cluster at the firm level with each entry listing the following attributes: *Name* (from which the gender and organisational form); *Location*, at the village or town level (these were often at the street level from 1802 onwards); *Specialisation*, such as Egyptian Blackware, Creamware etc. (this was not always listed in earlier directories in the eighteenth century). From these entries it was possible to reconstruct the district over time. The resulting database contains 2198 separate entries. Each entry was examined and compared with all entries from previous directories to determine whether they had appeared before in the same form, or whether they were a new business, or an existing business that had undergone a structural change. The construction of a database of all entries allowed for long run analysis of the character of the region and the identification of these producers and businesses that dropped out of the directory listings for any given reason.

⁸ Neil Raven and Tristram Hooley, 'Industrial and urban change in the Midlands: a regional survey', in Jon Stobart and Neil Raven (eds.) *Towns, regions and industries: Urban and industrial change in the Midlands, c. 1700-1840* (Manchester University Press: Manchester, 2005), p. 24.

⁹ Neil Raven, 'The Trade Directory: A Source for the study of early nineteenth century urban economies', *Business Archives Sources and History* (74), 1997, pp. 13-16.

Figure 1: Number of North Staffordshire earthenware producers listed in trade directories, 1781-1850



Note: for sources see Table 1 and Bibliography; author's estimates allowing for duplicates and errors

The database also allows us to break down the structure of the region in various ways. For the 50 years between 1781-1830, trade directories recorded 782 different producers which operated at some point during the period. These were accounted for by around 290 separate family names with several members of one family often operating numerous separate businesses concurrently. Figures 2 and 3 show the changing composition of the cluster over time at the firm level.

Figure 2: Composition of earthenware producers in North Staffordshire, 1781-1850

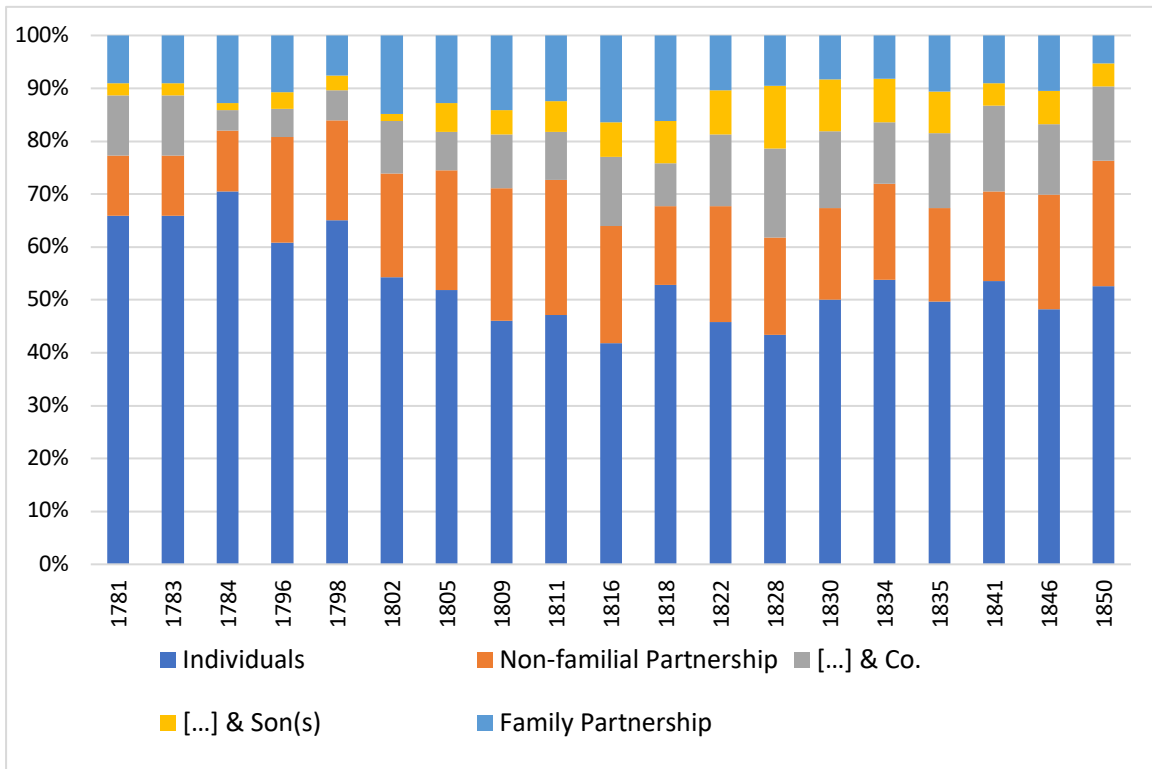


Figure 3: Sole agents and partnerships in North Staffordshire, 1781-1850

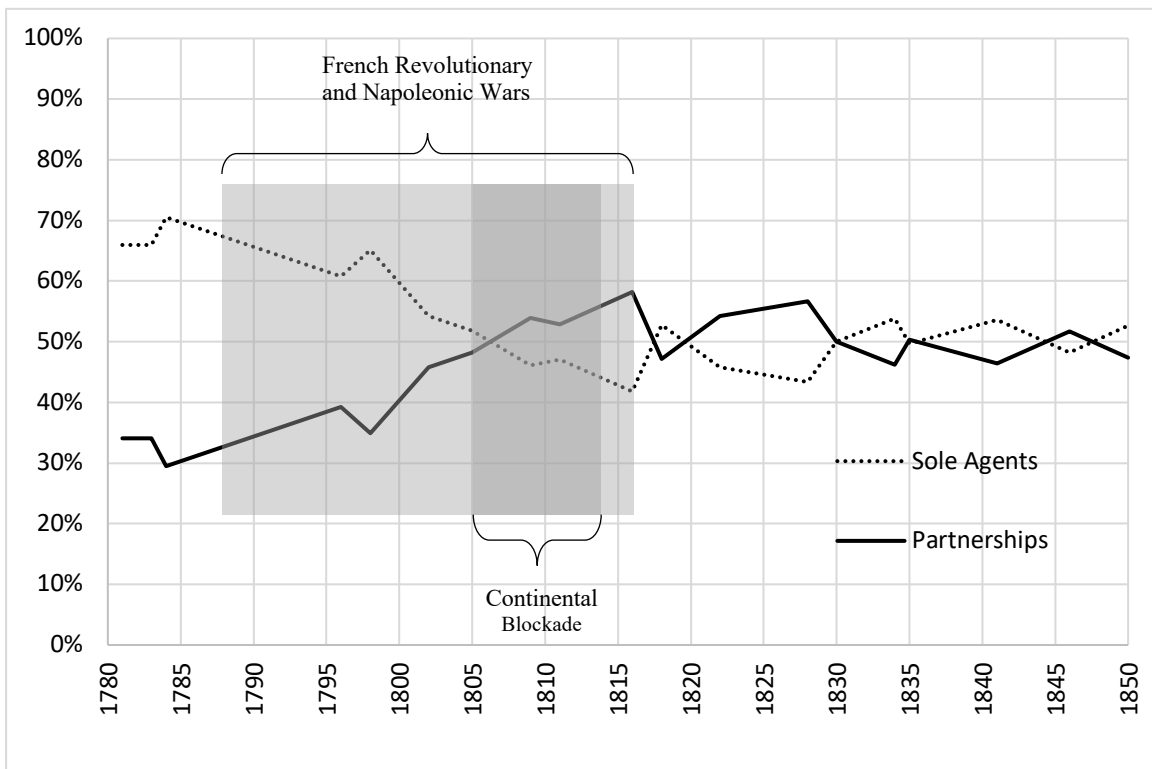


Table 2 shows a more detailed breakdown of the trade directory entries for the years 1781-1830. The first column shows the number of newly listed firms in each directory. The second column shows the number of firms that had dropped off, or exited, the listing since the previous directory. The third column gives the number of producers in each directory that were also listed in the previous directory. The total number of entries is shown in the fourth column. It also shows the number of firms that had dropped out of the listings since the publication of the previous directory. For example, a reading of the third column tells us that of the forty-four firms listed in Bailey's 1783 directory, nineteen of these did not then subsequently appear in Bailey's 1784 directory, twenty-five were re-listed as the same business and these were joined by fifty-three newly listed firms.¹⁰

Table 2: Trade directory listings, 1781-1830

	Newly Listed	Exit since previous	Listed in previous	Stock
1781	-	-	-	-
1783	-	-	-	-
1784	49	19	22	78
1796	106	54	17	130
1798	49	71	52	106
1802	106	71	30	142
1805	65	94	42	110
1809	57	39	68	128
1811	23	30	95	121
1816	63	63	55	122
1818	104	69	49	161
1822	88	91	62	155
1828	78	98	52	136
1830	48	39	91	144

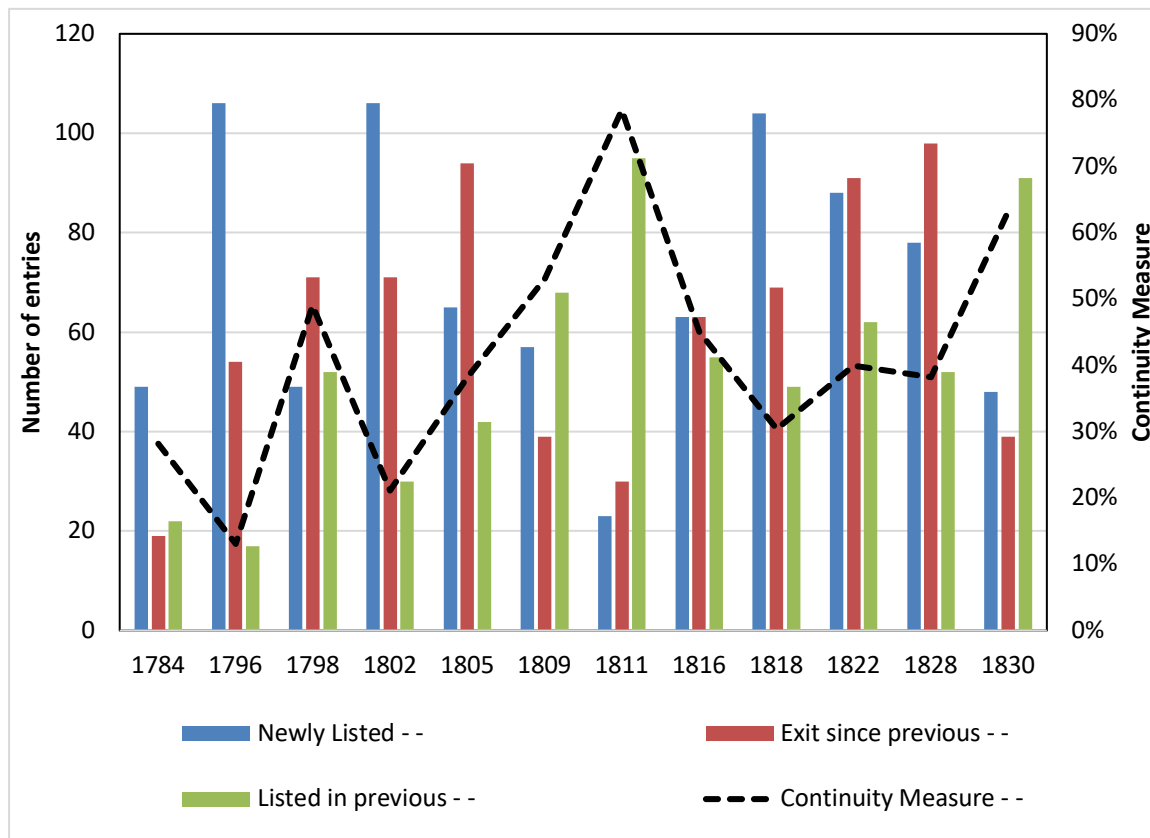
Figure shows this information for 1784-1830 alongside a continuity measure which is the number of producers in each directory that were also listed in the previous directory, expressed as a share of the total entries for each given year. The fourth column shows the stock of producers in the district at each point in time. The continuity measure can be used as a proxy for the turnover of firms and is influenced by a recent study by Molina-Morales *et al* which studied the Spanish ceramic tile industrial district in Castellón from 1985-2000.¹¹ They found that during this period there were over three times as many new firms created as old firms ceasing to exist and argue that this signifies a high vitality for the district.¹² Table 2, however, shows that the Potteries also experienced high failure or exit rates throughout the period.

¹⁰ The directory for 1783 was an exact replica of the directory for 1781 and therefore no analysis on new firms is possible.

¹¹ F. Xavier Molina-Morales, M. Lopez-Navarro and J. Guia-Julve, 'The Role of Local Institutions as Intermediary Agents in the Industrial District', *European Urban and Regional Studies*, Vol. 9, No. 4 (2002), pp. 315-329.

¹² *Ibid.*, p. 323.

Figure 4: Turnover of Staffordshire potters listed in trade directories, 1784-1830



The total number of producers in the region stagnated from the mid-1790s until the end of the Napoleonic wars. Examining this stagnation shows that the number of new producers entering the market reduced over the same period. The continuity measure for the district increased as a result of an increase in the average life-span of partnerships although this peaked slightly earlier and had already started to decline by 1816. A shift in the dynamics of the region occurred in the early nineteenth century with an influx of new entries to the market increasing the total number of producers. The increasing preference for partnerships was also curbed and even reversed for a short period in the 1830s as the organisational composition became closer to an equal split between individual enterprises and partnerships. Given the timing of these shifts it is clear that earthenware producers in the Potteries began to implement strategies to adapt and deal with times of crisis and exogenous shocks. The vitality and growth of the region from the 1790s until the end of the Napoleonic era was characterised by strategies of forming partnerships from an existing pool of producers. The fact that these firms were operating the way they were, in conditions of intense spatial concentration, is suggestive of the presence of significant local social and business networks.

This paper argues that between c. 1780-1851 the Potteries faced substantial exogenous challenges and competition. For example, the French Revolutionary and Napoleonic Wars (1789-1815) and the Continental Blockade had a significant impact on British trade and exports, and thus production. The economic impact of the European wars was felt globally.

Trade was 'seriously disrupted' through control and prohibition policies which were employed by both Britain and France, alongside the introduction of naval blockades.¹³

However, this period was also characterised by growth in the English pottery industry alongside a significant level of turnover and churn in the number and organisational form of firms with many small and large firms entering and exiting the industry. The Potteries was a dynamic cluster that responded to shocks and challenges successfully, entering its terminal phase only during the second half of the twentieth century. During times of crisis and broader economic tightening, such as those noted above, the district responded by reducing the number of new entrants and maintaining an existing pool of firms. These firms worked collaboratively on short term partnerships which became increasingly popular as the industry and cluster grew in size and importance. This finding is significant as it contrasts with Popp's work on pottery firms in North Staffordshire during the second half of the nineteenth century. Using rate books, Popp found that the cluster also faced periods of crisis (endogenous crises of identity and more conventional exogenous shocks) but responded in a very different way. He argues that the response during the 1870s, for example, was for the cluster to increase the number of entrants and exits, largely due to the maturity of the industry and an excess of redundant but readily available resources. Popp's work also revealed that during the later period churn in the entrance and exit of weaker firms had a negative impact on the cluster.¹⁴ The findings of this paper seem to indicate the opposite effect. Churn and turnover in the number and type of firms entering and exiting the market was a strategy employed at the cluster level to cope with periods of crisis. During the earlier period of the cluster's development and evolution, turnover and churn was a positive characteristic that accompanied (although demonstrating a causal link is difficult) broader growth and success.

This paper forms part of a broader systematic analysis of the cluster over the very-long run and will help set the empirical groundwork for analysis of the earlier period of the cluster's development. This firm-level analysis has hitherto been overlooked.

¹³ Lance Davis and Stanley Engerman, *Naval blockades in peace and war: an economic history since 1750* (Cambridge University Press: Cambridge, 2006), pp. 26-7; Kevin O'Rourke, 'The worldwide economic impact of the French Revolutionary and Napoleonic Wars, 1793–1815', *Journal of Global History*, Vol. 1, No. 1 (2006), pp. 146.

¹⁴ Andrew Popp, *Business Structure, Business Culture and the Industrial District: The Potteries, c.1850-1914* (Ashgate: Aldershot, 2001); "'The true potter": identity and entrepreneurship in the North Staffordshire Potteries in the later nineteenth century', *Journal of Historical Geography*, Vol. 29, No. 3 (2003), pp. 317-335.

List of References:

Primary Sources & Trade Directories:

- A View of the Staffordshire Potteries*, (Printed for and sold by T. Allbut, Burslem, dated 1800).
- Bailey's British Directory; or, Merchant's and Trader's Useful Companion, For the Year 1784, in Four Volumes. Volume the Second. The Western Directory, The First Edition*, (William Bailey, 53 Badinghall Street, London).
- Bailey's Northern Directory, or, Merchant's and Tradesman's Useful Companion, For the Year 1781*, (W. Bailey: Warrington).
- Bailey's Western and Midland Directory; or, Merchant's and Tradesman's Useful Companion, For the Year, 1783*, (W. Bailey: Birmingham)
- Biennial Directory, Class Third, First Edition, for the Years 1816 & 1817*, (Thomas Underhill: London).
- History, Gazetteer, and Directory, of Staffordshire*, (White: Sheffield, 1834)
- Holden's Annual London and Country Directory, of the United Kingdom and Wales, in Three Volumes, for the Year, 1811, Second Volume*, (W. Holden, London).
- Holden's Triennial Directory (Fifth Edition) for 1809, 1810, 1811, Second Volume*, (William Holden, London).
- Holden's Triennial Directory, Fourth edition, for 1805, 1806, 1807, Second Volume*, (W. Holden, Clerkenwell, London).
- Kent's Directory for 1803, Being an Alphabetical List of The Names and Place of Abode of the Merchants & Traders of London, seventy-first edition* (R. and H. Causton: London, 1803).
- Pigot and Co.'s London & Provincial New Commercial Directory, for 1822-23*, (Pigot & Co: Manchester).
- Pigot and Co.'s National Commercial Directory*, (Pigot & Co.: London, 1835).
- Pigot and Co.'s National Commercial Directory, for 1828-9*, (Pigot & Co.: London).
- Pigot and Co.'s New Commercial Directory for Staffordshire, Warwickshire, Worcestershire, Shropshire & North Wales*, (Pigot & Co.: London).
- Pigot and Co.'s Royal National and Commercial Directory and Topography*, (Pigot & Co.: London, 1841).
- Post Office Directory of Birmingham, with Staffordshire and Worcestershire*, (Kelly: London, 1850).
- Staffordshire General & Commercial Directory, for 1818, Part First, containing the Borough of Newcastle-under-Lime, The Potteries, and the Town of Leek &c.*, (Parson and Bradshaw, Manchester).
- Tables of the Revenue, Population, Commerce, &c. of the United Kingdome and its Dependencies Part VI*, (1836).
- The Commercial Directory, for 1818-19-20*, (Pigot and Dean: Manchester).
- The Newcastle and Pottery General and Commercial Directory, for 1822-23*, (Allbut, Hanley).
- The Staffordshire Potter Directory*, (printed and sold by Chester and Mort, Hanley, Newcastle, 1796).
- The Staffordshire Pottery Directory*, (Printed by J Allbut and Son. Hanley, dated 1802)
- The Universal British Directory of Trade, Commerce, and Manufacture, Volume the Fourth*, (Peter Barfoot & John Wilkes: London).
- William's Commercial Directory for Stafford and the Potteries*, (Williams: Manchester, 1846).

Secondary Sources:

- Davis, Lance and Stanley Engerman, *Naval blockades in peace and war: an economic history since 1750* (Cambridge University Press: Cambridge, 2006).
- Molina-Morales, F., 'Industrial districts and innovation: the case of the Spanish ceramic tiles industry', *Entrepreneurship & Regional Development: An International Journal*, Vol. 14, No. 4, (2002), pp. 317-35.

- Molina-Morales, F., M. Lopez-Navarro and J. Guia-Julve, 'The Role of Local Institutions as Intermediary Agents in the Industrial District', *European Urban and Regional Studies*, Vol. 9, No. 4 (2002), pp. 315-29.
- O'Rourke, Kevin, 'The worldwide economic impact of the French Revolutionary and Napoleonic Wars, 1793–1815', *Journal of Global History*, Vol. 1, No. 1 (2006), pp. 123-149.
- Owen, Harold, *The Staffordshire Potter* (Grant Richards: London, 1901).
- Popp, Andrew, *Business Structure, Business Culture and the Industrial District: The Potteries, c.1850-1914* (Ashgate: Aldershot, 2001).
- . "'The true potter": identity and entrepreneurship in the North Staffordshire Potteries in the later nineteenth century', *Journal of Historical Geography*, Vol. 29, No. 3 (2003), pp. 317-335.
- Raven, Neil, 'The Trade Directory: A Source for the study of early nineteenth century urban economies', *Business Archives Sources and History*, Vol. 74, (1997), pp. 13-30.
- Raven, Neil and Tristram Hooley, 'Industrial and urban change in the Midlands: a regional survey', in Jon Stobart and Neil Raven (eds.) *Towns, regions and industries: Urban and industrial change in the Midlands, c. 1700-1840* (Manchester University Press: Manchester, 2005), pp. 23-41.
- Stanley, Erica, 'Kent's Directories of London, 1759-1828: A Guide to the Machine-readable Transcription', *Inter-university Consortium for Political and Social Research*, (1983).
- Weatherill, Lorna, *The growth of the pottery industry in England 1660-1815* (Garland Publishing Inc.: London, 1986).