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# The Potter's Skill:

# Perceptions of Workmanship in the English Ceramic Industries, 1760-1800

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A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in History

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**CONTENTS**

## List of Illustrations

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## Declaration

I confirm that this thesis is my own work and has not been submitted for a degree at another university.

## Inclusion of Material from a Prior Thesis

Chapter two includes a map titled 'Map showing the location and value of ceramics traders in London between 1768 and 1794.' This map formed part of my MA by Research thesis, which I completed at the University of Warwick in 2006.

## Abstract

This thesis focuses on perceptions of workmanship in the English porcelain and earthenware industries between 1760 and 1800. Research by Berg and Clifford has demonstrated a new interest in and valuation of workmanship by contemporaries in the eighteenth century. Yet little is known of what contemporaries understood workmanship to mean, or be. This thesis argues that understandings of workmanship affected both the consumption and production practices of eighteenth-century contemporaries. It does so by concentrating on six groups of people – industrial tourists, consumers, retailers, designers, manufacturers and workers. It demonstrates the different ways in which contemporaries perceived hand skills and tacit knowledge by examining a range of sources such as letters, prints, trade cards, travel accounts and objects.

This thesis concludes that meanings of 'workmanship' - that combination of effort, work and skill - were shifting in the second half of the eighteenth century. For those not employed in manufacturing, reading manuals, seeing production in action and handling objects all challenged their ideas of workmanship. These experiences encouraged contemporaries to question the meaning of innovative products and the manufacturing techniques used to make them. Similarly, in manufacturing the development of the design process and the demands of novelty and standardisation forced manufacturers, designers and modellers to ask how to achieve 'excellent workmanship'. At the same time, workers understood and valued their work in different terms – as a hard-won, social and physical skill. This thesis argues that for eighteenth-century contemporaries 'workmanship' was a complex idea, under challenge from developments in production and consumption. In so doing it moves the interlinked history of manufacturing and consumption away from the extant debates of economic historians and into a different sub-disciplinary space, namely cultural history; a space that has tended to neglect the cultural aspects of production.

## Introduction

The focus of this thesis is perceptions of workmanship in the English porcelain and earthenware industries between 1760 and 1800. The thesis argues that perceptions and understandings of workmanship affected both the consumption and production practices of eighteenth-century contemporaries. By concentrating on six groups of people – industrial tourists, consumers, retailers, modellers, manufacturers and workers - it demonstrates the different ways in which contemporaries perceived hand skills and tacit knowledge.

This thesis links together two coinciding and interconnected historical issues. First, it responds to the current debate over the importance of the codification of useful knowledge to economic growth.[1] More specifically, it questions whether the increasing attempts to codify tacit knowledge and the problems surrounding it are evidence of a changing cultural valuation of tacit knowledge and hand skills in this period. Second, it also engages with arguments asserted by Maxine Berg and Helen Clifford, which demonstrate a shift in consumer choice from goods of intrinsic value to goods made from innovative processes of fabrication.[2] The thesis questions whether this shift also denotes a changing response to manufacturing and skill. Hence, this thesis tracks the ways in which different groups responded to ideas of workmanship in the late eighteenth

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[1] Joel Mokyr, *The Gifts of Athena: Historical Origins of the Knowledge Economy* (Princeton, 2002), p. 57.

[2] Maxine Berg, *Luxury and Pleasure in Eighteenth-Century Britain* (Oxford, 2005), p. 26; Helen Clifford, 'A Commerce with Things: The Value of Precious Metalwork in Early Modern England', in Maxine Berg and Helen Clifford (eds), *Consumers and Luxury: Consumer Culture in Europe 1650-1850* (Manchester and New York, 1999), p. 148; Helen Clifford, 'Innovation or Emulation? Silverware and its Imitations in Britain 1750-1800. The Consumers Point of View', *History of Technology*, 23 (2001), p. 73.

century. In so doing it moves the interlinked history of manufacturing and consumption away from the debates of economic historians and into a different sub-disciplinary space, namely cultural history; a space that has previously tended to neglect the cultural aspects of production.

Although this argument is temporally and geographically specific to England, the questions that it raises are more widely relevant to the study of industrialisation and craft. Moreover, although these questions could be asked of the silver trade, the textile industry or the toy trade, in its answers, this thesis specifically examines the English porcelain and pottery industries. During the eighteenth century these industries produced the innovative goods observed by Berg and Clifford, primarily through the labour of highly skilled workers. Moreover, as Lorna Weatherill's analysis of probate inventories demonstrates, a growing proportion of society bought porcelain and earthenware objects during the eighteenth century.[3] Hence, ceramic production and consumption offers a particularly clear example of an argument that could be made for other industries. Although the thesis uses examples from both the porcelain and earthenware industries, in considering production it focuses on the earthenware industry.

This thesis uses a variety of sources to answer these questions including manuals, diaries and accounts, trade cards, newspaper advertisements, objects, correspondence, commonplace books, maps and prints. By including a wide range of different source material this thesis

[3] Lorna Weatherill, 'The Meaning of Consumer Behaviour in Late Seventeenth and Early Eighteenth-Century England', in John Brewer and Roy Porter (eds), *Consumption and the World of Goods* (London and New York, 1993), p. 220.

approaches the question of perception in multiple ways. Hence, it examines not only representations but also contemporaries' responses to them.

This introduction proceeds in three sections. First, it explains how and why historians have previously dealt with the problems of tacit knowledge, skill and workmanship. Second, it provides a brief overview of the growth of the English ceramic industries in the seventeenth and eighteenth centuries, which provides the context for this thesis. Third, it sketches out the structure of the thesis by briefly outlining each chapter.

**Tacit Knowledge**

In *Gifts of Athena: Historical Origins of the Knowledge Economy* (2002) and *The Enlightened Economy* (2009), Joel Mokyr demonstrated the importance of useful knowledge to the development of the British economy.[4] More particularly, Mokyr highlighted the significance of reduced access costs in disseminating useful knowledge and consequently furthering economic growth. Between the publication of *Gifts of Athena* and *The Enlightened Economy*, attention slowly turned to focus on the role of tacit knowledge within the useful knowledge framework.[5] As part of his assessment of the dissemination of useful knowledge, Mokyr recognised the complex problem presented by knowledge developed through experience and practice.[6] In fact, historians have routinely accepted the problems of codifying and disseminating tacit forms of knowledge in the seventeenth

[4] Mokyr, *The Gifts of Athena*, p. 2; Joel Mokyr, *The Enlightened Economy: An Economic History of Britain 1700-1850* (New Haven and London, 2009), p. 40.
[5] Maxine Berg, 'The Genesis of "Useful Knowledge"', *History of Science*, xlv (2007), pp. 123-133; Liliane Hilaire-Pérez, 'Technology as a Public Culture in the Eighteenth Century: The Artisans' Legacy', *History of Science*, xlv (2007), pp. 135-153; Peter M. Jones, *Industrial Enlightenment: Science, Technology and Culture in Birmingham and the West Midlands, 1760-1820* (Manchester and New York, 2008), pp. 110-160.
[6] Mokyr, *The Gifts of Athena*, p. 57.

and eighteenth centuries.[7] Yet the ways in which contemporaries viewed this 'problem' remain unknown. Rather than exploring its role in economic growth, this thesis sets out to examine late eighteenth-century perceptions and understandings of the tacit knowledge inherent in manufacturing processes.

**The Problem of Tacit Knowledge**

For Mokyr, 'useful knowledge' was formed in two ways. First, the 'what', a form of propositional knowledge made up of beliefs about the regularities and irregularities of natural phenomena.[8] Through discoveries, namely finding something anew that already existed, contemporaries' added new pieces of propositional knowledge to the aggregate base.[9] Second, the 'how', a form of prescriptive knowledge made up of various instructions and techniques.[10] Additions to prescriptive knowledge arrived in the form of invention; the constitution of a new set of instructions that made it possible to do something previously deemed impossible.[11]

The 'tightness' of a piece of knowledge depended upon the number of people who believed it to be true at any one time.[12] Hence, knowledge was inherently collective in nature. Consequently, it was dependent upon the consensus of particular groups and on continual dissemination. The

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[7] J. R. Harris, 'Skills, Coal and British Industry in the Eighteenth Century', *History*, 61 (1976), pp. 167-182; Simon Valerani, 'The Roofs of Wren and Jones: A Seventeenth-Century Migration of Technical Knowledge from Italy to England' (LSE Working Papers Series, 2006), p. 1. Also see, Chandra Mukerji, 'Tacit Knowledge and Classical Technique in Seventeenth-Century France: Hydraulic Cement as a Living Practice Among Masons and Military Engineers', *Technology and Culture*, 47:4 (2006), pp. 713-733.
[8] Mokyr, *The Gifts of Athena*, p. 5.
[9] Ibid., p. 12.
[10] Ibid., p. 10.
[11] Ibid., p. 13.
[12] Ibid., p. 6.

collective aspect of knowledge is central to Mokyr's claim that Britain's economic development was largely dependent on its ability to reduce access costs.[13] The wider circulation of information reduced the chance of research following dead ends or knowledge being replicated and thus increased the efficiency of knowledge production. In addition, greater involvement in knowledge production created new ways in which collective consensus could be reached. Significantly, in the eighteenth century, people, institutions and texts disseminated useful knowledge in an unprecedented number of ways.

The Scientific Revolution of the seventeenth century and the Enlightenment of the eighteenth century, led to the increased observation, measurement and recording of natural phenomena.[14] Simultaneously, scientists, artisans and manufacturers increasingly codified techniques and recipes, presenting them in printed forms. Alongside these changes, clubs, societies and lectures spread knowledge, bolstering a culture of scientific and intellectual curiosity.[15] Yet within these flows of knowledge tacit knowledge was often a more reluctant vessel. As Mokyr argues 'Printed and written texts were probably complements to rather than substitutes for personal contact and artefacts in the transfer of useful knowledge.'[16] Tacit knowledge frequently remained stubbornly grounded in the bodies and minds of artisans and workers. As Michael Polanyi asserts in *The Tacit*

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[13] Ibid., p. 34.
[14] J. L. Heilbron, 'Introduction Essay', in Tore Frangsmyr, J. L. Heilbron and Robin E. Rider (eds), *The Quantifying Spirit in the Eighteenth Century* (Berkeley and Oxford, 1990), p. 2.
[15] Margaret C. Jacob, *Scientific Culture and the Making of the Industrial West* (New York and Oxford, 1997), p. 110.
[16] Mokyr, *The Gifts of Athena*, p. 57.

*Dimension*, 'in general, an explicit integration cannot replace its tacit counterpart.'[17]

In 2007, a special issue of *History of Science* brought together a series of responses to Mokyr's work. Amongst these pieces both Maxine Berg and Liliane Hilaire-Pérez commented on the lack of importance Mokyr attributed to the role of artisans and tacit knowledge.[18] Berg argued that the importance Mokyr placed on a vital few, rather than the artisanal many, left questions unanswered.[19] Some of those questions were taken up by Hilaire-Pérez, who challenged the neatness of Mokyr's divide between propositional and prescriptive knowledge, between knowing and doing, an argument that has also been asserted by Peter Jones in *Industrial Enlightenment*.[20] Both Berg and Hilaire-Pérez agreed, however, with Mokyr's assertion that despite much codification, forms of tacit knowledge remained. Yet rather than seeing this as a problem, Berg and Hilaire-Pérez concluded that the continued significance of tacit knowledge simply led to the persistent importance of people, particularly workers and artisans.[21] Berg and Hilaire-Pérez suggested that the tacit knowledge held by workers and artisans was useful and created the close-sighted responses necessary for the successful application of new technologies and processes.[22]

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[17] Michael Polanyi, *The Tacit Dimension* (Gloucester, MA, 1983), p. 20. Here, Polanyi is referring to the difference between inherent, experienced knowledge of an object, for example the body and a theoretical knowledge of that same object.
[18] Berg, 'The Genesis of "Useful Knowledge"', p. 128; Hilaire-Pérez, 'Technology as a Public Culture', p. 137.
[19] Berg, 'The Genesis of "Useful Knowledge"', p. 128.
[20] Hilaire-Pérez, 'Technology as a Public Culture', p. 136; Jones, *Industrial Enlightenment*, p. 150.
[21] Berg, 'The Genesis of "Useful Knowledge"', p. 128; Hilaire-Pérez, 'Technology as a Public Culture', p. 137.
[22] A point that Mokyr agrees with, but places less significance on. Joel Mokyr, 'Knowledge, Enlightenment, and the Industrial Revolution: Reflections on The Gifts of Athena', *History of Science,* xlv (2007), p. 185.

Despite historians' interest in tacit knowledge, this thesis asserts that these discussions overlook an important historical problem. The codification of tacit knowledge, whether it was successful or not, suggests that some contemporaries believed that hard-won tacit knowledge could be made explicit and could be stored in other ways – for instance, in printed text. Thus the push for codification not only represents contemporaries' interest in skills and processes, it also includes an inherent cultural assumption about embodied knowledge – that it can be known or represented in other ways. This assumption suggests that during the eighteenth century cultural understandings of tacit knowledge and skill were in the process of changing.

Hence this thesis explores the wider cultural valuations of and interest in tacit knowledge. In exploring these valuations, this thesis steps away from the debates of economic historians and enters another sub-disciplinary space, cultural history. Rather than studying the role of embodied knowledge in economic growth, this thesis examines perceptions of tacit knowledge between 1760 and 1800. Although economic history remains a central theme in this thesis, the six chapters that make up this dissertation primarily explore the various depictions of workmanship produced in the latter decades of the eighteenth century. Together they show how, during the early years of industrialisation, the perceptions and understandings of tacit knowledge changed.

**Producing Skill**

To examine this question more closely it is first necessary to consider by whom, how and where tacit knowledge was applied. Tacit knowledge was a central facet of skilled handwork, particularly for workers in industries such as metals, mining, textiles and ceramics. Learning skills, through watching, practising and repeating allowed workers to internalise knowledge about manipulating nature. During this process, as the piece of knowledge became increasingly embedded, it also became more and more difficult to articulate. Historians' understandings of the importance of hand skills in the classic Industrial Revolution period of 1760 to 1830 have changed in the last forty years. Rather than viewing hand skills as disappearing under the torrential attack of technological change and mechanisation, historians now recognise that hand skills changed and adapted, but remained key to industrialisation.

J. R. Harris's seminal article 'Skills, Coal and British Industry in the Eighteenth Century', was one of the first clear expressions of this view.[23] Harris examined the role played by skill in the face of technological change. He found that, rather than technological developments forcing the end of skills, skills adapted in the classic Industrial Revolution period.[24] Harris's work underlined the importance of the craft element, the 'unanalysable pieces of expertise' that constituted the 'knack' of a skill in industrial work.[25] More recent work by Chris Evans and Göran Rydén has done much to bolster our ability to understand craft skills as evolving in response to

[23] Harris, 'Skills, Coal and British Industry', pp. 167-182.
[24] Ibid., p. 175.
[25] Ibid., p. 182.

industrial change rather than simply opposing it.[26] Their work has particularly highlighted the significance of social and cultural dynamics in the development of skills in the iron industry.

Central to his 1993 work *'The Labyrinth of Flames': Work and Social Conflict in Early Industrial Merthyr Tydfill*, was Evans's elaboration of the term the 'cultural formation' of skill.[27] Evans argued that 'skill formation' was not just possessing a certain set of skills; it was also about the social recognition that one possessed those skills. Thus in Evans's reading, skills were all but useless if fellow workers failed to recognise them. The cultural dynamic appropriated upon skill was ultimately highly unstable because the definition of what constituted skill was under continual reassessment.[28] Yet Evans does not read the culture of Welsh iron workers at the turn of nineteenth century as one geographically located, rather he reads it as part of an 'iron culture'.[29]

Similarly, Göran Rydén's work on the Swedish iron industry has recognised skill cultures, which existed across geographical locations and were fixed by other forces. Rydén has investigated the impact of skill retention upon the Swedish iron industry between 1750 and 1850. His research has highlighted the importance of kinship groups, social structures and skill hierarchies in securing the quality of the iron produced

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[26] Chris Evans, *'The Labyrinth of Flames': Work and Social Conflict in Early Industrial Merthyr Tydfil* (Cardiff, 1993); Chris Evans, 'A Skilled Workforce During the Transition to Industrial Society: Forgemen in the British Iron Trade, 1500-1850', *Labour History Review*, 63 (1998), pp. 143-159; Chris Evans and Göran Rydén, 'Kinship and the Transmission of Skills: Bar Iron Production in Britain and Sweden', in Maxine Berg and Kristine Bruland (eds), *Technological Revolutions in Europe: Historical Perspectives* (Cheltenham and Northampton, MA, 1998), pp. 188-206; Göran Rydén, 'Skill and Technical Change in the Swedish Iron Industry', *Technology and Culture*, 39:3 (1998), pp. 383-407.
[27] Evans, *'The Labyrinth of Flames'*, p. 73.
[28] Ibid., p. 72.
[29] Ibid., p. 209.

and thus the future of the Swedish export market.[30] The work of Harris, Evans and Rydén has demonstrated the importance of cultural and social factors in the growth and stagnation of skill sets.

These debates leave unanswered further questions about the cultural valuation and meaning of embodied knowledge inside the workplace. If, as Evans argues, being skilled was not simply a question of doing something well, but rather about being seen by others to be doing something well, how did workers represent their skills to themselves and others? How did workers understand the concept of 'skill' and how did they value their own skills? Moreover, how did manufacturers' understanding of skill operate in the work place? This thesis explores how manufactures and workers understood skill and tacit knowledge between 1760 and 1800.

**Standards of Workmanship**

Despite the importance of perceptions of skill in the production process, this thesis also asserts that understandings of tacit knowledge were affective in spaces other than the workshop. Building on the work of Berg and Clifford, it argues that understandings of skill were also important in the consumption of goods. Berg argues that innovative goods, like those produced by the English porcelain and earthenware industries, made consumers view products in new ways.[31] They asked consumers to consider how manufacturers made goods that looked so similar to more expensive counterparts yet were cheaper and somehow different. New

[30] Rydén, 'Skill and Technical Change', pp. 383-407.
[31] Berg, *Luxury and Pleasure*, p. 26. See also Maxine Berg, 'From Imitation to Invention: Creating Commodities in Eighteenth-Century Britain', *The Economic History Review*, 55:1 (2002), pp. 1-30.

materials and processes made goods anew, 'lightweight cotton instead of silks, earthenwares instead of porcelain, flint and cut glass, metal alloys and finishes such as gilt and silver plate, stamped brassware, japanned tinware and papier mâché, ormulu and cut steel instead of gold and silver, varnishes and veneers instead of exotic woods.'[32] As Clifford's work on Sheffield Plate also demonstrates, rather than regarded as cheap substitutes, these goods appropriated their own meanings as inventive objects.[33]

Similarly, Jan de Vries asserts that between 1650 and 1750 as new, often imitative, products came onto the market 'consumer priorities shifted from the standard of the material…to the standard of workmanship.'[34] In addition, Mokyr has stressed that the 'demand for consumer durables in the century before the Industrial Revolution shifted from an emphasis on the quality of the materials to an emphasis on workmanship.'[35] Like Clifford and Berg, de Vries and Mokyr's allusion to the 'standard of workmanship' refers to a change from appreciating the 'intrinsic value' of an object and its materials, to a greater regard for the 'appearance given to it in the process of fabrication.'[36] Thus, by the mid eighteenth century consumers valued the effects created by the techniques inherent in manufacturing processes. Yet, in assessing consumers' reactions to goods, historians have neglected to consider the cultural consequences of shoppers' valuation of workmanship and by extension the concept of

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[32] Berg, *Luxury and Pleasure*, p. 24.
[33] Clifford, 'Innovation or Emulation?', p. 73.
[34] Jan de Vries, *The Industrious Revolution: Consumer Behavior and the Household Economy, 1650 to the Present* (Cambridge, 2008), p. 146.
[35] Mokyr, *The Enlightened Economy*, p. 116.
[36] de Vries, *The Industrious Revolution*, p. 146.

workmanship in a wider sense, as a term with multiple meanings in both consumption and production.

This thesis questions the impact of consumers' focus on the 'standard of workmanship'. More particularly, it examines how shoppers' valuation of the production of objects when consuming manifested itself in different ways. In so doing, it argues that these other estimations reflect a changing understanding of and interest in tacit knowledge and skill. Hence, this thesis examines the responses of different groups, such as tourists, consumers, retailers, manufacturers and workers, to the application of skill and the concept of workmanship in order to show how these were perceived and understood in new and different ways in the eighteenth century.

**Eighteenth-Century Workmanship**

During the long eighteenth century, the concept of workmanship represented the relationship between the worker, work and the worked upon. Etymologically, workmanship had three different yet interconnected definitions in this period, two of which are of primary importance to this thesis. First, from the fourteenth to the nineteenth century, workmanship was defined as 'The performance or execution of work or a work'.[37] It linked the performance of labour and the amount of labour used to complete a particular task of work, thus the application of skill.

[37] C.T. Onions (ed.), *The Shorter Oxford English Dictionary* Vol. II (Oxford, 1933), p. 2450.

Second, workmanship was 'That which is wrought or made by a workman or craftsman; (a person's) work.'[38] In this understanding, workmanship was a separate entity, enacted by a particular worker and then posited in the object of their work, a 'piece of workmanship'.[39] Finally, workmanship was also understood as, 'Skill or cunning as a workman; craftsmanship as exhibited in a piece of work.'[40] The definition marks a distinct juncture from the previous two, as it prioritises the term 'craftsmanship' as the means of understanding the skill of the workman. In many ways this particular definition marks a different, yet interconnected, etymological development of 'craftsmanship'. Contemporaries intertwined ideas of craft and workmanship in the eighteenth century.

Hence, according to these definitions, workmanship in the eighteenth century related to the time, skills and efforts applied by workers. Workmanship was a term that allowed contemporaries to think about the skilled handwork involved in manufacturing. In applying these efforts workers used and exploited their tacit knowledge, thus this thesis looks to the concept of workmanship – as the cultural manifestation of tacit knowledge in order to track changing perceptions and understandings of skill.

**Understanding Workmanship**

In the last twenty years, amidst the various sub-disciplines of history it is craft historians who have primarily studied contemporary perceptions of hand skills. Focusing mainly on the nineteenth and twentieth centuries due

[38] Onions, *The Shorter Oxford English Dictionary*, p. 2450.
[39] Ibid.
[40] Ibid.

to the dominance of the Arts and Crafts movement, craft historians have offered detailed narratives of the discourses surrounding skilled practice. In writing these histories, scholars have examined the origins of 'craft', both as an ideology and as a way of 'doing', by looking to the eighteenth century.

Gillian Naylor's examination of the Arts and Crafts Movement looked to the eighteenth century for murmurs of its arrival.[41] Naylor argued that the movement was a reaction both to doctrines of design and to the affects of the 'machine age', which became apparent in the late nineteenth century. Alongside nature, it championed the importance of worker autonomy, control and standards in craftwork. Naylor asserted that similar sentiments were not apparent in the eighteenth century as contemporaries welcomed the changes brought forth by the early years of industrialisation, as material evidence of progress. It was not until the early years of the nineteenth century, when the Romantic poets voiced fears about industry and mechanization that such rhetoric began to change.[42]

More recently, in an essay for Peter Dormer's seminal collection *The Culture of Craft*, Paul Greenhalgh began his history of craft by offering readers a compelling account of how contemporaries used the term in the early decades of the eighteenth century.[43] His etymological exploration began with Caleb D'Anver's 1729 publication *The Country Journal or the Craftsman*, which after several months became shortened to *The Craftsman*.[44] Here 'craft' had little to do with making and more to do with forms of

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[41] Gillian Naylor, *The Arts and Crafts Movement: A Study of its Sources, Ideas and Influence on Design Theory* (London, 1971), p. 11.
[42] Naylor, *The Arts and Crafts Movement*, p. 12.
[43] Paul Greenhalgh, 'The History of Craft', in Peter Dormer (ed.), *The Culture of Craft* (Manchester and New York, 1997), pp. 20-52.
[44] Greenhalgh, 'The History of Craft', p. 21.

political acumen. The publication survived until the 1780s by which point Samuel Johnson's *Dictionary of English Language* had emerged to summarily define the term. In Johnson's 1773 edition, one of the four definitions of craft was a 'manual art or trade', yet as Greenhalgh noted craft was not a thing in itself.[45] After this point, until the last quarter of the nineteenth century when the term became the flagship of the Arts and Crafts Movement, 'craft' undertook a quiet retreat.[46]

Despite the inherent legitimacy of the approach taken by Naylor and Greenhalgh, by concentrating on the etymology of the one term, they perhaps miss other key eighteenth-century terms which if considered, add depth and breadth to both eighteenth and nineteenth-century understandings of craft. As Peter Betjeman argues, the Arts and Crafts movement was sceptical of learned, reproducible technique leading to a devaluation of skills that were important to the manufacture of eighteenth-century objects.[47] Similarly, craft historians have tended to resist acknowledgement of the multiple understandings of craft in the years preceding 1800, despite the current and expanding breadth of craft history.

Recent reassessments of 'craft' offered by sociologists such as Richard Sennett and art historians such as Glenn Adamson, allow for new readings of craft skills and contemporary responses to them.[48] Rather than understanding craft as a thing in itself, a process or an idea, Adamson, explores crafts 'as an approach, an attitude, or a habit of action.'[49] Similarly,

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[45] Ibid., p. 22.
[46] Ibid., p. 23.
[47] Peter Betjeman, 'Craft and the Limits of Skill: Handicraft Revivalism and the Problem of Technique', *Journal of Design History*, 21:2 (2008), p. 189.
[48] Richard Sennett, *The Craftsman* (London, 2008); Glenn Adamson, *Thinking Through Craft* (Oxford and New York, 2007).
[49] Adamson, *Thinking Through Craft*, p. 4.

Sennett comprehends craft as a process; as a 'rhythm', which patiently engages with 'resistance' and 'ambiguity' to solve problems and ensure 'good work'.[50] Like Adamson, Sennett reads craft as an attitude. In the light of such reassessments, questions concerned with how eighteenth-century contemporaries understood and perceived handwork need to be reconsidered.

More recently, however, other disciplines have begun to consider the importance of eighteenth-century conceptions of production. Historians such as Helen Clifford and Giorgio Riello have started to consider the affective nature of contemporary perceptions of production.[51] In 2004, Clifford published a short article entitled 'Making Luxuries: the Image and Reality of Luxury Workshops in Eighteenth-Century London'.[52] In the article, Clifford questioned how 'makers' and consumers, thought about sub-contracting as a means of production. Clifford argued that the increasing distance between the consumer and the maker was significant in affecting the creation of more positive understandings of production. Riello's 2008 article 'Strategies and Boundaries: Subcontracting and the London Trades in the Long Eighteenth Century', primarily concentrated on sub-contracting as an important organisational framework for various London trades. Yet within this article Riello also asserted that perceptions of sub-contracting affected consumers' trust in and ideas about production and quality.[53] Clifford and Riello's focus on sub-contracting asks important

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[50] Sennett, *The Craftsman*, p. 175, p. 215, p. 231, p. 249.

[51] Helen Clifford, 'Making Luxuries: The Image and Reality of Luxury Workshops in Eighteenth-Century London', in P.S. Barnwell, Marilyn Palmer & Malcolm Airs (eds), *The Vernacular Workshop: From Craft to Industry, 1400-1900* (York, 2004), pp. 17-27; Giorgio Riello, 'Strategies and Boundaries: Subcontracting and the London Trades in the Long Eighteenth Century', *Enterprise and Society*, 9:2 (2008), pp. 243-280.

[52] Clifford, 'Making Luxuries', pp. 17-27.

[53] Riello, 'Strategies and Boundaries', pp. 266-67.

questions about the dynamics surrounding manufacturing and consumption in the eighteenth century, questions that this thesis argues need to be asked more widely.

This thesis builds on the work of Clifford and Riello by considering how perceptions of skill and workmanship operated in both production and consumption. In response to work by Ben Fine and Ellen Leopold this thesis acknowledges the interconnected nature of agents and behaviours on both the demand and supply side.[54] Thus, it looks to a variety of sources in order to examine the perceptions of consumers, retailers, designers, manufacturers and workers. This thesis claims that between 1760 and 1800 innovative consumer goods and Enlightenment curiosity prompted an interest in manufacturing and technique. It further claims that this interest was an affective force. Hence, this thesis argues that during this period, perceptions of workmanship affected retailing and marketing, consumer skills, design processes and production. In conclusion, this thesis asserts that examining eighteenth-century understandings of workmanship has significance not only for the cultural history of production and consumption practices, but that it is also important in widening discussions currently located in craft history.

In order to examine the importance of understandings of skill this dissertation looks to two industries, which between 1760 and 1800 underwent changes in both production and consumption – the English porcelain and earthenware industries.

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[54] For most recent version of this argument see Ben Fine, *The World of Consumption: The Material and Cultural Revisited* (London and New York, 2002), p. 7.

**The Ceramics Industry – Porcelain and Earthenware**

During the seventeenth and eighteenth centuries highly desirable porcelain goods took European markets by storm. Foreign and exotic, European consumers wanted to own and display these translucent white hard-bodied objects. Imports of porcelain from China peaked in the early years of the eighteenth century and reached a highpoint in 1721, when Britain bought two million pieces of porcelain from the East India Company.[55] Demand continued and in the late 1770s nearly 400 tons of chinaware was unloaded onto British docks from East India Company vessels.[56] As Berg argues, these products, amongst others, initiated consumer interest and desire.[57] Moreover, as de Vries asserts they encouraged a reorganisation of household resources in order to afford them.[58] Hence, in Britain between 1675 and 1725 the percentage of inventories including earthenware objects rose from twenty-seven to fifty-seven percent, whilst those including china ware rose from zero to nine percent.[59]

Those who owned earthenware or china belonged to an increasingly wide range of occupations. Between 1675 and 1725, while thirty-nine per cent of the gentry owned earthenware, fifty-three per cent of those in high status trades, the clergy or the professions also possessed it. Forty-two per cent of low status trades and forty-three per cent of labourers also owned

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[55] Berg, *Luxury and Pleasure*, p. 128.
[56] Ibid., p. 56; Maxine Berg, 'Cargoes: The Trade in Luxuries from Asia to Europe', in David Cannadine (ed.), *Empire, The Sea and Global History: Britain's Maritime World c. 1763-c.1840* (New York and Hampshire, 2007), p. 64.
[57] Berg, *Luxury and Pleasure*, pp. 19-20.
[58] For more on the importance of ceramics in prompting a reorganisation of household resources see de Vries, *The Industrious Revolution*, pp. 130-133.
[59] Weatherill, 'The Meaning of Consumer Behaviour', p. 220.

earthenware objects.[60] At the same time, six per cent of the gentry, eleven per cent of those in high status trades, the clergy or the professions, three per cent of those in low status trades and four per cent of labourers owned china goods.[61] The desire for ceramic wares flourished in the eighteenth century and by 1800, earthenware and porcelain objects were a ubiquitous presence in most households.

Alongside the demand ignited by Chinese porcelain, social and cultural changes further encouraged consumers to buy an increasing range of ceramic products. In the early eighteenth century, changing norms of politeness and sociability fostered new dining habits, which required dinner services with individual settings and a variety of serving dishes. Similarly, as a result of the importation of tea from China the practice of domestic tea drinking expanded, affecting all members of society, from servants to members of the gentry.[62] For the upper and middling sort, tea drinking became a key social practice entered into with visitors, resulting in a demand for tea equipment – a teapot, tea bowls or cups, saucers and dishes. In the second half of the eighteenth century, these new forms of sociability increased the importance of the domestic space culminating in other more decorative desires – the vase, the tablet and the medal.[63] In addition, building projects grew in numbers and scale, expanding household space and creating further demand for ceramic goods.

While the influx of Asian objects fuelled an increase in demand, it also prompted a supply response from British producers of porcelain and

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[60] Ibid., p. 222.
[61] Ibid., p. 220.
[62] For more on servant's tea drinking see Carolyn Steedman, *Labours Lost: Domestic Service and the Making of Modern England* (Cambridge, 2009), p. 260.
[63] Amanda Vickery, *Behind Closed Doors: At Home in Georgian England* (New Haven and London, 2009), p. 228.

earthenware. Manufacturers worked to imitate Chinese porcelain goods and later to respond to the new desires formed through domestic sociability and space. Initially, in the late seventeenth century and early eighteenth century, the flood of goods sparked imitation and innovation, in terms of both process and product.[64] In Britain, the scholar, alchemist and potter John Dwight (1637-1703) made a series of porcelain experiments in the late seventeenth century, which resulted in a white body made from Dorset ball clay and a patent in 1672.[65] Although the use of ball clay meant that the pieces resulting from these experiments were not strictly 'porcelain', his tests were important for the development of a fine near-white salt-glaze body in the late seventeenth century.

In Europe, chemists and alchemists approached the challenge of porcelain with similar exuberance and under court patronage these efforts moved faster than in Britain. After the development of soft-paste porcelains in the sixteenth and seventeenth century at the Medici court and in factories such as those at St Cloud and Rouen in France, the eighteenth century witnessed the discovery of hard-paste porcelain. In 1708, Johann Friedrich Böttger (1682-1719) and Ehrenfied Walther Tschirnhaus (1651-1708) formed the first successful sample of hard-paste porcelain.[66] As a result the Meissen porcelain manufactory grew and prospered from 1709 onwards. At the same time, industrial espionage ensured that the knowledge required to manufacture porcelain disseminated quickly, ushering in an important period for the European industry.

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[64] Berg, 'From Imitation to Invention', pp. 1-30.
[65] Rose Kerr and Nigel Wood, 'Transfer', in Rose Kerr (ed.), *Science and Civilization in China, Volume 5, Chemistry and Chemical Technology, Part 12: Ceramic Technology* (Cambridge, 2004), p. 756.
[66] Kerr and Wood, 'Transfer', p. 750.

In Britain, following William Cookworthy's discovery of china clays in Cornwall and the bone ash innovation of the 1740s, the porcelain industry evolved at speed until the 1770s.[67] It changed from an industry responding to Chinese imports, mimicking the mystery and exoticism of porcelain, to a domestic industry with its own aesthetic sense in the 1770s. After the mid eighteenth century, larger manufactories such as Bow, Derby and Worcester, with 200 or more workers, changed the nature of the English porcelain industry producing goods that were imitative, but also increasingly innovative.[68]

While the British porcelain industry only started to expand rapidly in the later decades of the eighteenth century, the earthenware industry had grown and prospered throughout the century, particularly from 1715 onwards.[69] Between the latter decades of the seventeenth century and the 1730s, the earthenware industry and the North Staffordshire industry in particular, experienced many different changes. New materials, the use of new technologies and techniques, changes to the organisation of the trade and the expansion of production units all affected the growth of earthenware production. These changes then developed and accumulated over the remainder of the eighteenth century, until around 1790, to the benefit of the domestic industry. In the midst of this, by the middle decades of the eighteenth century manufacturers produced a discernible British product, namely fine earthenware, which consumers purchased in ever-greater quantities.

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[67] Roger Massey, 'The Size and Scale of Eighteenth-Century English Porcelain Factories', *English Ceramic Circle Transactions*, 17:3 (2001), p. 443.
[68] Massey, 'The Size and Scale', p. 449.
[69] Lorna Weatherill, *The Pottery Trade and North Staffordshire 1660-1760* (Manchester, 1971), p. 145.

Larger production units, under the management of manufacturers such as Thomas Whieldon, John Baddeley and Josiah Wedgwood, gradually emerged. Thomas Whieldon employed around twenty workers in the early 1750s, whilst John Baddeley employed around forty by the later years of the decade.[70] Ten years later, in 1770, Josiah Wedgwood complained of the problems incurred by employing 150 workers.[71] These earthenware manufactories employed increasing numbers of workers to perform ever-more specialised tasks. Although potters have rarely produced their own wares from start to finish, from the 1710s onwards new materials, technologies and techniques demanded that the specialisation of work began in earnest.[72]

New technologies and techniques allowed manufacturers to create more intricate forms in larger quantities. From the 1720s onwards, as throwing wheels began to be powered by someone other than the thrower, potters could produce more precise forms.[73] Similarly, press moulding and slip casting provided the means of creating delicate, elaborate forms. The development of lathes and later engine-turned lathes gradually came into use during the eighteenth century, affecting the finish of goods. From 1760 onwards they were a key piece of equipment.[74] Using lathes, turners created smooth, fine goods in imitation of Chinese wares and later as distinct goods in their own right.

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[70] Weatherill, *The Pottery Trade and North Staffordshire*, p. 51.
[71] Wedgwood Museum Trust, Barlaston. Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 3 February 1770. MS E25-18287.
[72] Sarah Richards, *Eighteenth-Century Ceramics: Products for a Civilised Society* (Manchester and New York, 1999), p. 50; Weatherill, *The Pottery Trade and North Staffordshire*, p. 60.
[73] Lorna Weatherill, 'Technical Change and Potters' Probate Inventories 1660-1760', *Journal of Ceramic History*, 3 (1970), p. 6.
[74] Weatherill, *The Pottery Trade and North Staffordshire*, p. 50.

In addition, just as different techniques for decoration, such as transfer printing enabled innovative aesthetic developments, new bodies also emerged. Creamware, agate ware, jasper ware, black basalt and red ware responded to and created fashions, fuelling consumer desire. From the 1730s onwards North Staffordshire potters began producing creamware. Made from a combination of white ball clay and flint, manufacturers fired the body at a lower temperature than stoneware to produce hard, light-coloured earthenware. By the 1760s, creamware became finer and lighter and emerged as Queen's ware. In this form earthenware was able to compete with porcelain. As a new, innovative good it appealed to the upper and middling sort.

Jasper ware was also an important development for the earthenware industry. Jasper was a type of dense white stoneware, which, when thinly potted and fired at above 1250 centigrade took on a translucent quality. The body could be stained different colours, ornamented, engine-turned, laminated and lapidary polished, which provided many options for creating ornamental pieces. Not only did it facilitate the making of fashionable tablets, gems, medals and cameos, it also allowed earthenware to compete in a market increasingly dominated by neo-classical colours and design. Despite eight costly years of development from 1772 onwards, Wedgwood's eventual success with jasper ware in the 1780s represented another key moment for the English ceramic industry.

In making objects such as creamware teapots or jasperware vases, manufacturers invited consumers to question material, form and decoration. Perhaps most importantly, they also invited customers to

consider the workmanship and skill behind the finished product. It is with these particular concepts that this thesis is concerned.

**Chapter Outlines**

Rather than following previous models, which have studied both the demand and the supply side by moving from production to consumption, this thesis begins with consumption and ends with production. This thesis uses this structure to shift the typical consumer goods narrative, which follows objects from conception to sale. It does this in order to demonstrate the multiple interconnections between consumption and production. Moreover, this approach also asserts consumption as an active process, which affected production. Just as consumption could be the end point of production, so production could be the end point of consumption.

The thesis begins with industrial tourists and retailers before considering consumers, designers, manufacturers and workers. It ends with workers as a forceful reminder of their importance. Amongst the various representations of tacit knowledge witnessed by tourists, created by retailers and used by manufacturers, workers applied their tacit knowledge on a daily basis. Hence, despite appearing at the end of the thesis, workers and their work also appear throughout.

In order to show how Enlightenment curiosity and new consumer goods prompted an interest in manufacturing this thesis begins by examining how information about ceramic production became increasingly available to a wide range of contemporaries. Chapter one looks to two sets of different yet related sources. First, it considers the wealth of printed

material, including manuals and articles, which emerged during the eighteenth century to explain the increasing number of production processes in action. In England, numerous authors and publishers, generally with little first hand experience of manufacturing, exploited the population's thirst for industrial knowledge by producing a variety of encyclopaedic volumes. This chapter analyses these printed materials to assess both the information they contained and the terms in which that information was written. It asks whether these works were capable of generating real knowledge or awareness within their readers.

The second half of the chapter analyses the role of industrial tours in contemporary understandings of manufacture. It asks how contemporaries responded to them and what they thought they gained from embarking on them, by examining a set of tour guides and journals. Many of the tourists appear to view the processes they witnessed in these ceramic factories in terms of awe and wonder. In light of these responses, how did contemporaries view workmanship? Significantly, contemporaries sought ways of learning about and interacting with production. Thus, their distance from production is questionable. Yet, trying to decipher the understanding they gained from manuals is more complex. I argue that this is not a simple story of alienation from a comprehension of production, but rather a more complex picture in which contemporaries projected various understandings onto the processes at hand. In so doing, this chapter asserts not only that contemporaries were interested in production but also that they understood it in multiple ways, thus complicating how historians interpret eighteenth-century conceptions of workmanship.

Moving away from representations of manufacturing produced by writers, publishers and manufacturers, chapter two looks more specifically at depictions of production generated by ceramic retailers in the late eighteenth century. Hence, chapter two develops the argument of the thesis by questioning whether contemporary interest in manufacturing examined in chapter one was recognised by others and whether it manifested itself in other areas. The chapter begins by examining different images of fabrication contained within newspaper advertising and then trade cards. The various depictions of manufacture that retailers produced for consumers using these media represent a largely unstudied means of understanding how contemporaries formulated ideas of production. Yet this chapter uses trade cards and newspaper advertisements to demonstrate that ceramic retailers regularly invoked ideas of production in their marketing. The chapter analyses these various images in the context of retailers day-to-day operations. In order to complicate the messages contained in such advertisements it asks whether these depictions reflected the reality of ceramic retailing. It further explores the impact of these images upon consumers by considering how they compared to consumers' perceptions of production.

As chapter one demonstrates, contemporaries were keen for information on different production processes. Similarly, many customers (particularly the elites) fostered connections with manufacturers, through direct ordering. Moreover, the middling sorts also created their own networks from which they could acquire valuable knowledge about production *and* consumption. Chapter two questions how consumers received the images of production rendered by retailers.

Chapter three observes consumer practices inside the shop. Surrounded by consumer goods, it seems unlikely that the shop space offered a representation of production. Yet, by examining shopping practices this chapter demonstrates how contemporaries sought out independent information about production techniques. The chapter examines trade cards, advertisements and architectural plans and interprets shops as highly sensory spaces. It argues that stressing sensory aspects encouraged shoppers to linger in the shops and to slowly peruse the goods on offer. Through an examination of literary sources, diaries and objects, it asserts that it was through the process of browsing that shoppers not only assessed the quality and suitability of the goods on offer but that they also constructed their own, independent understanding of workmanship. Through repetitive interaction with the outcome of workmanship, consumers gained a different means of understanding what it might be.

Chapter four advances the thesis focus from consumption to production in order to examine how manufacturers constructed and employed ideas of workmanship in the production of ceramic objects. The chapter questions the role of workmanship in the design process of the ceramics industry and engages with the work of David Pye, which regards workmanship as a form of 'execution'. I argue that in the changing world of ceramic design, as two-dimensional drawings began to gain precedence and modelling increasingly became its own discrete process, the role of execution began to shift. In the second half of the eighteenth century, as modelling grew in importance a split occurred not only between design and manufacture, but also between design and modelling. Increasingly, the

execution of design was initially worked out in the modelling process rather than the manufacturing process.

Hence, chapter four examines the modelling process for evidence of how workmanship was considered and judged. The correspondence of Josiah Wedgwood to his London partner Thomas Bentley is a key source here. In these letters, Wedgwood frequently voiced concerns, criticisms and delight about the various modellers and modelling commissions he was managing. These records of the frustrations and triumphs of the modelling process provide much evidence of how manufacturers understood workmanship and the changing issues surrounding the workers' ability to execute designs. A key feature highlighted by this process was the increased importance of communication in allowing modellers to work successfully. As a result of the design debate and the subsequent formalisation of design, judgements of good workmanship were increasingly linked to the execution of a specific design intention. Thus, in order for the modellers to deeply engage with the process and adopt the attitude necessary for good workmanship they had to be aware of what it was they were trying to achieve. Often the greatest frustration was not ownership of the design process but rather full communication of the design idea. Hence, this chapter judges the impact of changing design processes upon the meanings of workmanship for designers, modellers and manufacturers.

Chapter five examines various sources from the archives of the Wedgwood Museum Trust, Barlaston in order to show how changing production practices effected ideas of workmanship. Rather than exploring worker specialisation in Wedgwood's manufactory, this chapter focuses on

how changes to the built environment of the factory and tools affected work practices. Similarly, it also follows the use of training, guidance and repetition in the later decades of Josiah Wedgwood's business. It looks to the implementation of these different strategies, which were all designed to improve workmanship, to examine how implementation took place. It looks more specifically to the role of tacit knowledge and collaboration in this implementation to decipher the importance of these factors in production at this time. Chapter five demonstrates how changing production processes challenged manufacturers' ideas of workmanship.

The sixth and final chapter of the thesis considers how the workers themselves understood and valued their own skills and workmanship. The chapter suggests that the physicality of potting was of great significance and had an important effect on potters' worldview. Their metaphorical repertoire was shaped by physical terms. At the same time, the chapter also suggests that workers valued their skills as generational assets handed down through their parental lines. They also recognised the inherently social aspect of their skill and gave value to the increasing importance of their reliance on others workmanship due to the process of specialised labour. For the workers themselves workmanship defined their wages, their social standing and their ability to guide themselves through the world.

In sum, by juxtaposing the viewpoints of these six different groups – tourists, retailers, consumers, designers, manufacturers and workers – this thesis examines both how workmanship was perceived in this period and also how those perceptions affected the meaning of workmanship at this time. This thesis demonstrates how, in the early years of industrialisation,

workmanship was a complex concept undergoing change. By showing the evolving nature of the term this thesis reveals how interest in and understandings of workmanship were an affective force in this period. Hence, moving the history of consumption and production away from the debates of economic history and into the different sub-discipline of cultural history shows that changes in demand and supply have a cultural, as well as an economic identity, which plays an important role in determining change.

# Chapter One

## 'Tis more worth seeing than anything I hardly ever see': Industrial Tourists and the View of the Factory

In the *Encyclopédie* (1751-72), Diderot celebrated observation as a means to understanding. The weighty volumes deemed so significant to the Enlightenment project, included plate after plate of diagrams, drawings and writings denoting various technical processes. Just as in Abbé Noel-Antoine Pluche's *Le Spectacle de la nature* (1732-51), the formation of these multifaceted depictions of manufacturing life began with a number of artists being sent out to workshops to observe and record their inner workings.[1] Returning to their studios, these artists then produced visual representations of the processes they had witnessed. Yet observation, so successful in other areas of knowledge gathering, was problematic when witnessing technical skills in action. The artists had little, if any, experience of the processes they were contemplating. Consequently, they failed to present a realistic representation of working processes.[2] Although certain contributors, such as Benoît-Louis Prévost and Claude-Henri Watelet did depict processes as complex and ambiguous, most contributors presented a scientific, individualised, projection of work.[3]

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[1] Cynthia J. Koepp has recently argued that *Le Spectacle de la nature*, which preceded the *Encyclopédie* by twenty years, acted as a template for this work. Cynthia J. Koepp, 'Advocating for Artisans: The Abbé Pluche's Spectacle de la nature (1732-51)', in Josef Ehmer and Catharina Lis (eds), *The Idea of Work in Europe from Antiquity to Modern Times* (Farnham, 2009), pp. 245-273.

[2] William H. Sewell Jr, 'Visions of Labour', in Steven L. Kaplan and Cynthia J. Koepp (eds), *Work in France: Representations, Meaning, Organization and Practice* (Ithaca, 1986), p. 264.

[3] For more on the representation of processes as complex see John R. Pannabecker, 'Representing Mechanical Arts in Diderot's "Encyclopédie"', *Technology and Culture,* 39:1 (1998), pp. 50-54. For more on scientific representation of work see Sewell Jr, 'Visions of Labour', p. 277.

Meanwhile, when workers attempted to depict the techniques they regularly performed other problems arose. In 1737, the Académie offered an award to the person who could provide the best explanation of how to make an anchor. The prize, however, rewarded that person who could prove that they knew how to make an anchor, rather than celebrating the most useful description of how others could make it. The end product was not a complete description of the manufacturing process but rather a representation of its elements.[4] Hence the *Encyclopedie's* problematic attempts to observe and categorise tacitly understood skills, or rather, in Diderot's terms "knowledge…that one does not see", highlights a tension between the ethos of the Enlightenment project and the existence of embodied knowledge.[5] In an age insistent on the need to observe, categorise and quantify, what became of knowledge that evaded order, codification and representation?

As a strong advocate for the continued importance of craft skills in industry during the eighteenth century and into the nineteenth century, it is hardly surprising that J. R. Harris was largely sceptical of written texts. Harris argued that the eighteenth century produced little technological literature due its limitations in depicting craft practice.[6] He asserted that although recording technological information in a dictionary or encyclopaedia was easily accepted in Britain, there were extensive problems with the literature created. The rapidly changing nature of technical skills, called into question the accuracy of the contributions made to such tomes. In addition, issues of plagiarism created further problems.

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[4] Olivier Lavoisy, 'Illustration and Technical Know-How in Eighteenth-Century France', *Journal of Design History*, 17:2 (2004), p. 150.
[5] As cited in Pannabecker, 'Representing Mechanical Arts', p. 38.
[6] J.R. Harris, 'Skills, Coal and British Industry in the Eighteenth Century', *History*, 61 (1976), p. 167.

Finally, Harris also questioned the motivation that lay behind creating these publications, particularly in terms of the lack of interest in certain techniques and industries.[7] At the heart of Harris' concern, however, was a disbelief in the ability of text or image to fully represent the complexity of craft practice.[8]

More recently in his *The Enlightened Economy*, Joel Mokyr voiced concern over the extent to which tacit knowledge can ever be made explicit through language or other forms of representation.[9] For Mokyr, a set of written instructions can never fully encompass the complexities of a new technique. As he argued in *The Gifts of Athena*, in all recipes some knowledge, judgment, dexterity and experience will always come into play.[10] Thus, despite his work emphasising the importance of codification in reducing access costs and facilitating knowledge flows, Mokyr conceded that texts failed to replace the need for face to face interaction and experience in the transfer of some forms of useful knowledge.[11] Building on the work of Harris and Mokyr, yet simultaneously stepping outside of it, this chapter asks: if texts and illustrations provided only a limited means of transmitting knowledge between trained individuals, how successful were they in providing wider contemporary audiences with a genuine representation of manufacturing techniques?

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[7] Harris, 'Skills, Coal and British Industry', p. 169.
[8] Ibid., p. 179.
[9] Joel Mokyr, *The Enlightened Economy: An Economic History of Britain 1700-1850* (New Haven and London, 2009), p. 46.
[10] Joel Mokyr, *The Gifts of Athena: Historical Origins of the Knowledge Economy* (Princeton, 2002), p. 15.
[11] Mokyr, *The Gifts of Athena*, p. 57; Mokyr, *The Enlightened Economy*, p. 46.

**Other Audiences**

The importance of this question is more apparent when we consider that texts such as Robert Campbell's *The London Tradesman* (1747) and Thomas Mortimer's *A New and Complete Dictionary of Trade and Commerce* (1766) were ultimately aimed at a variety of audiences. Writers, such as Campbell and Mortimer, nominally targeted their texts at those active in the industries. They also aimed their texts at those entering the industry, as in the case of Campbell's attempt to instruct the 'Guardians and Parents of Youth'.[12] Yet they largely failed in this aim.

Mortimer's bulky two-volume publication is particularly open to scrutiny on this account. He stipulated that the dictionary was aimed not at the 'Rich and Affluent alone' but also at 'Tradesmen, Manufacturers, and Mechanics', for perusal in their 'leisure hours'.[13] In order that this full audience might be met the publication was sold 'in periodical Numbers, at an easy price' so 'that persons of every station might be enabled to purchase a work'.[14] When writing more specifically about his audience he envisaged that he was 'writing chiefly for the use of the Sons of Industry, who have but little leisure to bestow on reading'.[15] Whilst Mortimer's claims of writing for 'every station' appear deeply suspect, even his claims to write for the industrial bourgeoisie are open to question. Comments within the text of the dictionary suggest that his writing was actually aimed at the landed gentry. For instance, when discussing clays, Mortimer

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[12] Campbell discusses this towards the front of the book in his 'Dedication'. See R. Campbell, *The LondonTradesman* (London, 1747).
[13] See the 'Advertisement' following the frontispiece in volume one. Thomas Mortimer, *A New and Complete Dictionary of Trade and Commerce* (London, 1766).
[14] See the 'Advertisement' following the frontispiece in volume one. Mortimer, *A New and Complete Dictionary.*
[15] Ibid.

suggests that 'land-proprietors' should consider the 'great benefit' of turning their land to clay rather than arable and pasture.[16]

Other writers aimed their dictionaries explicitly at affluent audiences. For instance, Malachy Postlethwayt's pitch towards 'landed gentlemen' perhaps illustrates more accurately for whom these authors wrote.[17] Almost forty years later, John Guy's *Miscellaneous Selection* was particularly directed at those entirely outside of manufacturing that had embarked on a liberal education. For Guy, it was imperative that these scholars invested time in gaining an awareness of manufacturing processes. He asked 'Among all the *manufactories* and *arts*, invented by men for the convenience and benefit of society, what know you of any of them besides their names?'[18]

As Maxine Berg has argued, 'collections of commercial dictionaries, encyclopaedias, technical manuals and treatises on the arts and manufactures were iconic possessions of the industrial bourgeoisie.'[19] Mokyr is less certain on this point. He argues that 'It is not entirely clear who actually read these writings, much less how the readers benefited from them.'[20] This chapter argues that although superficially designed for artisans they were securely targeted at wealthy groups. Berg has asserted that these printed forms were as much about commercialization as codification.[21] They were desirable possessions, forwarding the

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[16] There are no page numbers in *A New and Complete Dictionary*. The work is alphabetically arranged and the reference can be found in the 'Clay' section in volume one. Mortimer, *A New and Complete Dictionary*.
[17]Malachy Postlethwayt, *The Universal Dictionary of Trade and Commerce.* Vol. 1 (2nd edn, London, 1757), p. vi.
[18] John Guy, *Miscellaneous Selections: Or the Rudiments of Useful Knowledge from the First Authorities. Designed for Senior Scholars in Schools, and for Young Persons in General* [1796] (2nd edn, Bristol, 1803), p. iv.
[19] Maxine Berg, 'The Genesis of "Useful Knowledge"', *History of Science*, xlv (2007), p. 127.
[20] Mokyr, *The Enlightened Economy*, p. 46.
[21] Berg, 'The Genesis of "Useful Knowledge"', p. 127.

organisation of knowledge as an aesthetic, rather than creating a genuine addition to the epistemic base.[22] In the light of the introductions to these manuals, Berg's critique appears pertinent. In response this chapter asks to what extent did the writers of these manuals provide the industrial bourgeoisie and, we should add, the gentry and middling sort with an appropriate explanation of manufacturing processes.

The chapter asks this question of commercial literature and factory tours, as it was through both these experiences that this social group interacted with production.[23] It concedes that, just as with trained individuals, manuals and industrial tours rarely provided the wider populace with a deep insight into the inherent complexities of production. The tacit nature of skill and technique always remained at one remove. Thus the chapter begins by analysing the problematic nature of the representations these experiences offered. Yet despite making allowances for these difficulties, the chapter goes on to argue that the representations found in manuals and on factory visits allowed contemporaries to gain an understanding that, rather than alienating, was both useful and empowering.

**Outside of Artisanal Practice**

As objects flowed into Britain from Asia during the seventeenth and eighteenth centuries, the polite and the genteel with no relation to the

[22] Ibid.
[23] This chapter focuses on the industrial tourism undertaken by British travellers, rather than foreign visitors, as it is interested in how these groups formulated their understanding of changes in knowledge and skill. For more on the responses of foreign travellers, particularly in the later period 1815 to 1850 see Giorgio Riello and Patrick K. O'Brien, 'The Future Is Another Country: Offshore Views of the British Industrial Revolution', *Journal of Historical Sociology*, 22:1 (2009), pp. 1-29.

manufacturing industry began to engage with representations of production. Even in the final years of the eighteenth century, Guy asked 'From the different quarters of the globe, we are supplied with innumerable productions and fruits: Can you partake of them without the least curiosity to enquire from whence they came, or how they are produced, prepared and preserved?'[24] As these objects slowly entered and colonised the houses of upper and middling portions of society their variety and beauty inspired desire and wonder.

The annual East India Company sales of dry leaf tea totalled 65,000 pounds in 1701 and by 1780 this amount had reached five million pounds.[25] Tea drinking, that increasingly popular social ritual, was accompanied by an equally voracious demand for ceramic drinking vessels and objects. The British imported one to two million pieces of porcelain a year in the early decades of the eighteenth century. Although 100,000 pieces were generally re-exported to their colonies, domestic demand was insatiable.[26] In the years 1777-78 East India Company vessels carried 800 tons of chinaware into Europe, and Britain took nearly half this load.[27] As these Chinese and Japanese ceramic objects flowed onto the European market in the 'Asian Century', questions about their origin, and their making, began to arouse interest.[28] How were they made? How were they produced in such large quantities?

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[24] Guy, *Miscellaneous Selections*, p. v.
[25] David Porter, 'A Peculiar But Uninteresting Nation: China and the Discourse of Commerce in Eighteenth-Century England', *Eighteenth-Century Studies*, 33:2 (2000), p. 182.
[26] For more on this see Rose Kerr and Nigel Wood, 'Transfer', in Rose Kerr (ed.), *Science and Civilization in China: Volume 5, Chemistry and Chemical Technology Part 12: Ceramic Technology* (Cambridge, 2004), p. 743; Maxine Berg, 'Cargoes: The Trade in Luxuries from Asia to Europe', in David Cannadine (ed.), *Empire, The Sea and Global History: Britain's Maritime World c.1763-.c.1840* (New York and Hampshire, 2007), p. 66.
[27] Berg, 'Cargoes', p. 64.
[28] Ibid., p. 60.

The publication in English in 1588 of Juan González de Mendoza's tract on China, which described the process of making porcelain with clay and heat, largely ousted previous theories that porcelain had been long buried in the ground.[29] Yet new knowledge was slow to disseminate.[30] As Postlethwayt stated in the 1750s, 'It is said in Europe, that porcelain must be long buried in the earth before it arrives at its perfection. This is a false opinion, at which the Chinese laugh.'[31] Postlethwayt's remark was timely, as in the early decades of the eighteenth century understandings of how to make porcelain were further elucidated. Following the creation of soft-paste porcelain in Europe in the seventeenth-century, Ehrenfied Walther von Tschirnhaus and Johann Friedrich Böttger's discovery of hard-paste porcelain in 1708 ensured that Europeans began to have their own claims on the knowledge inherent in porcelain production.[32] Yet even in this instance Böttger's background as an alchemist allowed porcelain to retain a mythical quality. Hence, it was perhaps the letters written by Père d'Entrecolle in 1712 and 1722 that did most to illuminate how the Chinese manufactured such a precocious number of desirable objects.

By 1743, the ceramics city Jingdezhen was home to 200 to 300 areas of private kilns and employed approximately 100,000 craftspeople.[33] D'Entrecolle's letters contained vital information on materials, kilns and the organisation of work in the ceramics city. By the second half of the

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[29] Robert Batchelor, 'On the Movement of Porcelains: Rethinking the Birth of Consumer Society as Interactions of Exchange Networks, 1600-1750', in Frank Trentham and John Brewer (eds), *Consuming Cultures, Global Perspectives: Historical Trajectories, Transnational Exchanges* (Oxford and New York, 2006), p. 100.

[30] In fact, any new knowledge about China was slow to disseminate as the Macartney embassy (1792-94) exemplified. See Maxine Berg, 'Britain, Industry and Perceptions of China: Matthew Boulton, "Useful Knowledge" and the Macartney Embassy to China 1792-94', *Journal of Global History*, 1 (2006), pp. 269-288.

[31] Malachy Postlethwayt, *The Universal Dictionary of Trade and Commerce* Vol. 2. (2nd edn, London, 1757), p. 502.

[32] Kerr and Wood, 'Transfer', p. 750.

[33] Berg, 'Cargoes', p. 69.

eighteenth century the knowledge contained in these letters began to circulate more widely through various publications, where it was explicitly cited as a source.[34] These works formed part of the market that emerged in response to the demand for information on trade, commerce and manufacturing. As discussed above, although originally conceived as aiding artisans and workers, it was through these manuals that curious, genteel contemporaries glimpsed inside the manufacturing world that increasingly surrounded them. Yet despite the emergence of these manuals and dictionaries, contemporaries' furtive glance at production did not inevitably sate their curiosity about how exactly processes were enacted.

Through a close reading of the representations of ceramic production included in a series of eighteenth-century texts, this chapter explores the terms in which they presented manufacturing techniques to contemporaries. More particularly, this analysis focuses on how these writers presented their audience with the production processes of the porcelain and pottery industries. Eight different trade dictionaries have been chosen for close analysis. These include Ephraim Chambers, *Cyclopaedia: or, an universal dictionary of arts and sciences* (1728), Campbell's *The London Tradesman* (1747), Postlethwayt's *The Universal Dictionary of Trade and Commerce* (1751-1755), Richard Rolt's *A New Dictionary of Trade and Commerce* (1756), Mortimer's *A New and Complete Dictionary of Trade and Commerce* (1766), Rev. Erasmus Middleton, William Turnbull, Thomas Ellis and John Davison's *The New Complete Dictionary of Arts and Sciences* (1778),

[34] See Ephraim Chambers, *Cyclopaedia: Or, An Universal Dictionary of Arts and Sciences* Vol. 2 (London, 1728), p. 841. <The Making of the Modern World> (08 February 2009); Richard Rolt *A New Dictionary of Trade and Commerce* [1756] (2nd edn, London, 1761), p. 619; Mortimer, *A New and Complete Dictionary of Trade and Commerce*; Rev. Erasmus Middleton, William Turnbull, Thomas Ellis and John Davison *The New Complete Dictionary of Arts and Sciences: Or, An Universal System of Useful Knowledge* (London, 1778), p. 247; Guy, *Miscellaneous Selections*, p. 247.

William Henry Hall's, *The New Royal Encyclopaedia; Or, Complete Modern Universal Dictionary of Arts and Sciences* (1788) and finally John Guy's, *Miscellaneous Selections: or the rudiments of useful knowledge* (1796).[35] This chapter uses these publications as a representative sample for the period. Significantly, the writers referenced each other in their works. For instance, in the introduction to his work Mortimer launched into a specific critique of Postlethwayt's *Universal Dictionary*. Similarly, in 1788 Hall made a corresponding set of criticisms concerning Chamber's *Cyclopaedia*.[36] Such links demonstrate that their publications dealt with similar issues and spoke to the same audiences.

Finally, in order to provide a point of contrast, I have also included Robert Dossie's *The Handmaid to The Arts* (1764) as part of the analysis. This work is more explicitly about teaching technique to those involved in the production of various artistic and consumer goods. Yet, as discussed below, his references to readers with no prior experience suggests that Dossie also aimed at those with no direct contact to the production of objects. This set of texts provides a means of perceiving the particular ways in which writers introduced audiences to manufacturing, trade and commerce.

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[35] Chamber, *Cyclopaedia*; Campbell, *The London Tradesman*; Postlethwayt, *The Universal Dictionary of Trade and Commerce*; Rolt, *A New Dictionary of Trade and Commerce*; Mortimer, *A New and Complete Dictionary*; Middleton, Turnbull, Ellis and Davison, *The New Complete Dictionary of Arts and Sciences*; William Henry Hall, *The New Royal Encyclopaedia; Or, Complete Modern Universal Dictionary of Arts and Sciences* (London, 1788). <Eighteenth-Century Collections Online> (08 February 2009); Guy, *Miscellaneous Selections*.

[36] See the 'Advertisement' in volume one. Mortimer, *A New and Complete Dictionary*. See also Hall, *The New Royal Encyclopaedia*, p. 7.

**Reading Manuals – The Issue of Tacit Knowledge**

In chapter six of *The Craftsman*, Richard Sennett explores some of the complexities of writing instructions to explain a specific technique. One of Sennett's principal claims is that written instructions are often limited by the writer telling, rather than showing, how to do a certain procedure. By telling, as opposed to showing, the writer explains to the reader how a process is done, but provides no strategies as to how to go about actually doing it.[37] Essentially for Sennett, writing instructions for techniques is largely problematic because it requires bringing to the surface a consciousness of knowledge that has become inherent and 'natural'.[38] Yet, this chapter argues that the habitual nature of technique is a problem for both readers *and* writers.

Writers of eighteenth-century manuals were keen to stress the responsibility placed on the reader. They actively asserted that attempting to read their descriptions with little experience of the processes involved was problematic. The 1764 edition of Dossie's *The Handmaid to the Arts* contained a preface, which included a reluctant nod towards the problems experienced by readers of previous editions. Dossie exclaimed that, 'This part of the work has been censured by some, who have consulted the former edition, as giving erroneous or insufficient instructions with respect to the preparation of several of the colours.'[39] Yet Dossie was unfazed by such criticism and instead turned back to the readers, insisting that 'I am satisfied, that as to most of those objections, the error, or defect, lay rather

[37] Richard Sennett, *The Craftsman* (London, 2008), p. 182.
[38] Sennett, *The Craftsman*, p. 183.
[39] Robert Dossie, *The Handmaid to the Arts* Vol. 1 (2nd edn, London, 1764), p. xiii. <Eighteenth-Century Collections Online> (15 September 2008).

in the manner of trial to put them in practice, of those who condemned them, than in the instructions themselves.'[40] Dossie dismissed these criticisms as an inevitable outcome for those who are 'unaccustomed' to these processes.[41] The texts were only truly accessible for those who had physically experienced the process.

Like Dossie, other writers were also self-consciously aware of the gap between theoretical and practical knowledge. In his 1761 edition of *A New Dictionary of Trade and Commerce*, Richard Rolt also recognised this problem and asserted that a description of manufacturing was almost impossible through mere words. Rolt claimed that 'Of every artificial commodity the manner in which it is made is in some measure described, though it must be remembered, that manual operations are scarce to be conveyed by any words to him that has not seen them.'[42] Rolt felt that it was impossible for someone to understand manufacturing processes without seeing the actions take place. In this instance, tacit knowledge was difficult to comprehend.

Although Rolt's work aimed only to describe manufacturing, unlike Dossie's that aimed to actually instruct, understanding through reading texts was highly problematic. Whether contemporaries registered Dossie and Rolt's assertions about the problems inherent in reading these texts is unknown. The very existence of these texts, however, does indicate that contemporaries believed it was possible to posit a meaningful understanding of largely physical processes on your bookshelf. More cynically, the owners of these volumes perhaps received more pleasure in viewing them on the bookshelf as physical representations of their

[40] Dossie, *The Handmaid to the Arts*, p. xiii.
[41] Ibid.
[42] See the 'Preface' in Rolt, *A New Dictionary of Trade and Commerce*.

inquisitiveness, than in reading them to sate that curiosity. Essentially though, as the writers conceded, attempting to read these texts with little previous experience of the procedures they discussed was problematic. Hence, these texts represented tacit knowledge as a highly valued and irreplaceable form of knowledge.

**The Language of Instruction**

In his examination of the problems of written instructions, Sennett goes on to analyse a series of recipes used for cooking chicken and suggests three different examples of how 'showing' rather than telling might happen. First, Julia Child's recipe placed importance on demonstrating empathy with the human protagonist rather than the bird.[43] Her instructions focused on the most difficult gesture that the hand is forced to do. By pointing the reader towards certain danger points, Child re-entered the moment before the skill became inherent and demonstrated strategies that the reader might use.[44] Second, Sennett discusses the recipes of Elizabeth David who placed the potential cook at the centre of a scenic narrative.[45] David created a scene in which the cook played a specific role. She then gradually opened up a narrative through which the cook could proceed.[46] Finally, he discusses the instructions given by Madame Benshaw, whose recipe was conceived entirely of metaphors. Through this she clarified the essential objective of each stage and offered strategies for proceeding by invoking certain

[43] Sennett, *The Craftsman*, p. 185.
[44] Ibid., p. 186.
[45] Ibid., p. 187.
[46] Ibid., p. 189.

'natural' responses.[47] Sennett's analysis of these different recipe-writing techniques opens up a number of questions for consideration in discussing the codification of embodied skills.

First, using recipe writing as a point of comparison highlights the extent to which eighteenth-century texts about manufacturing processes dealt in general terms rather than the specifics required for learning. Second, Sennett illustrates how the codification of tacit knowledge is often mired by the problems of dead denotation. He argues that much language invokes no useful response within the reader. Yet he stipulates that in the examples discussed above, the problems of dead denotation are overcome. In order for a recipe to be useful it must invoke cultural references that are easily accessible to the reader.[48] Nevertheless, the invocation of these references is incredibly complex even when discussing a process in general rather than specific terms, as the commercial dictionaries forming the bulk of this analysis demonstrate.

As discussed earlier in the chapter, much of the interest in manufacturing arose as a result of the new goods that flowed onto the market from Asia in seventeenth and eighteenth century. The different qualities of these objects sparked wonder and encouraged contemporaries to ponder their making. Pieces of Chinese porcelain were one of the most frequent recipients of such curious gazes. Despite slow and difficult dissemination, questions concerned with their making began to be answered after the publication of d'Entrecolle's letters. Of the nine publications featured in this analysis, seven contained articles regarding porcelain and of those seven, five explicitly use d'Entrecolle's letters as

[47] Ibid., p. 191.
[48] Ibid., p. 183.

their source of information on the manufacture of Chinese porcelain.[49] Based on a comparison with these accounts it also seems likely that Postlethwayt's main source was d'Entrecolle.[50] For more than half a century therefore, this was one of the key means of understanding how the Chinese produced porcelain.

Writers, such as Rolt and Mortimer as well as Middleton, Turnbull, Ellis and Davison used d'Entrecolle's letters to discuss the various aspects of manufacture, including the preparation of materials, forming, painting and firing. Although altered by different writers in various places, the account generally stressed the importance of preparing the materials, petuntse and kaolin, correctly. Lengthy descriptions of pounding rocks, skimming cream, submerging in water and grinding, led the reader through the processes involved. Writers also gave due attention to the various methods for forming vessels, painting and glazing. Finally the account turned to the engineering feats manifest within Chinese kilns. The account revelled in the massive numbers of objects involved as well as smaller details, such as the arrangements of the caskets. The sheer quantity of detail gives any reader what appears to be a reasonably full account of the processes at work in Jingdezhen. Yet, as Sennett's analysis of recipes implies, the accounts are largely meaningless if readers are unable to tack the details onto their own experience.

The writers themselves appear aware of the distance between the Chinese case and their readers' knowledge. Thus, they included cultural references given by d'Entrecolle to ease the comprehension process. For

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[49] See 'Porcelain' section in Chambers, *Cyclopaedia,* p. 841; Rolt, *A New Dictionary of Trade and Commerce*, p. 619; Mortimer, *A New and Complete Dictionary of Trade and Commerce*; Middleton, Turnbull, Ellis and Davison, *The New Complete Dictionary of Arts and Sciences*; Guy, *Miscellaneous Selections,* p. 247.

[50] Postlethwayt, *The Universal Dictionary of Trade and Commerce*, pp. 497-505.

instance, Mortimer described how 'The mines whence the kaolin is dug are deep, and the matter is found in glebes, like the chalk in ours.'[51] Similarly, in the *New Complete Dictionary*, Middleton, Turnbull, Ellis and Davison asserted that the porcelain painters 'are all sorry workmen' and 'the greatest Masters are not to be compared to Apprentices among the Europeans'.[52] These moments of insight are, however, rare.

With few reference points to guide readers, the imagined workings of Jingdezhen must have remained hazy for contemporaries. Admittedly, such complex production processes were difficult to comprehend. Even when contemporaries saw the manufacturing in progress, they did not always understand it. For instance, when the Scottish physician John Bell travelled overland to Peking (now Beijing) from St Petersburg with the Russian embassy to China between 1719 and 1722 he was unable to comprehend the porcelain manufacturing he witnessed. He described how on 17 February 1721, 'I revisited the China-manufactory, in order to try whether I could learn any thing of that curious art. But, though the people were very complaisant and showed me everything I desired them, I returned as ignorant as I went thither.' The visit persuaded Bell that 'before a person can get any knowledge of the affair, he must be bred a potter, and have time to inspect its whole progress.'[53]

Bell's assumption that this knowledge was only accessible to those with previous knowledge was astute. Although watching the process first-hand and reading d'Entrecolle's letters proved ineffective to some, they

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[51] There are no page numbers in *A New and Complete Dictionary*. The work is alphabetically arranged and the reference can be found in the 'Porcelain' section in volume two. Mortimer, *A New and Complete Dictionary*.

[52] See 'Porcelain' section in Middleton, Turnbull, Ellis and Davison, *The New Complete Dictionary*.

[53] John Bell, *A Journey from St Petersburg to Pekin, 1719-22* [1763] (Edinburgh, 1965), p. 167. Thanks to Stephen McDowall for suggesting this source.

were of use to others, such as the pharmacist William Cookworthy who used them to search for china clays and glazes in Cornwall.[54] Hence, Bell's inability to understand the processes he saw might be extreme. Whether or not it was, the limitations of the texts were due to more than just the complexity of the processes they described, as Cookworthy demonstrated. By readily reproducing d'Entrecolle's letters, writers took little responsibility for the understanding that readers could or could not gain. Most of the authors of these manuals were professional writers, Postlethwayt wrote regularly on economics, Chamber's *Cyclopaedia* was his life's work, Mortimer wrote on trade and finance, while Richard Rolt was a historian and writer. Hence, with no first-hand experience of the processes described, writers were unable to invoke useful reference points that were capable of guiding the reader. This 'other' world was depicted, but remained largely unknown to those unconnected with the manufacturing process.

The limitations apparent in articles discussing production in Jingdezhen become more apparent when compared to those discussing domestic production techniques such as 'pottery'. Like the accounts of porcelain manufacture these depictions are also rather loose, imaginary and even incorrect. For instance in his 1747 work *The London Tradesman*, Campbell depicts the potter as turning his own wheel in the throwing process, despite wheels from the 1720s onwards generally being cranked by a boy.[55] Yet in spite of these inaccuracies, in these descriptions the writers appear more willing to invoke reference points designed to guide the

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[54] Kerr and Wood, 'Transfer', p. 758.

[55] Campbell, *London Tradesman*, p. 184. For more on the potter's wheel see Lorna Weatherill, 'Technical Change and Potters' Probate Inventories 1660-1760', *Journal of Ceramic History*, 3 (1970), p. 6.

reader. They particularly included references to bodily action. When describing domestic pottery processes writers offered descriptions rather than instructions, yet also encouraged readers to empathise with the process at hand.

For instance, in a section entitled 'Chap XXXV – Of the Potter', Campbell highlighted the inherent physicality of the work undertaken by a potter. He pointed to the foot as it turned the wheel, and the finger and thumb which formed the vessel.[56] In a similar fashion to Campbell, Mortimer also described the role of the potter in particularly physical terms. To form the vessel, Mortimer's potter used his 'knuckles' or his 'finger and thumb' whilst 'his foot' worked the wheel. Similarly, Chambers highlighted the importance of bodily interaction with pottery work. Chamber's potter was seen 'wetting his hands in the water, [before] he bores the Cavity of the Vessel'.[57] For Campbell, Mortimer and Chambers, pottery was physical work involving the body in a variety of ways and by focusing on this physicality they encouraged the reader to concentrate on certain aspects of the activity. The bodily interaction represented as inherent within pottery work provided the reader with a set of reference points – feet, hands, fingers – through which they could register certain movements and empathise with them.

Yet, as with the Chinese examples, the extent of that empathy was always clearly demarcated. Writers encouraged the reader to take the role of spectator rather than actor. In Campbell's account the reader followed the actions of an unnamed male potter. Similarly in Mortimer's text, rather

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[56] Campbell, *London Tradesman*, p. 184.
[57] Chambers, *Cyclopaedia*, p. 852. The text remained the same in later editions, see Ephraim Chambers, *Cyclopaedia: Or, An Universal Dictionary of Arts and Sciences* Vol. 3 (London, 1781), p. 1060. <Eighteenth-Century Collections Online> (8 February 2009).

than described in association with the reader, he depicted the potter in a particular space and in relation to other objects. He described how 'The artist sits before the bench'.[58] Although writers encouraged the reader to understand the movements that the potter went through, it was made clear that another was undertaking those movements.

Chambers most thoroughly invoked the distance between his reader as observer and the potter as observed. He described how the potter sat and 'By his side is a trough of water, where from time to time he wets his hands, to prevent the earth sticking to them.'[59] Chambers registered the water as preventing stickiness rather than aiding the moisture levels of the clay. Thus Chambers allowed the reader to imagine the stickiness of the hand, rather than imagine the feel of the clay. He allowed the reader into the realm of the potter's hand, but not into the realm of actually doing with the hand. Similarly, when Chambers described the potter boring into the cavity of the vessel, the reader followed the movement of the potter, rather than establishing how that movement was actually done. By providing details and cultural reference points the texts allowed the reader to empathise with the processes they were trying to understand. Simultaneously, however, they kept the reader at a distance. The writers asked the reader to view rather than experience. Like Edwards, these writers placed the reader within the scene, but as the spectator rather than the central protagonist.

In the last quarter of the eighteenth century, while the story of pottery remained constant, the narrative of porcelain manufacture offered

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[58] There are no page numbers in *A New and Complete Dictionary*. The work is alphabetically arranged and the reference can be found in the 'Potter' section in volume two. Mortimer, *A New and Complete Dictionary*.
[59] Chambers, *Cyclopaedia*, p.1060.

by these manuals changed substantially. During the eighteenth century, Chambers republished his *Cyclopaedia* many times. In this republication process the story of porcelain changed, from one almost entirely based on China in 1728, to one that included a lengthy description of English production in 1781.[60] Similarly, unlike the earlier works, William Henry Hall's *The New Royal Encyclopaedia* (published in 1788) focused almost exclusively on the European manufacture of porcelain.[61] Likewise, in his *Miscellaneous Selections* (first published in 1796) Guy included a greater concentration on English porcelain. He particularly promoted Worcester Porcelain, remarking that 'Of the English porcelain, and particularly that manufactured in the city of Worcester, it may be said that they want little or nothing to make them of equal value with the Chinese, but to be brought five thousand leagues.'[62] Although still drawn to Chinese porcelain production process, the new focus of these works reflected the changing production of porcelain, whilst the new narrative of porcelain production was increasingly one of English triumph.

In general, representations of porcelain and pottery manufacturing did little to further understandings of tacit knowledge, yet despite this it is important to note that in some cases writers got closer than in others. When reproducing others' depictions of manufacturing, as in the case of Jingdezhen, writers could not provide readers with useful reference points through which they could empathise with the techniques at hand. In these depictions, production became a hazy mix of largely irrelevant details. Yet when discussing the processes used by domestic industries such as

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[60] Chambers, *Cyclopaedia* (1728), pp. 841-844; Chambers, *Cyclopaedia* (1781), p. 1040.
[61] Hall, *The New Royal Encyclopaedia*, pp. 240-242.
[62] Guy, *Miscellaneous Selections*, p. 252.

'pottery', although inaccurate at times, writers invoked useful reference points – such as bodily action – thus allowing the reader to understand the inherent tacit knowledge in use. Although not probed, the embodied element of skill was enacted. Nevertheless, tacit knowledge was not transferred by texts and the limitations of these works cannot be ignored. In fact, the restrictions inherent in the depictions offered by dictionaries were apparent to more than just their writers and thus other forms of representation supplied different means by which contemporaries could sate their curiosity about production. As Mokyr has asserted 'social organizations and academies' emerged to meet demands for closer interaction with tacit knowledge, as did industrial tours, as this chapter goes on to explore.[63]

**Other Representations**

Fig. 1.1. Salt-glazed Stoneware Mug. Nottingham. 1725.
Fitzwilliam Museum, Cambridge.[64]

[63] Mokyr, *The Enlightened Economy*, p. 47.
[64] Fitzwilliam Museum, Cambridge. Glaisher Collection. Salt-glazed Stoneware Mug. Nottingham. 1725. GL 1233/1928. See also See Bernard Rackham, *Catalogue of the Glaisher Collection of Pottery & Porcelain in the Fitzwilliam Museum, Cambridge* Vol. 2 (Cambridge, 1935), p. 159.

As the British porcelain and earthenware industries grew in the second half of the eighteenth century, contemporaries sought out opportunities to witness firsthand the processes and skills involved in manufacturing ceramic objects. Their interest was not new, however, as watching potters shape and form ceramic objects excited much wonder in the early decades of the century. The antiquarian Ralph Thoresby, a spectator to the pottery making process in Nottingham on 29 August 1712, expressed wonder and delight at the performance he witnessed. On his return journey to Yorkshire from London, coach repairs forced Thoresby to take an unexpected stop at Nottingham. To entertain himself during this stopover, he decided to go and watch the potters making 'the curious Nottingham mugs' (seen above).[65] He marvelled at the process he witnessed, 'he formed one into a mug, then immediately into a teapot, then a decanter, and in a few moments into six or seven vessels, of quite different forms, which brought to my thoughts that Scripture, "as clay in the hands of the potter"'.[66]

In an earlier encounter with the pottery production process, Thoresby expressed himself in similar terms. When on a visit to Allethorp on 16 March 1702, Thoresby ventured out to see the local Pott-ovens. He stayed there to observe 'the manner of forming their earthenware, (which brought to mind that of the Prophet, "As clay in the hands of the potter, so

[65] As cited in Angela Cox, 'An Early Account of the Nottingham Saltglazed Stoneware Industry', *Journal of the Northern Ceramic Society*, 6 (1987), p. 221. Also see Reverend Joseph Hunter, *The Diary of Ralph Thoresby, F.R.S. Author of the Topography of Leeds (1677-1724)* Vol. II (London, 1830), p. 168.
[66] As cited in Cox, 'An Early Account of the Nottingham Saltglazed Stoneware Industry', p. 221. Also see Hunter, *The Diary of Ralph Thoresby*, p. 168.

are we in the Lord's" &c.)'.[67] It is unsurprising that Thoresby, a non-conformist, devoted to religious reflection in his diary, chose to express his astonishment in such biblical terms.[68] What is perhaps more surprising in the early decades of the eighteenth century is that he ventured out to these locations at all. Yet it is through the reactions recorded by industrial tourists that we are able to gauge contemporary responses to the difficulties and complications of representing production.

**Industrial Tours**

The oft-quoted accounts of Celia Fiennes and Daniel Defoe demonstrate the uncertain beginnings of industrial tourism. Yet by the second half of the eighteenth century the desire to view not only the breathtaking picturesque, but also mines, mills and factories, widened and developed. Increasing numbers of British travellers sought out industrial curiosities as part of a wider movement that witnessed the growth of domestic tourism. As Ian Ousby argues, during the 'latter part of the eighteenth century' domestic tourism grew in esteem and popularity.[69] Such growth was largely due to advances in road and communication infrastructure, allowing travellers to cover greater distances in less time.[70] Some of the destinations housing these tours were more curious and dangerous than others. As the Rev. James Plumptre encountered at the end of the eighteenth century, entering mines often involved strapping oneself to a

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[67] Reverend Joseph Hunter, *The Diary of Ralph Thoresby, F.R.S. Author of the Topography of Leeds (1677-1724)* Vol. I (London, 1830), p. 356.
[68] Hunter, *The Diary of Ralph Thoresby*, p. x.
[69] Ian Ousby, *The Englishman's England: Taste, Travel and the Rise of Tourism* (Cambridge and New York, 1990), p. 9.
[70] Ousby, *The Englishman's England*, p. 10.

bucket or being let down a hundred yards, tied by a chain fastened to a rope.[71] In contrast, visits to earthenware and porcelain manufacturers appear tame. Yet long lines of travellers and tourists included them on their lists of curiosities to be visited.

**Ceramic Factories**

Visitors to ceramic manufactories became such a frequent occurrence that by 1771, Wedgwood noted to Bentley how 'We have company at the works almost every day.'[72] Despite the regularity of visitors, admission to these works was not an automatic privilege enjoyed by all. During his travels in 1791, Daniel Clarke expressed his initial anxiety about approaching the Wedgwood factory. 'I was fearful of being denied admittance to the works, as I know that it is customary in these places to introduce [a] stranger to what is called the store room, and then dismiss them without any further trouble.'[73] Although visitors such as Dr Samuel Johnson, who visited Derby Porcelain Manufactory in 1777 and Sir George Strickland who visited Wedgwood's Etruria works in 1771, were welcomed into these commercial concerns, others were right to feel apprehension.[74]

The admission of visitors was an issue for both manufacturers and travellers alike. It was perhaps the frequency of tourists to the Derby

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[71] Esther Moir, *The Discovery of Britain: The English Tourists, 1540-1840* (London, 1964), p. 93.
[72] Wedgwood Museum Trust, Barlaston. Leith Hill Place Collection. Letter from Josiah Wedgwood to Thomas Bentley. 7 September 1771. LH W/M 1441.
[73] Daniel Edward Clarke, *A Tour Through The South Of England, Wales, And Part Of Ireland, Made During The Summer Of 1791* (London, 1793), p. 362.
[74] For Dr Johnson reference see, William Bemrose, *Bow, Chelsea and Derby Porcelain* (London, 1898), p. 35. Sir George Strickland, his wife and Mr Freeman visited the Etruria Factory in 1771, see Leith Hill Place Collection. Letter from Josiah Wedgwood to Thomas Bentley. 7 September 1771. LH W/M 1441. Sir George Strickland and Mr Freeman travelled regularly together see East Riding Archive, Beverley. Papers relating to Sir George Strickland, Fifth Baronet (1729-1808) of Boynton, nr Bridlington. Letter from George Strickland to John Grimston. 9 July 1769. DDGR/42/19/76.

Porcelain Factory that encouraged the manager William Duesbury to establish a visitor policy.[75] A draft of the policy asserted that 'W Duesbury respectfully requests the favour of any Company to honour him with inspecting the Manufactory.'[76] Yet it went on to stipulate, more specifically, that any company 'Desiring to honour W Duesbury with this inspection are respectfully requested to signify this instruction previous to their coming down'. Their reasoning for this procedure was simple, they believed that a visit would 'be most interesting to strangers' when of least inconvenience to the manager. The distinction highlighted by both Clarke and Duesbury is that of 'stranger'. If personally unknown to the manufactory, entrance appears a more tentative procedure. Yet for those fortunate enough to understand the various etiquettes of industrial tourism, the rewards were vast and varied.

After sending in their names to Wedgwood, Clarke received 'full permission from him to see the whole of the manufactory, except the rooms where the black and the new discovered blue ware is made, and these they never shew to any one.'[77] Clearly, the secrecy surrounding certain aspects of the production process only added to visitors' interest. At the same time, the employment of secrecy and thus exclusion and inclusion as the prime organising principle for these visits also demonstrates their increasingly choreographed nature.

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[75] Although a draft note on this policy survives in the Derby Local Studies Library, it is not dated. Derby Local Studies Library, Derby. Derby Porcelain Archive. Draft of Memorandum from William Duesbury. DL82 6/31.
[76] Derby Porcelain Archive. Draft of Memorandum from William Duesbury. DL82 6/31.
[77] Clarke, *A Tour Through The South of England*, p. 362.

**The Choreography of Production**

As Clarke's trepidation and Duesbury's rules demonstrate, the choreography inherent in the industrial tour began well before the visitor entered the hallowed gates of the factory. As Carole Fabricant argues, just as increases in tourism in the eighteenth century created a demand for tourist literature, so tourist literature shaped potential tourists and the expectations they felt.[78] Thus, just as Clarke expressed his own concerns about entry, he simultaneously sought to guide fellow travellers about the worry they must also have felt. Duesbury's policy was a similar, yet more direct means of shaping and demanding visitor expectation. In fact, manufacturers found a variety of means through which they built and shaped visitor expectation. For instance, a map of the Worcester Porcelain factory published in the *Gentleman's Magazine* in August 1752 demonstrates that whilst marketing the production of goods, manufacturers also used such advertisements to excite curiosity and predetermine visitor's expectations of the experience they would encounter.[79]

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[78] Carole Fabricant, 'The Literature of Domestic Tourism and the Public Consumption of Private Property', in Felicity Nussbaum and Laura Brown (eds), *The New Eighteenth Century: Theory, Politics, English Literature* (New York and London, 1987), p. 260.

[79] As Edward Cave, the owner of *the Gentleman's Magazine,* was one of the original shareholders in the Worcester Porcelain factory when it was established in 1751, it is unsurprising that this 'advertisement' appeared in the publication in 1752. See Aileen Dawson, *The Art of Worcester Porcelain 1751-1788: Masterpieces from the British Museum Collection* (London, 2007), p. 12. For more on the use of workshop tours as a means of advertisement see Liliane Hilaire-Pérez, 'Technology, Curiosity and Utility in France and in England in the Eighteenth Century', in. Bernadette Bensaude-Vincent and Christine Blondel (eds), *Science and Spectacle in the European Enlightenment* (Aldershot and Burlington, VT, 2008), p. 36.

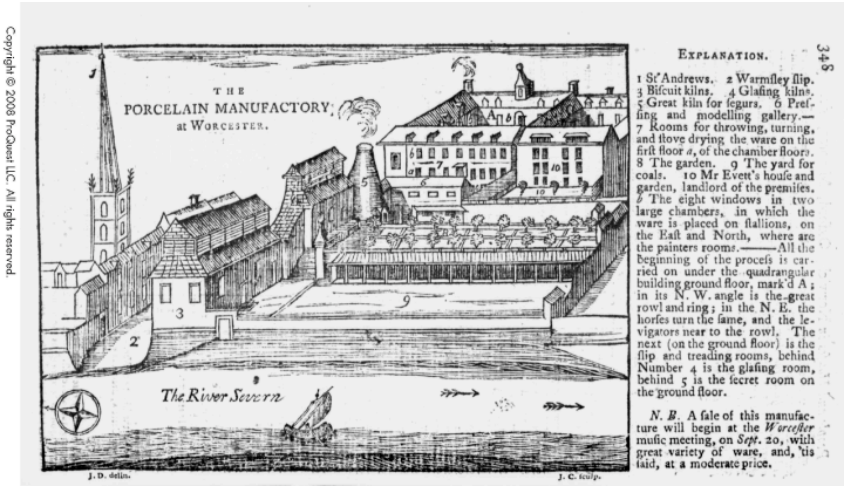

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Fig. 1.2. 'The Porcelain Manufactory at Worcester'. *Gentleman's Magazine*. August 1752.[80]

The almost page-length image encouraged potential visitors to visualise the factory and consequently establish a particular spatial relationship with it. The author organised the written description included to the right of the image in such a way as to suggest that the reader would view the image from left to right. The description follows the viewer's eye across the page rather than following the visitor through the different stages of the manufacturing process. The readers' glance from left to right parallels the visitors' movements when navigating the physical factory. The glance is encouraged to start at the street outside and then pass into the complex of the Worcester Porcelain Factory. Before arriving, therefore, it was important that visitors understood the layout of the grounds rather than the processes that took place inside these buildings. Production, workers and techniques were represented as secondary to the stress on neatness and organisation.

The encouragement of expectation excited by these adverts worked, and visitors duly arrived in Warmsley Slip with the intention of entering

[80] 'The Porcelain Manufactory at Worcester', *Gentleman's Magazine* (London, 1752), p. 348.

the Worcester Porcelain Factory. One such visitor was Mrs Philip Lybbe Powys of Hardwick House, Oxfordshire, who arrived at the factory on 28 August 1771. Although it appears that Mrs Powys had not toured a ceramic factory prior to her Worcester visit, she was clearly a keen connoisseur of earthenware and porcelain objects.[81] In fact, in 1778 a Lady Dashwood of Kirklington Park tested her skills. On entering the 'china room' at the Park, Lady Dashwood asked Mrs Powys whether she could test her 'judgment'.[82] After agreeing, Mrs Powys was asked to try and pick out the one piece that was superior to all others in the room. Mrs Powys proved lucky, and confessed to her diary that 'I thought myself fortunate that a prodigious fine old Japan dish almost at once struck my eye.'[83] Although Mrs Powys' judgment tells us little about her knowledge of porcelain manufacturing processes when she entered the Worcester Manufactory, it does highlight Mrs Powys keen interest in ceramic matters. It also explains Mrs Powys' manifest excitement at seeing the works. She exclaimed to her cousin Mrs Wheatley that 'tis more worth seeing than anything I hardly ever see.'[84] Considering the extent of Mrs Powys' touring, this was quite a claim.[85]

**Comprehending Production**

Going from room to room of the factory, what caught Mrs Powys eye as she moved along the production process was the potters forming objects.

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[81] For evidence of no previous ceramic factory visits see Emily J. Climenson (ed.) *Passages from the Diaries of Mrs Philip Lybbe Powys of Hardwick House, Oxon. A.D. 1756 to 1808* (New York and Bombay, 1899), pp. 1-124. For evidence of Mrs Powys as a connoisseur see Climenson, *Passages from the Diaries of Mrs Philip Lybbe Powys*, p. 198.
[82] Ibid.
[83] Ibid.
[84] Ibid., p. 125.
[85] For instance see Ibid., p. 231.

She observed how in the third room 'the cakes work'd up like a paste, and form's by *the eye only* into cups, mugs, basons, [sic] tea-pots'.[86] She was amazed at the freeness with which the potters worked, using '*the eye only*'. Just as Ralph Thoresby had stood in awe of the speed and dexterity of the Nottingham potters, so Mrs Powys, sixty years later looked on in wonder at the skills of the Worcester potters. For Mrs Powys, 'their ingenuity and quickness' was a cause for genuine surprise and marvel.[87] She seemed almost at a loss in describing what she saw and stated that their skill in forming vessels 'appears like magic'.[88] Similarly, on his visit to the Swansea Pottery in the summer of 1791, Clarke recounted the different stages of the ceramic production process. Despite the intricate composition of the clay, the brutal heat of the kilns and the dexterity of the painters, Clarke, like Mrs Powys, chiefly noticed the skills of the potters in forming vessels. More specifically, what caught Clarke's eye was the 'surprising quickness' with which the potters form 'the different articles of their manufactory'.[89] As the potters moved from producing one shape to another (and yet another) Clarke was left to look on in wonder.

Mrs Powys and Clarke's interest in the hand skills of potters contrasts with the lack of attention they gave to other workers when touring the manufactories of other industries. For instance, when touring a silk mill in Derby, although Mrs Powys comments on the number of children employed to tie knots, she makes little reference to the skills involved in that process.[90] Similarly, when touring a silk mill in Barnstaple, Clarke is also struck by the numbers of children employed and attributes

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[86] Ibid., p. 125.
[87] Ibid.
[88] Ibid.
[89] Clarke, *A Tour Through The South of England*, p. 206.
[90] Climenson, *Passages from the Diaries of Mrs Philip Lybbe Powys*, p. 354.

this to the simplistic nature of the work they carry out as a result of mechanisation in that industry.[91] Hence, their interest in the hand skills of potters was a particular case.

When viewing the potter in action, contemporaries focused on how they used their hands to create various shapes, yet Mrs Powys and Clarke seemed unable to clearly articulate what they saw and instead relied on expressing surprise and wonder. The anthropologist Alfred Gell has argued that if a person is unable to mentally encompass the 'coming-into-being' of an object because the technical process 'transcends' their understanding, then they will be forced to construe it as 'magical'.[92] Gell explored this as a facet of the process through which people perceive art objects as awe-worthy. Yet his reading of how people understand art objects also speaks to the experiences of Thoresby, Mrs Powys and Clarke. When faced directly with the 'how' of making they faltered. Seeing an action performed before them they appeared incapable of articulating what it was they saw. Even in these instances, tacit knowledge remained hidden and thus the 'coming-into-being' was construed as 'magical' – the processes transcended their understanding.

Reacting with wonder when seeing a complex action performed was not unusual in the eighteenth century. For a culture increasingly steeped in spectacle, expressions of disbelief and awe were frequent occurrences. Toyshops displayed ingenious goods and machines. In the mid eighteenth century, Christopher Pinchbeck junior's shop on Fleet Street exhibited a model, which depicted a working shipyard, a founder's shop, a

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[91] Clarke, *A Tour Through The South of England*, p. 126.
[92] Alfred Gell, 'The Enchantment of Technology', in Jeremy Coote and Anthony Shelton (eds), *Anthropology, Art and Aesthetics* (Oxford and New York, 1992), p. 49.

stonemason's yard and a blacksmith's shop.[93] Similarly, Jacques Vaucanson and James Cox exhibited automata across London. Like scientific lectures, the display of toys and automata used theatrical forms to enhance their performances.[94] Hence, by the late eighteenth century, the ability of these spectacles to induce awe and wonder was a cause for concern. As audiences 'believed' the actions produced by automata, critics voiced worries. Spectators' fascination in automata provoked claims that they induced mesmerism, turning audiences into ready slaves.[95] The critique at the heart of these claims reflected concerns that audiences failed to appreciate the lessons automata provided about nature and morality.[96] Thus certain contemporaries perceived expressions of awe and wonder as an inability to understand.

In light of Gell's claim and in the context of other spectacles, the reaction expressed by Mrs Powys and Clarke, suggests a level of alienation from the process. But although these expressions of awe might suggest little understanding of the frailties and intricacies of the ceramic production process, what is more interesting is the point at which they expressed awe – namely, when the potter's hands were in motion. Thus, like Julia Childs discussed earlier, Mrs Powys concentrated on the most difficult motion of the hand and at this point expression failed her and she declared 'magic'. Clearly though she managed to pin point an important moment. What is more, she articulated that moment in some way. She was left with a mental

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[93] Pérez, 'Technology, Curiosity and Utility', p. 31.
[94] Bernadette Bensaude-Vincent and Christine Blondel, 'Introduction: A Science Full of Shocks, Sparks and Smells', in Bernadette Bensaude-Vincent and Christine Blondel (eds), *Science and Spectacle in the European Enlightenment* (Aldershot and Burlington, VT, 2008), p. 8.
[95] Simon Schaffer, 'Enlightened Automata', in W. Clark, J. Golinski and Simon Schaffer (eds), *The Sciences in Enlightened Europe* (Chicago and London, 1999), pp. 157-158.
[96] Schaffer, 'Enlightened Automata', p. 158.

image of the process. Thus although she did not achieve understanding she managed to acquire a visual image, or guide to the processes involved – she achieved comprehension.

The extent of this comprehension can be realised if we consider her fuller description. She noted how the works employed 160 people at that time. Consistent with this, Roger Massey has shown that Derby and Worcester were amongst the largest English porcelain factories.[97] On this account, the workforce at Worcester was substantial but not unusual considering that some earthenware manufactories in the Midlands employed between 300 and 400 workers in the latter half of the eighteenth century.[98] For Mrs Powys, however the number was clearly noteworthy. In similar fashion to other travel guides and the dictionaries previously discussed, Mrs Powys then listed out the different stages of the process. She noted how the stages that made up the process took place in eleven different rooms. Considering the emphasis on space in their advertisement in the *Gentleman's Magazine* and we can imagine on the tour, it is unsurprising that Mrs Powys also noticed the significance of 'eleven rooms'. What is perhaps more significant is her detailed listing of the activities that happened in each room.

In the first room, Mrs Powys noticed 'a mill for grinding' and recognised its importance in creating the correct 'composition' in order 'to make the clay'.[99] The next room saw 'the flat cakes of clay drying in ovens'. It was in the third room that Mrs Powys encountered the awe-inspiring sight of the potters working up cakes of clay into recognisable forms such

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[97] Roger Massey, 'The Size and Scale of Eighteenth-Century English Porcelain Factories', *English Ceramic Circle Transactions*, 17:3 (2001), p. 454.
[98] Maxine Berg, *Luxury and Pleasure in Eighteenth-Century Britain* (Oxford, 2005), p. 129.
[99] Climenson, *Passages from the Diaries of Mrs Philip Lybbe Powys*, p. 125.

as 'cups' and 'tea-pots'. After viewing the wonders of the throwing room, Mrs Powys had the opportunity of comparing this means of forming with another means, namely press-moulding. She described how they used moulds to create standardised goods, 'making the things exactly by moulds all to one size'. Mrs Powys was amazed by the accuracy with which these potters worked, and again summed up their skill, in terms of 'their eye'. She wrote of how these forms 'are seldom different, so nice is their eye in forming'. Mrs Powys recognised the importance of the potter's tacit knowledge, 'their eye' and acknowledged its role in creating these objects.

By the time Mrs Powys had reached the fifth room at the Worcester Porcelain factory, her description of the process became more explicitly populated. Mrs Powys recognised the roles played by boys and workmen in finishing goods. The workmen pared and chipped the forms, altering and perfecting them whilst a boy turned their wheel.[100] In the next room, watching the making of 'little roses, handles, twists and flowers', Mrs Powys began to view production in terms of consumption. She recognised the pieces she saw being made as the decorations 'one sees on the china fruit-baskets'. As the production process progressed, it started to link more explicitly to the objects she was so keen to consume. Similarly, in the next room, Mrs Powys again viewed processes of decoration, whilst in the eighth room her visceral reaction to the heat was palpable. She exclaimed how 'the heat of this eighth room was hardly bearable'. Yet despite the horrific heat, Mrs Powys still managed to observe technical features of the 'immense ovens', such as the 'sort of high sieves about six feet long'.[101] In the ninth room, Mrs Powys viewed the wares being dipped, before being

[100] Ibid., p. 126.
[101] Ibid.

sorted and smoothed, ready for painting in the eleventh, and final, room. The amount of detail observed, remembered and articulated by Mrs Powys demonstrates the importance of this visit in providing her with a vivid understanding of the different aspects of the porcelain production process.

Mrs Powys certainly wrote in more detail than another visitor to the Worcester porcelain factory, namely Lady Shelburne, who visited the factory on 13 July 1770.[102] Yet despite the lack of detail in comparison to Mrs Powys, Lady Shelburne did record the main processes of production, demonstrating some level of comprehension. Similarly, Mrs Powys offered more detail than Valentine Green in his account of the factory, which he included in his *A Survey of the City of Worcester* (1764).[103] Here Green recounted the steps included on the tour of the factory and the different processes a visitor might expect to encounter. The steps Green recounted were largely similar to those recorded by Mrs Powys seven years later. Yet Green failed to record the details that Mrs Powys picked out. The immensity of the ovens, the intensity of the heat and the skills of the pressers are all missing from his account. Green left these features for visitors to experience first hand, which Mrs Powys clearly did. Hence, although at points Mrs Powys was left in awe, for the majority of the visit she was clearly aware, keen to observe, and ready to learn.

Similarly, after his visit to the Swansea Pottery in 1791, where Clarke felt he 'became acquainted with an outline of the process, by which this beautiful ware is made' he was able to recount that process in detail.'[104] He began by outlining how they dealt with preparing the clay they received 'in

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[102] See Lady Shelburne's account of the Worcester porcelain factory in a diary extract cited in J. V. G. Mallet, 'Lady Shelburne's visit to Worcester in 1770', *English Ceramic Circle Transactions*, 11:2 (1982), p. 109.
[103] Valentine Green, *A Survey of the City of Worcester* (Worcester, 1764), pp. 231-33.
[104] Clarke, *A Tour Through The South of England*, p. 205.

large balls, from the pits in Devonshire.' He witnessed how they 'pulverized' the clay and mixed it with water before passing it 'through a sieve, finer than any cambric in the world.' Here, Clarke provided the reader, not just with detail, but also with the reference point of 'cambric'. Once he had seen how the clay was dried, he looked on as it was kneaded and wedged. He understood why these processes were important, stipulating that 'for should it so happen, that be carelessness or inattention, a bubble of air is left in the clay, it will expand by rarefaction in the oven, burst, and destroy the work.'[105] Next he witnessed the vessel being formed and although after the excitement of seeing 'the most surprising quickness' his attention clearly waned, yet he managed to provide the reader with a reasonably insightful view of pottery production.

In his nineteenth-century autobiography *When I was a Child* (first published in 1903), Charles Shaw described how manufacturers worked to conceal the more inhuman aspects of pottery production from esteemed visitors. He wrote of how, 'On such occasions we had to clean the windows, wash the benches, remove every particle of dust and dirt, and sand the steps and floors with bright new, clean sand'.[106] It is unknown whether such choreography was also a part of the visitor experience in the eighteenth century, yet with such high visitor numbers it seems less likely. Nevertheless, as the experiences encountered by Mrs Powys and Clarke, and the responses they formulated, demonstrate, despite such potential choreography visitors were able to understand the different manufacturing techniques involved in ceramic production and concentrated on them in their accounts. Moreover their accounts also show that contemporaries

[105] Ibid., p. 206.
[106] Charles Shaw, *When I was a Child* (Firle, 1977), p. 79.

pinpointed the centrality of tacit knowledge within production processes. At these moments of recognition, they were unable to comprehend the magnitude of what they saw, but instead expressed awe. Within these wonder-filled moments, they did not react to tacit knowledge in terms of derision, but rather with respect and admiration. Viewing potters engrossed in the act of repetitive labour, enacting tacit knowledge, contemporaries responded with positive commendation and comprehension.

**Material Worlds**

Mrs Powy's and Clarke's concentration on particular aspects of the production process is also a striking feature of their accounts. They were particularly interested in the aspects of production that related directly to the finished object, such as the forming. Similarly, when Campbell, Mortimer and Chambers described potters forming objects they placed the human protagonist into the centre of this relatively detailed scene. Yet when describing other processes, such as firing or glazing, they, and more particularly Campbell, depicted the methods as lacking a main protagonist. Campbell described how 'When it is finished on the Wheel, he cuts it off from the remaining Part of the Clay, and sets it aside to dry: It is then put into a Furnace and receives the first Burning.'[107] In reading the quote, the shift that takes place from human-centric to uninhabited process, is distinct and almost ghostly. Once the potter has cut the clay off the wheel and set it aside to dry the object is spirited away by an unknown entity to the other

[107] Campbell, *The London Tradesman*, p. 185.

phases of production. By creating this stark contrast between peopled action and empty process the writers emphasised particular aspects of pottery work – namely the forming. Similarly, as noted above, Mrs Powy's and Clarke's accounts also include the same focus on the aspects of production that directly shaped features obvious in the final product they bought.

In portraying the pottery industry as they did, these writers gave the reader a version of the production process. They encouraged the reader to focus on how potters formed the vessel. In this reading, the writers presented manufacturing as something that could be directly witnessed in the products themselves. The form and colour of objects were prime concerns, whilst materials, environment and process were not. Thus in their representation of production they concentrated upon consumption. They presented a particular view of manufacturing as creating consumer objects. The writers invoked a final reference point from which to understand, namely the objects they consumed.

Production and consumption were also linked in other ways, for instance by purchasing goods on site. When Samuel Johnson visited the Derby Porcelain works in 1777, James Boswell recounted how 'The china was beautiful, but Dr Johnson justly observed it was too dear; for that he could have vessels of silver as cheap as were here made of porcelain.'[108] Thus for Johnson, it was the consumption rather than the production that was important. Similarly, when Mrs Powys visited the Derby Porcelain factory in August 1803, she 'purchas'd many articles'.[109] Clearly, purchasing goods was an important part of the factory tour. Mrs Powy's enthusiasm

[108] Bemrose, *Bow, Chelsea and Derby Porcelain*, p. 35.
[109] Climenson, *Passages from the Diaries of Mrs Philip Lybbe Powys*, p. 304.

for buying the goods offered by factories suggested that visitors understood production as intrinsically linked to the material world of consumption. In the late eighteenth century, consumption and production were not split further apart, but rather were continually joined together.

**Conclusion**

Reading manuals and visiting factories provided contemporaries with an insight into how production worked. In articles on porcelain and pottery they received narratives depicting the various parts of the process of making. Writers invoked empathy in the reader by highlighting the physical nature of the processes. Yet writers' failure to link all the techniques to accessible reference points simultaneously limited readers' understanding. Making, and the tacit knowledge inherent within the production processes, appeared continually distant with readers never leaving the role of spectator. Similarly, on industrial tours, visitors were aware of their role as spectator and frequently expressed awe and wonder at the skill they witnessed. Yet, their subsequent description of the processes they watched demonstrates that they actually comprehended much about making. Their understanding of making was, however, frequently linked up to the objects that resulted. What contemporaries understood of consumption, clearly affected their view of production. Thus, in the next chapter the thesis moves on, into the retail realm to examine how production was represented and understood there.

# Chapter Two

## 'The greatest Encourager and Promoter of the said Manufactories': Retailers Sell Production

> I rather wonder'd they did not in one room exhibit their most beautiful china finished; they did, it seems, till finding people remain'd in it too long, and so took up too much of the men's time, so now they send it to the shops in Worcester for sale.[1]
>
> Extract from the *Diaries of Mrs Philip Lybbe Powys*, 1771.

Mrs Philip Lybbe Powys of Hardwick House, Oxfordshire, toured the Worcester porcelain factory in August 1771. Only twenty years old at that time, the factory housed eleven different rooms each accommodating a different part of the porcelain production process. As discussed in chapter one, Mrs Powys registered this divided vision of making in terms of spectacle. Manufacturers used factory tours to present contemporaries with a highly choreographed representation of the making process. Certainly, the sight of the potters at work and the 'magic' they enacted duly entranced Mrs Powys.[2] Yet the end of the tour, much to Mrs Powys surprise, did not culminate in an experience of buying. She was keen to witness the finished product on site rather than being forced to go to 'the shops in Worcester' to purchase the items she had just witnessed being made. Mrs Powys sought to consume the manufacturing process both as a tour and in the form of an object she could take away.

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[1] Emily J. Climenson (ed.), *Passages from the Diaries of Mrs Philip Lybbe Powys 1756-1808 of Hardwick House, Oxon. A.D. 1756-1808* (New York and Bombay, 1899), p. 126.
[2] Climenson, *Passages from the Diaries of Mrs Philip Lybbe Powys*, p. 125.

For the seemingly practical reason of freeing up the men's time, the factory moved the consumer end of the operation to the nearest retail environment – Worcester. Its removal into a different space, at some distance from the site of production, facilitated the transition of the object from one made to one consumed. Marked out as commodities, the objects moved on to the next phase of their life history.[3] Worcester porcelain encouraged this transition, forcing the made object and the consumed object to become separate entities, with largely separate meanings. On leaving the context of the factory, the object was no longer a receptacle for the work, effort and skill central to the production process. Instead the object was situated in a shop and consequently began to represent the new possibilities it held as a consumer good.

Mrs Powys' critical consideration of the parameters placed around the consumption experience offered by the factory, demonstrates that shoppers were not merely passive recipients of meanings; rather they were actively aware of their own consumption choices and desires. Clearly, for Mrs Powys, the 'made' aspect of the object was its most positive attribute; her encounter with a highly choreographed performance of work had attached a sense of wonder to its other, more tangible qualities. By forming her own view of the production process, Mrs Powys re-engaged the object with its previous life history as a made object. Yet, as this chapter goes on to explore, had our historical actor been in an urban retail environment, her reading of the making process and the product it manufactured, may have been very different.

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[3] Igor Kopytoff, 'The Cultural Biography of Things: Commodization as Process', in Arjun Appadurai (ed.), *The Social Life of Things: Commodities in Cultural Perspective* (Cambridge, 1986), p. 64.

Like Mrs Powys travelling between the porcelain factory and the shops in the city of Worcester, this chapter now moves from examining contemporaries' understandings of workmanship as part of a production process to their comprehension of workmanship whilst consuming objects. Jan de Vries asserts that between 1650 and 1750 as new, often imitative, products came onto the market 'consumer priorities shifted from the standard of the material…to the standard of workmanship.'[4] Hence, during the eighteenth century processes of manufacture became increasingly important to consumers. Furthermore, scholars have asserted that 'making' was sold to customers. Maxine Berg and Helen Clifford have argued that retailers 'stressed through word and picture the process of making'. In this reading of late eighteenth-century consumer culture, retailers regarded 'making' as a key quality in customers' choice of products and advertised it as such.[5]

Building on the work of Berg and Clifford this chapter offers a close reading of advertisements, which promoted production 'through word and picture'. Concentrating on the example of ceramic retailers, it examines the use of language and image in various forms, such as trade cards, newspapers and shop displays, to question the different ways in which retailers and manufacturers alluded to or evaded the production processes that created goods. It looks to these depictions to ask how ideas of

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[4] Jan de Vries, *The Industrious Revolution: Consumer Behavior and the Household Economy, 1650 to the Present* (Cambridge, 2008), p. 146. See also Joel Mokyr, *The Enlightened Economy: An Economic History of Britain 1700 to 1850* (New Haven and London, 2009), p. 116. This also links to Maxine Berg's work on the importance of imitative products in the British product revolution. See Maxine Berg, *Luxury and Pleasure in Eighteenth-Century Britain* (Oxford, 2005), p. 26. See also Maxine Berg, 'From Imitation to Invention: Creating Commodities in Eighteenth-Century Britain', *The Economic History Review*, 55:1 (2002), pp. 1-30.

[5] Maxine Berg and Helen Clifford, 'Selling Consumption in the Eighteenth Century: Advertising and the Trade Card in Britain and France', *Cultural and Social History*, 4:2 (2007), p. 162.

manufacturing affected the consumption decisions of shoppers and their view of workmanship.

**Advertising Production**

While at home or in coffee shops, eighteenth-century contemporaries perused a variety of publications in search of all-important news. Flicking through a copy of the *London Evening Post* on Saturday 16 September 1775, readers met with news stories ('The King has been pleased to grant unto the Rev. Ashburnham Philip Toll…his royal leave and licence to take and use the surname and bear the arms of Newman'), letters from abroad (mostly out of date – 'Grenada June 28th'), and advertisements ('STOLE the 3d of this instant September, in the night, from Fullwall near Buckingham, two large liver and white coloured POINTERS').[6] Local, national and international matters attracted readers and subsequently shaped their idea of current events. Advertisements of all shapes and sizes appeared amongst these news stories, some advertising the loss of pointers and others arguing the virtues of a particular retailer. Even while at home in an armchair, eighteenth-century contemporaries were imaginatively involved in the world of goods.

Prior to the 'consumer revolution' thesis of the 1980s, historians were largely sceptical about the sophistication of advertising in this period. Scholars viewed advertising and marketing as products of the nineteenth

[6] *London Evening Post* (London, England). 16 September 1775. <Seventeenth and Eighteenth Century Burney Collection Online> (08 January 2009).

rather than the eighteenth century.[7] In the 1980s and 1990s, closer readings of eighteenth-century manufacturers and retailers marketing and advertising activities led to new understandings of the techniques used. In this revision, historians particularly focused on the examples of Matthew Boulton and Josiah Wedgwood. The different tactics used by these manufacturers - from newspaper puffs, to ticketed exhibitions and from endorsements to advertisements – earned them congratulations for their ability to manipulate fashion, taste and habits.[8]

Amidst the different types of advertising and marketing now included in studies on the eighteenth-century, more recent work has highlighted the limited role of newspaper advertising in the sale of domestic consumer goods. R. B. Walker's survey of London newspaper advertisements between 1650 and 1750 demonstrated that although the number of advertisements increased, they concentrated on a few 'branded' goods such as books, medicines and theatrical plays.[9] Claire Walsh has shown the continuance of this trend between 1721 and 1791.[10] Similarly, a survey of three newspapers, found in the Burney Collection at the British Library, at five-year intervals between 1760 and 1797 finds that

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[7] For example see James. B. Jefferys, *Retail Trading in Britain, 1850-1950: A Study of Trends with Special Reference to the Development of Co-operative, Multiple Shop and Department Store Methods of Training* (Cambridge, 1954), p. 36-37.

[8] See Neil McKendrick, John Brewer, and J.H. Plumb, *The Birth of a Consumer Society: The Commercialization of Eighteenth-Century England* (London, 1982); John Brewer and Roy Porter, *Consumption and the World of Goods* (London and New York, 1993). This work did have earlier precedents, see Eric Robinson, 'Eighteenth-Century Commerce and Fashion: Matthew Boulton's Marketing Techniques', *The Economic History Review*, 16:1 (1963), pp. 39-60.

[9] R. B. Walker, 'Advertising in London Newspapers, 1650-1750', *Business History*, 15:2 (1973), pp. 123-125.

[10] Claire Walsh, 'The Advertising and Marketing of Consumer Goods in Eighteenth-Century London', in Clemens Wischermann and Elliott Shore (eds), *Advertising and the European City: Historical Perspectives* (Aldershot, 2000), p. 83.

manufacturers or retailers of consumer goods such as textiles, ceramics, glass and metals, rarely advertised.[11]

The infrequent advertisements included in these newspapers – *Daily Advertiser*, the *London Evening Post* and the *Gazzetteer and New Daily Adveriser* – generally promoted retailers, rather than goods. A small group of advertisements did allude to the products that retailers supplied, but only did so indirectly in naming their business, for example 'Quilt Warehouse'.[12] Retailers rarely included descriptions of products and any that they gave tended to be short and functional. In 1775, an advertisement in the *London Evening Post* gave readers a list of various clothing textiles sold by W. Taylor in Tavistock Street. The list denoted the price, breadth and type of textile.[13] As Barbara Benedict argues, these lists used 'an apparently artless torrent of words – to imply that their products need no devious selling techniques'.[14] Certainly, these listings made only very rare references to the production process. When advertisements did mention the production of objects it was generally framed as an innovative new technique and thus worthy of note. In 1770, gentlemen reading the *Gazetteer and New Daily Advertiser* 'that are curious in perukes' but had difficult getting them to fit, would have been pleased to know that their worries had been answered by a certain Edward Evans of 83 Fleet Street who had

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[11]This survey of newspapers is based on Claire Walsh's earlier analysis of newspaper advertising. In order to probe the questions of this chapter, three newspapers (from the original five) were surveyed. The survey looked at the newspapers at five-year intervals between 1760 and 1797. It analysed the classified adverts that appeared in the month of September for all those years. I used the online facility of the Burney Collection at the British Library.

[12] *Gazzeteer and New Daily Advertiser* (London, England). 16 September 1775. p. 3. <Seventeenth and Eighteenth Century Burney Collection Online> (06 January 2009).

[13] *London Evening Post* (London, England). 21 September 1775. p. 1. <Seventeenth and Eighteenth Century Burney Collection Online> (06 January 2009).

[14] Barbara Benedict, 'Encounters with the Object: Advertisements, Time, and Literary Discourse in the Early Eighteenth-Century Thing Poem', *Eighteenth-Century Studies*, 40:2 (2007), p. 198.

happened upon 'a particular method of making bag or queue wigs.'[15] In general, however, the majority of retailers who used newspaper advertising used them to announce a change or continuance of address to clients, a convention that is echoed in Natacha Coquery's work on Paris.[16]

Focusing more specifically on the ceramics industry, retailers and manufacturers in this sector followed similar advertising conventions.[17] Apart from those manufacturers and retailers operating at the top end of the market, which employed more elaborate forms of newspaper advertising such as puffs, others tended to adopt simple forms.[18] A large proportion of ceramic advertisements appropriated the conventions of notices, for instance in announcing the location of showrooms and warehouses. Even the most minor changes of address failed to escape attention, as when in 1768, a 'chinaman' named Clarke advertised that they had 'removed from No. 3, Ludgate Hill, to No. 44. Opposite'.[19]

Retailers also exploited other minor changes in circumstance to justify commandeering a newspaper announcement. For instance, in 1764 James Ansom took the opportunity to 'inform his Friends and Customers, that he has now laid in a fresh Assortment of Goods; consisting of a very

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[15] *Gazzetteer and New Daily Advertiser* (London, England). 21 September 1770. p. 2. <Seventeenth and Eighteenth Century Burney Collection Online> (06 January 2009).

[16] Walsh, 'The Advertising and Marketing of Consumer Goods', p. 88; Natacha Coquery, 'The Language of Success: Marketing and Distributing Semi-Luxury Goods in Eighteenth-Century Paris', *Journal of Design History*, 17:1 (2004), p. 74.

[17] This claim is based on a search of the online Burney Collection belonging to the British Library, London. The *Gazetteer and New Daily Advertiser* (1764-1796), the *Public Advertiser* (1752-1793), the *Daily Advertiser* (1751-1796) and the *London Evening Post* (1727-1799) were all included in the search. I used certain keywords in order to find advertisements, these included 'Chinaman', 'Pottery', 'Porcelain' and 'Earthenware'. The keywords were searched for in the selected newspapers for all years between 1760 and 1800. Only advertisements placed by ceramic retailers and manufacturers, concerned with the sale of ceramic goods were included in the final analysis.

[18] Hilary Young, *English Porcelain 1745-1795: Its Makers, Design, Marketing and Consumption* (London, 1999), p. 170.

[19] *Gazetteer and New Daily Advertiser* (London, England). 4 March 1768. <Seventeenth and Eighteenth Century Burney Collection Online> (28 October 2009).

great Variety of China, Glass, and Stone Ware'.[20] How 'fresh' his assortment of goods actually was is unknown. Yet by appropriating the language of notices retailers highlighted the 'new' aspect of their business concern. Retailers encouraged customers to take note and engage. In these 'announcements', retailers communicated important information about their location, the goods they sold, the price they sold at and the range on offer. They also allowed retailers to stress their own credentials as polite hosts welcoming their friends, as in the case of Ansom. Retailers also used these notices to communicate their suitability as purveyors of all that was new and novel, as in the case of Clarke who employed the seductive phrase '&c., &c.,' to describe the breadth of his stock. What these 'notices' failed to do, however, was to stress how the goods they sold were manufactured.

By concentrating on this format of advertisement it is possible to entirely lose sight of production. Yet considering advertising more broadly demonstrates that advertisements for retail concerns occupied the same space as notices concerned with production enterprises. Notices announcing the sale of property and adverts for 'JOURNEYMEN POTTERS, in the Sugar-Mould Business' interweaved between announcements from retail concerns.[21] Thus although infrequently encouraged to consider manufacturing in the adverts and notices they read, newspaper advertising indirectly asked contemporaries to consider production. Moreover, certain retailers used advertisements to encourage potential customers to consider production closely, as this chapter goes on to explore.

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[20] *Gazetteer and New Daily Advertiser* (London, England). 18 August 1764. <Seventeenth and Eighteenth Century Burney Collection Online> (28 October 2009).
[21] Nancy Valpy, 'Extracts from the Daily Advertiser and Additional Manuscripts', *English Ceramics Circle Transactions*, 14:1 (1990), p. 107.

**Representing the Virtues of the Retailer's Stock**

Returning the newspaper to its place on the coffee house table, getting up to leave the establishment and begin their walk along London's streets, contemporaries might have reached into their pockets and felt a small wad of papers. Inside this wad might have been a billhead from a trunk maker, a scrap from the London directory, and at the bottom perhaps a trade card given by a friend in recommendation of a particular retailer.

Trade cards were a particularly effective form of advertisement, as 'where image and text were interdependent, [marketing] had a wider impact'.[22] Trade cards married together text and image to provide customers with information about the type of retailer and their location. Despite Josiah Wedgwood's open disdain for trade cards, the majority of retailers dealing in luxury and semi-luxury goods, such as ceramics, eagerly appropriated this form of marketing.[23] Shop-keepers distributed cards in the local area surrounding a shop. They also handed them out to customers, generally deploying them after a sale rather than before.[24] By passing the card from hand to hand after a sale, retailers used it to consolidate their relationships with customers.[25] It was both a reminder of their shopping experience and a physical object whose quality and feel represented the virtues of the retailer's stock.

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[22] Berg and Clifford, 'Selling Consumption in the Eighteenth Century', p. 145.
[23] Maxine Berg and Helen Clifford, 'Commerce and the Commodity: Graphic Display and Selling New Consumer Goods in Eighteenth-Century England', in Michael North and David Ormond (eds), *Art Markets in Europe, 1400-1800* (Aldershot, 1998), p. 196.
[24] Berg and Clifford, 'Selling Consumption in the Eighteenth Century', p. 151.
[25] Jon Stobart, 'Selling (Through) Politeness: Advertising Provincial Shops in Eighteenth-Century England', *Cultural and Social History*, 5:3 (2008), p. 314; Katie Scott, 'The Waddesdon Manor Trade Cards: More Than One History', *Journal of Design History*, 17:1 (2004), p. 97; Philippa Hubbard, 'The Art of Advertising: Trade Cards in Eighteenth-Century Consumer Cultures' (Unpublished PhD Thesis, University of Warwick, 2009), p. 75.

Consumers also circulated these attractive pieces, facilitating the wider acknowledgement of particular shops. Small in size and desirable in appearance, the cards usurped domestic and urban space.[26] The cards often featured elaborate designs, painstakingly engraved or etched, whose own inherent attraction was cause for collection. The number of surviving trade cards in collections such as the John Johnson Collection, the Heal and Banks Collection, the Guildhall Library and Waddesdon Manor demonstrates the longevity of their desirability.

A sample of trade cards from the John Johnson collection held at the Bodleian Library in Oxford and the Heal and Banks collections held at the British Museum examined here, gives an indication of how ceramic retailers and manufacturers represented themselves and the objects they sold. The collections are rich in British printed ephemera from the eighteenth, nineteenth and twentieth centuries, and feature amongst their various cards and prints a notable number of trade cards from ceramic warehouses. By any standards, the sample is small. The date of the cards is also problematic with dates rarely being included upon the cards. Yet, the members of the relevant sample that do survive provide important clues as to how retailers managed and used ideas of manufacturing in the sale of consumer goods such as ceramics.

[26] Benedict, 'Encounters with the Object', p. 196.

**Distancing Production**

Ceramic retailers often invoked ideas of distance when constructing depictions of production. More particularly, as we see on the trade cards below, they employed images that referenced the importation of goods manufactured in far away lands. For instance, the 'Wholesale China, Glass & Staffordshire Warehouse', run by James Shakeshaft Jnr at the turn of the nineteenth century (1802-23), included images of both importation and production on their trade card.


Fig. 2.1. James Shakeshaft Jnr Wholesale China, Glass & Staffordshire Warehouse. 1802-3. Trade Card. Bodleian Library, University of Oxford.[27]

On the right of the card, is a kiln in use with smoke pluming into the sky. The kiln is depicted as a solid, steadfast building, suggesting the longevity and thus the credibility of their suppliers. In the centre of the image, men

[27] Bodleian Library, University of Oxford, Oxford. John Johnson Collection. Ja's Shakeshaft Jnr Trade Card. 1802-3. Trade Cards 6 (47b).

carry boxes out of the kiln and towards a dock. The process appears small-scale. In the background ships sail away, leaving the dock, they corner the cliffs and disappear into the distance. Above these processes of production and transportation stands the wholesaler James Shakeshaft. An elaborate, swirling typeface gives the viewer details about the Shakeshaft business and its location. Any further information the consumer might require is found in the image itself.

This representation of production and transportation reassured customers of the distance that these objects had travelled. Shakeshaft acted as a dealer of both Chinese porcelain and Staffordshire earthenware, both of which travelled distances before arriving. Yet, the actual production of these objects remained hazy. Although production was included in some form, namely the kiln, the image failed to include workers producing objects. Production was represented by a building rather than by work practices. Whilst reassuring customers that the objects they might buy have travelled from a certain distance, guaranteeing novelty and uniqueness, Shakeshaft was also keen to remind his customers that someone produced his wares in a calm, idyllic environment.

Other retailers made similar claims about the goods they sold. For instance, Robins & Foster, who operated as cut glass manufacturers and dealers in china and Staffordshire ware, used their trade card to promote their dealings in the importation and exportation of wares. In the centre of their trade card, they included a maritime scene filled with ships, docks, and stock.


Fig. 2.2. Robins & Foster Cut Glass Manufacturers and Dealers in China and Staffordshire Ware. Trade Card. Bodleian Library, University of Oxford.[28]

In the foreground of the image is a set of products bound and packaged for travel. Behind the barrel and boxes, in the centre of the card, Robins & Foster included an image of a dockyard. Like the Shakeshaft card above, the card represents the dockyard as a peaceful, lightly populated area. The imaginary dockyard is not based on the chaotic, bustling banks of the Thames. It is quiet, with only a few workers and much emptiness. Again in the background, ships sail away to their destination across a peaceful sea. Both these depictions show how some ceramic retailers stressed the importance of the distance their goods had travelled.

The motif employed by Shakeshaft and Robins & Foster, of production alongside a sailing ship travelling across distance, was popular in the eighteenth century. It appeared on the trade cards of other ceramic retailers in addition to other trades, particularly those of linen drapers.[29] In

[28] John Johnson Collection. Robins & Foster Trade Card. Trade Cards 6 (28).
[29] For example of another ceramic dealer using this motif see British Museum, London. Department of Prints & Drawings. Heal and Banks Collection of Trade Cards and Selected Bill Heads. William Gibson Trade Card. MS37.28. For example of linen drapers see John Johnson Collection. J.C. Sercombe Trade Card. Trade Cards 12 (121); John Johnson

the light of global connections, trade and interaction, its popularity is hardly surprising. Yet retailers desire to provide potential customers with a recognisably shared image of the 'where' and 'what' of their stocks origins suggests the value of place and production. Retailers assumed that, rather than dismissive of production, consumers esteemed it. Yet what they saw was a distant process. Similarly, other retailers were also keen to place production at a distance, representing it as an unknown entity.

**Facilitating Production**

Thomas Peacock & Co., a Glass Manufactory and Staffordshire Warehouse, located on the upper end of Holborn Bridge near Fleet Market in London, printed a trade card that posited manufacturing and retail in the same perfect balance as the title of their business suggested it stood.[30]

Collection. Jno. Ewen Trade Card. Trades Cards 12 (117); John Johnson Collection. Isaac Newton Trade Card. Trade Cards 27 (29).

[30] The period during which Thomas Peacock's business was in operation is unknown. Yet there are Sun Fire Insurance Records showing that a certain Thomas Peacock operated as a dealer in china, glass and earthenware in nearby Borough in the early 1780s. These records are perhaps linked to the operation in Fleet Market recorded on the trade card below. See Guildhall Library, London. Sun Fire Insurance Records. MS 11936/281 and MS 11936/292.


Fig. 2.3. Thomas Peacock & Co. Glass Manufactory and Staffordshire Warehouse. Trade Card. Bodleian Library, University of Oxford.[31]

On the left side of the card, behind the figure located in the foreground, stands a small town. Spires and buildings are included in the depiction, signs of residence and activity – we are left in no doubt that this is a town where the normality of life carries on. Included to the far right of this depiction of small-town life is a kiln, vigorously pumping torrents of smoke into the air; production is in action, things are being made at that very moment. Although near the town, production is simultaneously at a distance from it. The retailer is placed in the centre, depicted by their name and address, facilitating the link between consumers and production. The two figures flanking the name and address, further the claims of the retailer as worthy facilitator. Representing vigilance on the left and awareness on the right, the figures reassure customers of the competency they will meet with.[32]

[31] John Johnson Collection. Thomas Peacock & Co. Trade Card. Trade Cards 6 (25).
[32] The stork in the arm of the male figure on the left depicts vigilance, whilst the hand and eye held by the female figure on the right classically represents God, but in this instance appears to depict the senses and thus awareness. See James Hall, *Hall's Dictionary of Subjects and Symbols in Art* (London, 1993), p. 118 and p. 292.

Thomas Peacock & Co. clearly felt it was necessary to reassure customers about their expectations upon entering their establishment. Inside the 'Glass Manufactory and Staffordshire Warehouse' located on Holborn Bridge, production was happening, but alongside this endeavour shoppers would be able to interact with a normal, town-like retail environment. Placing the 'town' on the left-hand side of the card highlighted its importance to a set of visual readers who worked from left to right. By using the trade card to reassure customers that production happened at a distance from the consumption practices, Peacock represented production as a process at one remove. Just like the Worcester Porcelain factory described earlier, retailers and manufacturers felt that they benefited from stressing production and consumption as different entities. Simultaneously, the representation stresses the role of the retailer in successfully negotiating that distance.

The trade card of a 'China and Glass' seller operating in the middle decades of the eighteenth century provides a further example of retailers representing production at a distance only navigable with their help.[33] Jane Taylor set up business after the death of her husband, John Taylor. The trade card below forefronts her name and the services her business offered.

[33] The trade card is dated as 1756 in an article by Aubrey J. Toppin. See Aubrey J. Toppin, 'The China Trade and Some London Chinamen', *English Ceramic Circle Transactions*, 3 (1935), p. 51.


Fig. 2.4. Jane Taylor & Son China and Glass Sellers. 1756.
Trade Card. British Museum, London.[34]

Within the flourish of the cartouche in the centre, the card asserts that the business 'Sells all sorts of China Ware, Cutt and Plain Glass' as well as the 'Finest Teas & Chocolate'. Whilst above these claims and their concentration on selling, the images included reference importing and making. On the left, goods are negotiated for in a landscape that stands in sharp contrast to the urban context of 'London', which is emblazoned in the centre of the text. Similarly, the image in the top right hand corner also stands in contrast to claims of urbanity. Instead it represents production. Here, workers stand next to elemental flames and exert human energy on the task of blowing glass. Unlike Peacock's representation of making, the image included on Taylor's card forefronts the role of people in constructing the goods she sells. Production is performed and enacted. In front of these images, in a cartouche full of text, stands Taylor. It is clearly through her, therefore, that these forms of production can be obtained and

[34] Heal and Banks Collection of Trade Cards and Selected Bill Heads. Jane Taylor Trade Card. 1756. 37.47. Image Number AN543412001.

procured. She facilitates and negotiates the process on behalf of her customers.

Other retailers appropriated this motif of facilitation in different advertising forms. For instance, in 1770 an advertisement appeared in the *Public Advertiser,* which promoted a new concern recently opened at 'The Old Playhouse, Richmond-Hill, Surrey.'[35] The rather long and elaborate advertisement was at pains to assert that members of the nobility and gentry 'who are curious in China and India Goods may depend on seeing a large Collection of the finest brought home this Season in compleat Services.'[36] The retailer positioned himself as epic traveller bringing home wonders to display. He further consolidated his role as worthy navigator through the highways of production by reassuring potential customers that he also had 'some of the finest of the English Porcelain Manufactories.'[37] The advertisement promoted to the reader the wealth of bounty available at the shop, a hoard that the retailer had duly plundered directly from various manufacturers. Here, the retailer promoted the importance of his direct link to production and consequently represented production as a landscape needing careful navigation.

Other retailers also presented production as rocky terrain requiring highly skilled traversing, whilst others went further, presenting themselves as promoters of production. For instance, a Mr Williams advertised himself in 1789 as 'the greatest Encourager and Promoter of the said Manufactories.'[38] By his own humble admission, Williams had previously

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[35] *Public Advertiser* (London, England). 28 August 1770. <Seventeenth and Eighteenth Century Burney Collection Online> (27 October 2009).
[36] *Public Advertiser*. 28 August 1770.
[37] Ibid.
[38] *Public Advertiser* (London, England). 19 December 1789. <Seventeenth and Eighteenth Century Burney Collection Online> (27 October 2009).

encouraged the Chelsea, Salopian, Derby, Worcester and Bow manufactories and now he was also going to include a new, unknown factory into the fold. From this new manufactory he had purchased a large quantity of pieces, which he thought 'worthy of the Attention of all Ranks of People.'[39] Luckily, potential customers could trust his judgement in purchasing these pieces as Mr Williams had 'a superior Knowledge to most of his Profession in England.'[40] Hence, once again the ceramic retailer presented himself as skilful navigator.

Outside of the ceramics trade, other businesses used text and image to convey their skills as retailers and distributors. A billhead made in 1800 for G. Daniell, a business that both made and sold trunks, alludes to a similar distance between retail and production.


Fig. 2.5. G. Daniell. 1800. Bill Heading.
Bodleian Library, University of Oxford.[41]

In the image, included in an oval at the top of the billhead, once again consumption is placed in the privileged position on the left. Consumption

[39] *Public Advertiser*. 19 December 1789.
[40] Ibid.
[41] John Johnson Collection. G. Daniell Bill Heading. 1800. Tradesmen's Lists 188.

is represented as a genteel young couple deep in negotiation. Aiding this process of negotiation is a shop assistant who stands in the centre of the image displaying a trunk. The assistant tries to influence the customer's decision by pointing right, to the young man who is actually making the trunk. Clearly, making is an influential factor in the consumption process. Yet at the same time, the image on the billhead depicts a shop assistant facilitating the couple's view of a trunk being made. Again consumption and production are presented as opposites ends of a scale that can only be facilitated by the retailer. It is unsurprising perhaps that a business that carried out manufacturing on site would point to this on their trade card, but it is presented in a certain way. The maker stands, hunched over his work, his body language is passive and self-contained, demarcating the boundaries of the production process in this business. Although carried out on site, production is at a safe distance from consumption.

Like the images included on the trade cards of James Shakeshaft and Robins & Foster, the retailers discussed above depicted production in the gentlest of terms – a smoking kiln, blowing glass, altering a trunk upon a counter. Retailers' employment of these particular images, suggests a desire to construct production as 'attractive' and accessible. Yet, within these images, retailers were also keen to stress their role. Nevertheless by offering up their hand to guide the consumer and thus highlighting the importance of facilitation, retailers represented ceramic production as unknowable and foreign.

**Reflecting Reality**

In many ways representations of ceramic retailers skilfully facilitating consumers' interaction with production reflected the inherent reality of this particular trade. Some consumers must have felt overwhelmed by the multiplicity of goods on offer and retailers were thus answering a real need for guidance and help. Moreover, a distinct feature of ceramic retailing was the structure of the sales and distribution network in which dealers operated. As Mrs Phillip Lybbe Powys (discussed above) and Dr Samuel Johnson's (discussed in chapter one) experiences demonstrate, some regional factories, such as Worcester and Derby, did operate local retail outlets. Yet these local markets were mostly small. For example in one year Derby Porcelain sold twenty-three pounds worth of ornamental wares in Derby compared to the four hundred and sixty-four pounds worth sold at their warehouse in London.[42]

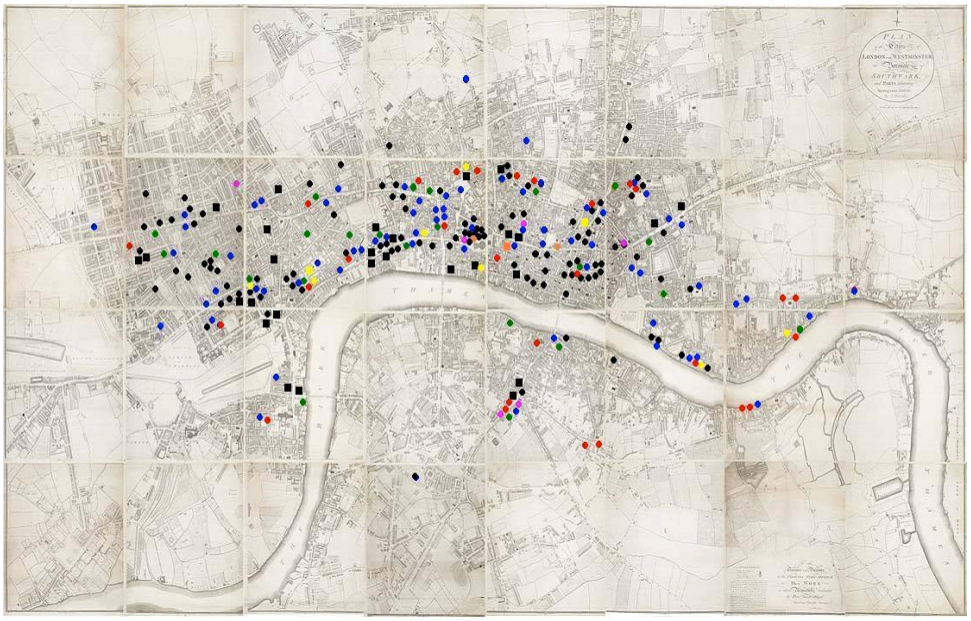
Given the limitations of these local markets, some of the larger factories, such as Wedgwood, established their own wholesale and retail outlets in London. Similarly, William Duesbury Senior and Junior of Derby Porcelain factory operated a successful retail and wholesale outlet from the warehouse in Bedford Street, Covent Garden through their agent Joseph Lygo. This was not a small concern. In 1786, they insured their stock at the value of £3400 with Sun Fire Insurance. Nevertheless, the numbers of this type of outlet were limited.[43] Manufacturers channelled the majority of

[42] Hilary Young, 'Manufacturing Outside the Capital: The British Porcelain Factories, Their Sales Networks and Their Artists 1745-1795', *Journal of Design History*, 12:3 (1999), p. 259.
[43] Lorna Weatherill, 'The Business of Middlemen in the English Pottery Trade Before 1780', *Business History*, 28:2 (1986), p. 60.

their wares through specialist dealers operating in the capital.[44] Like the depictions shown in the trade cards and advertisements discussed above, these specialised dealers bought goods from distant production sites in Britain, Europe and beyond. By using their connections and contacts these dealers procured a varied stock, which invoked desire in the consumers who crossed their threshold.

Trade directories and fire insurance records show that between 1768 and 1794 at least two hundred and seventy-seven ceramic dealers operated in London. As the map below demonstrates, these businesses varied in size and location. From John Fox's business operating out of Bakers Buildings, which for fire insurance purposes declared a stock valued at ten pounds in 1780 to William Bacchus' much larger operation in Upper Thames Street, which benefited from a stock declared to be worth £5,880 in the same year.[45] As the map demonstrates, although there was a shift towards the west of London, dealers were dispersed throughout the city.

[44] Young, 'Manufacturing Outside the Capital', p. 258.
[45] Sun Fire Insurance Policies. John Fox. 1780. MS11936/286. Sun Fire Insurance Policies. William Bacchus. 1780. MS11936/277.



| Stock values | Unknown | £0-100 | £101-500 | £501-1000 | £1001-1500 | £1501-2000 | £2001+ |
|---|---|---|---|---|---|---|---|
| Key | | | | | | | |

Fig. 2.6. Map showing the location and value of ceramics traders in London between 1768 and 1794.[46]

In 1666, when the Great Fire destroyed most City area shops, many traders moved west to Covent Garden, the Strand and Holborn.[47] By the early eighteenth century, the most fashionable shops had moved even further west, to the streets of St James's. West London was increasingly popular with high-end retailers of other luxury objects, as well as ceramic dealers. At the same time, however, ceramic dealers operating with various stock valuations continued to locate themselves across the city. For instance in 1778 chinamen William Pryer and William Hussey insured their Coventry Street based stock for £3300, while John Moore, a chinaman based in St

[46] Kate Smith, 'The Power of Design: An Examination of the Transfer of Design Knowledge by Ceramic Dealers in the Late-Eighteenth Century' (Unpublished MA Thesis, University of Warwick, 2006), p. 27.
[47] Kathryn A Morrison, *English Shops and Shopping: An Architectural History* (New Haven and London, 2003), p. 33.

Paul's Churchyard nominally valued his stock at £1630.[48] Similarly, Thomas Peacock a dealer in china and glass, based in Borough, registered a stock valuation of £1400 in 1781.[49] A year later Thomas Wilkinson a dealer in china, glass and earthenware operated in Wapping with a stock valued at £2525.[50] Catering for trade and retail customers, ceramic dealers appropriated and overcame the different meanings of their locations.[51]

As Robert Campbell asserted in *The London Tradesman*, 'The Earthen-Ware Shop is a Dependent on the Pot-House: They buy their Goods from Several Houses in England, from Holland, and at the Sales of the *East-India* Company'.[52] The majority of ceramic objects, both porcelain and earthenware, sold in London had to travel a certain distance before arriving at the warehouse that sold them. As noted in chapter one, from seventeenth century onwards and from the eighteenth century more particularly, the East India Company ensured the importation of large stocks of porcelain from the distant regions of China. The East India Company ships arrived on the banks of the Thames and sold their goods through large-scale auctions. Ceramic dealers bought stock from these sales to sell on to consumers, as well as other dealers in the capital and the provinces. The radial structure of the sales network was thus founded. Despite the restriction of imports from the 1780s onwards, the end of bulk imports by the East India Company in 1791 and the increasing dominance of English

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[48] Sun Fire Insurance Policies. William Pryer and William Hussey. 1778. MS11936/262. Sun Fire Insurance Policies. John Moore. 1778. MS11936/264.
[49] Sun Fire Insurance Policies. Thomas Peacock. 1781. MS11936/292.
[50] Sun Fire Insurance Policies. Thomas Wilkinson. 1782. MS11936/301.
[51] For more on the meaningfulness of addresses see Peter Jackson and Nigel Thrift, 'Geographies of Consumption', in Daniel Miller (ed.), *Acknowledging Consumption: A Review of New Studies* (London and New York, 1995), p. 219; Laura Wright, 'Street Addresses and Directions in Mid-Eighteenth Century London Newspaper Advertisements', in Nicholas Brownlees (ed.), *News Discourse in Early Modern Britain: Selected Papers of CHINED 2004* (Bern and New York, 2006), p. 205.
[52] Robert Campbell, *The London Tradesman* (London, 1747), p. 188.

regional production, the structure of ceramic dealing in the capital underwent little change in the late eighteenth century.[53]

As James Shakeshaft Jnr and Robins & Foster stressed on their trade cards, all goods travelled a long way. European ceramic wares arrived from continental locations including France, Germany and Italy. Similarly, domestic products also made a significant journey from production site to the British metropolis. The strength of the London dealers meant that goods from Bristol, Leeds and Staffordshire travelled a considerable distance to the centre of retail in London.[54] In the case of North Staffordshire, covering well over one hundred miles to reach its destination. The breadth of stock offered by specialist ceramic dealers consolidated their position in the distribution network. They often sold a wide range of ceramic wares, including delft, Chinese porcelain, Staffordshire pottery and English china, as well as glass and often tea.[55] As Campbell observed, for ceramic dealers the range of stock was key.

Chinamen, such as William Bacchus, specialised in the sale of imported china and operated on a large scale. Similarly, stoneware and earthenware dealers operating in London also managed large concerns. By the mid-eighteenth century insurance valuations for stock owned by London ceramic dealers ranged between three hundred and three thousand pounds.[56] Comparison with eighteenth-century producers demonstrates the enormity of these stock levels. For instance, the Turners insured their

[53] Young, 'Manufacturing Outside the Capital', p. 261.
[54] Ibid., p. 263; Weatherill, 'The Business of Middlemen', p. 55.
[55] Young, *English Porcelain 1745-1795*, p. 155.
[56] Weatherill, 'The Business of Middlemen ', p. 58.

warehouse stock for only one thousand pounds in 1770.[57] The size of these stock valuations indicates the range of goods that dealers held.

**Displaying Their Range**

As ceramic retailers increasingly catered exclusively for shoppers, they used more than just newspaper advertisements and trade cards to promote their range of stock; they also placed particular emphasis on shop displays. Although goldsmiths tended to claim the most elaborate displays in London, ceramic dealers also boasted complex designs.[58] Prints and trade cards depicting ceramic retailers often focused on their use of the shop front and window displays. Innovative and diverse, these displays captured the eye as well as the imagination of passing consumers.


Fig. 2.7. West's Penny Plate of New Pantomime Tricks No. 1 London. Published as the Act directs Apr 24th 1824 by W. West at his Theatrical Print Warehouse No 57 Wych Street, Strand.
Bodleian Library, University of Oxford.[59]

[57] Ibid.
[58] Nancy Cox and Claire Walsh, 'Their Shops Are Dens, the Buyer is Their Prey": Shop Design and Sale Techniques', in Nancy Cox, *The Complete Tradesman: A Study of Retailing, 1550-1820* (Aldershot and Vermont, 2000), p. 95; Claire Walsh, 'Shop Design and the Display of Goods in Eighteenth-Century London', *Journal of Design History*, 8:3 (1995), p. 167.
[59] John Johnson Collection. West's Penny Plate. 1824. Trades and Professions 6 (19).

The above print depicts John Doyle's 'Patent Iron and Other China, Glass and Staffordshire Warehouse' situated at No. 7 Tavistock Row. It represents the shop window display as a well-ordered presentation of stock. Like goldsmiths who appropriated window space to display a variety of seals, ceramic retailers were particularly apt at using glazed windows to their advantage by using the many small panes to frame each individual object.[60] The above depiction of Doyle's premises shows his endorsement of this technique. Here an object stands in every pane, framed and situated for the viewer, a style of presenting objects that encouraged potential customers to concentrate their viewing on specific goods. The system of framing offered by glazed windows organized potential consumers' view of the objects on offer.[61] Similarly, display racks and shelves structured the display of goods from behind the glass. For instance, Thomas Turner, a china man operating in central London in the 1760s used shelves and hooks in his window in order to create a display to capture consumers' imagination and focus their gaze.[62]

Ceramic dealers also showed the breadth of their stock inside the shop. As Walsh has argued the orderly arrangement of stock in the shop indicated the competence of the retailer, a view echoed in the work of Andrew Hann and Jon Stobart.[63] Displays were tangible evidence of the retailers stock and retail credentials. For ceramic dealers, however, the

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[60] Helen Clifford, *Silver in London: The Parker and Wakelin Partnership 1760-1776* (New Haven and London, 2004), pp. 121-122.
[61] Claire Walsh, 'Shops, Shopping, and the Art of Decision Making in Eighteenth-Century England', in John Styles and Amanda Vickery (eds), *Gender, Taste, and Material Culture in Britain and North America 1700-1800* (London and New Haven, CT, 2006), p. 153.
[62] The National Archives, London. Records of the Preogative Court of Canterbury. Thomas Turner Probate Inventory. 1768. Probate 31/533/120.
[63] Andrew Hann and Jon Stobart, 'Sites of Consumption: The Display of Goods in Provincial Shops in Eighteenth-Century England', *Cultural and Social History*, 2 (2005), p. 171; Walsh, 'Shop Design and the Display of Goods', p. 164.

display of stock was something more, namely evidence of their links to production.

Through the seventeenth and eighteenth centuries the quality and quantity of shop furniture increased, adding depth and variety to displays.[64] For instance, an inventory taken at the death of chinaman Thomas Turner in 1768, depicts a shop full of furniture.[65] While goldsmiths used glass display cases and drapers used shelving and presses, chinamen such as Turner employed other techniques.[66] In Turner's shop, bookcases, glass cases, shelves, windows and hooks were all loaded with wares, presenting goods in a variety of ways. One book case alone boasted seven shelves stocked with ware.[67] On the 'first shelf near the Window', potential customers could consider 'one beautiful looking Glass Guilt [sic] Frame two Chelsea Handle Cupps and Saucers eight odd saucers two odd Cupps two fine Dresden Cups and Saucers Ruby Guilt [sic] six white and Gold Glass Tumblers six odd Coffee Cups one Imago Cream mug'. The list was endless.[68] These presentations affected an opulent display of material bounty. Such a display of stock, something that Daniel Defoe critically referred to as 'over-trading' in his 1727 work, *The Complete English Tradesmen*, demonstrated the ceramic retailer's ability to procure objects and satisfy customers.[69] Like Jane Taylor's trade card demonstrating her

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[64] P. D. Glennie, and N. J. Thrift, 'Consumers, identities, and consumption spaces in early-modern England', *Environment and Planning A*, 28 (1996), p. 33.
[65] Records of the Prerogative Court of Canterbury. Thomas Turner Probate Inventory. 1768. Probate 31/533/120.
[66] For more on goldsmith's use of display cases see Clifford, *Silver in London*, p. 41. For more on drapers see Walsh, 'Shop Design and the Display of Goods', p. 160. Top end retailers such as the Wedgwood showroom did use glass display cases to present expensive ornaments. See Robin Reilly, *Josiah Wedgwood 1730-1795* (London, 1992), p. 99.
[67] Records of the Prerogative Court of Canterbury. Thomas Turner Probate Inventory. 1768. Probate 31/533/120, p. 2.
[68] Ibid., p. 6.
[69] Daniel Defoe, *The Complete English Tradesman* (2nd edn, London, 1727), p. 61.

negotiations with foreign suppliers these displays showed a retailers connections and credibility.

**Gathering Stock**

Yet despite the central importance of constructing a varied range of stock, it was not a simple process. As the domestic industry grew from the 1740s onwards offering fine earthenware and porcelain in imitation of Chinese porcelain, retailers had to source ceramic objects from a variety of suppliers to construct the diversity of stock that consumers expected. Sellers patiently built and adapted banks of suppliers by interacting with complex sales networks consisting of manufacturers, auctioneers and other dealers. As Mr William's advertisement indicates most trade took place between producers and large dealers.[70] While larger dealers tentatively balanced their relationships with producers, smaller retailers largely depended on inter-trading between dealers. Dealers deftly facilitated the interface between demand and supply, adroitly exploiting their pivotal position between consumers and manufacturers to relay information on fashion, taste and style between the two.

In the seventeenth and early eighteenth century provincial dealers travelled to London to purchase ceramic goods from the East India Company auctions and from other dealers. By the end of the eighteenth century, this practice continued to operate, with provincial dealers purchasing items from other dealers rather than the auctions.[71] For instance, Thomas Brocas (1756-1818) a china, glass and cheese dealer who

[70] Weatherill, 'The Business of Middlemen', p. 59.
[71] Ibid., p. 64.

operated in Shrewsbury, regularly visited London as well as Manchester, Chester and various local potteries to procure supplies.[72] His London purchases tended to prove profitable as he remarked in August 1810, 'What a world I do live in. With me all has been bustle and confusion – prosperity has strangely shined on my London purchases.'[73] Hence, not only a matter of finding and retaining suitable suppliers, ceramic retailers also had to purchase objects which consumers deemed desirable.

**Deciphering Quality**

From the seventeenth-century onwards, ceramic dealers also increasingly promoted themselves as qualified judges of well-made pottery. After receiving their charter from Charles II in 1664, the Worshipful Company of Glass-Sellers of London supervised the making of glass and the sale of glass and earthenware. The Company carried out periodic searches of producers and sellers to uphold standards of quality by seeking out defective and deceitful wares.[74] In 1691, the Glass-Sellers' Company claimed that glass and earthenware shopkeepers were 'persons of judgment in these commodities'.[75] During the late eighteenth and early nineteenth century, however, like most other guilds and companies, the search powers held by the Glass-Sellers' Company weakened.[76]

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[72] A handbill attached to the second page of Brocas' journal advertised that the ceramic dealer spent a few weeks in London 'every year'. Shropshire Archives, Shrewsbury. Journal of Thomas Brocas. January 1804-June 1815. MS 5492/2.
[73] Journal of Thomas Brocas. 18 August 1810. MS 5492/2.
[74] Alexander L. Howard, *The Worshipful Company of Glass-Sellers of London: From its Inception to the Present Day* (London, 1940), p. 5.
[75] Weatherill, 'The Business of Middlemen ', p. 65.
[76] Howard, *The Worshipful Company of Glass-Sellers of London*, p. 28. For more on the loss of search powers experienced by other guilds see Michael Berlin, '"Broken all in Pieces": Artisans and the Regulation of Workmanship in Early Modern London', in Geoffrey

Consequently, the need for expertise in deciphering quality enlarged. Simultaneously, in the second half of the eighteenth century, shoppers in search of ceramics found themselves navigating an increasingly complex market full of different goods made from new materials. Ideas of quality, therefore, were unstable. Hence chinamen appropriated newspaper advertising, trade cards and shop design to voraciously assert claims of knowledge and expertise, as Mr Williams advert and his claim to 'superior Knowledge' demonstrates.[77] Thus, apart from selling techniques, ceramic retailers also required the ability to match sets and control quality.

As orders of wares arrived in the warehouse, dealers and shopkeepers had to unpack the wares and sort them into sets. Lack of standardisation required dealers to judge the quality of wares, a feat that was increasingly hard as new shapes, bodies and decoration appeared on the market.[78] Failure to do this correctly resulted in a lack of sales, as the example of Lady Shelburne demonstrates. On a visit to the Worcester porcelain factory in 1770 (discussed in chapter one), despite wanting to buy large quantities of pieces, faulty goods resulted in Lady Shelburne only purchasing 'two Sallad Dishes'. She described how 'We saw some very fine Specimens of the Porcelaine, tho' there appears to me many things to be corrected in it, & their Sets so imperfect that I cou'd get nothing compleat to carry with me to Ireland.'[79] As chapter three goes on to discuss, producers, such as Derby and Wedgwood established something close to a brand, specifically a name that could be trusted. Yet in terms of quality, even these

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Crossick (ed.), *The Artisan and the European Town, 1500-1900* (Aldershot and Brookfield, VT, 1997), pp. 75-91.
[77] *Public Advertiser*. 19 December 1789.
[78] Weatherill, 'The Business of Middlemen ', p. 65.
[79] As cited in J. V. G. Mallet, 'Lady Shelburne's visit to Worcester in 1770', *English Ceramic Circle Transactions*, 11:2 (1982), p. 109.

large producers could not guarantee standardisation. Thus ceramic retailers had to establish consumers' trust in their ability to judge quality. Thus, the advertisements examined earlier can be re-read as the retailers selling themselves as judges of quality, someone to be trusted. Establishing that trust, however, was precarious.

Outside of printed advertising, ceramic retailers used the shop environment and sociability to build relationships with their customers. Like other retailers, ceramic dealers used shop design to encourage polite and sociable shopping, with customers encouraged to sit, take refreshments, and make conversation.[80] Shopkeepers, such as grocers, entertained regular customers as 'visitors' to their 'homes', encouraging a sense of relationship and hence trust.[81] For instance, Thomas Turner, a Sussex shopkeeper added a second private room behind the main shop into which he invited particular customers. This layout shaped the shop into a place where the 'hosting' of various social activities could take place, from tea drinking to dinner.[82] Ceramic retailers', who did not benefit from daily interaction with regular customers, also framed their hospitality by consciously creating inviting interiors, a practice that began in the first quarter of the eighteenth century.[83]

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[80] Helen Berry, 'Polite Consumption: Shopping in Eighteenth-Century England', *Transactions of the Royal Historical Society Transactions*, 12 (2002), p. 386; Jon Stobart, Andrew Hann and Victoria Morgan, *Spaces of Consumption: Leisure and Shopping in the English Town, c. 1680-1830* (London and New York, 2007), p.158.

[81] Nancy Cox, *The Complete Tradesman: A Study of Retailing, 1550-1820* (Aldershot and Vermont, 2000), p. 133. Moreover, as Berry's work on the Durham gentlewoman Judith Baker shows retailers were not always the instigators of such attention; customers also sought to build personal relations. Helen Berry, 'Prudent Luxury: The Metropolitan Tastes of Judith Baker, Durham Gentlewoman', in Rosemary Sweet and Penelope Lane (eds), *Women and Urban Life in Eighteenth-Century England: 'On the Town'* (Aldershot and Burlington, VT, 2003), p. 147. Also see Hann and Stobart, 'Sites of Consumption', p. 182.

[82] Stobart, Hann and Morgan, *Spaces of Consumption*, p.158.

[83] As Walsh argues, in the first half of the eighteenth century, creating a domestic setting was characteristic of china shops and drapers in contrast to others such as goldsmith shops. See Walsh, 'Shop Design and the Display of Goods', p. 167.

As contemporaries placed greater significance on physical comfort, ceramic dealers organised shop furniture in such a way as to recognise its importance.[84] Henry Ackerman, a china dealer who died in 1722, used six cane chairs, a painted card table, sixteen canisters, a looking glass, a pair of glass sconces, four pairs of scales, counters, drawers and racks in his shop.[85] Similarly, Thomas Hutchins, a seller of China and Earthenware who died in 1745, had a fireplace in his shop, around which he arranged three chairs, a small bookcase and desk.[86] Here, potential customers sat, enjoying the warmth, while waiting for Hutchins to attend them.

In the second half of the eighteenth century, hospitality reached new heights. The chinaman Thomas Turner listed a 'Backgammon table', 'three gilt sconces', 'three stools', 'one Looking Glass' and 'a small Writing Desk' in his back shop, along with a plethora of prints.[87] Taking customers through to the back shop, gave an air of selectivity whilst the props of genteel sociability reassured customers of the hospitable welcome with which they would be treated. Chairs accommodated weary shoppers, encouraging them to rest and take time within the shop, whilst drawers and racks displayed goods encouraging potential customers to indulge in leisurely browsing.

Ceramic retailers made other attempts to encourage customers to linger in and enjoy the retail environment. Inside the ceramic dealer's shop, alongside the displays of quantity and diversity, the 'domestic' setting also

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[84] Hann and Stobart, 'Sites of Consumption', p. 182. For more on the increased use of the term 'comfort' in the eighteenth century see John. E. Crowley, 'Homely Pleasures: The Pursuit of Comfort in the Eighteenth Century', in Constance Classen (ed.), *The Book of Touch* (Oxford and New York, 2005), p. 82.
[85] Cox and Walsh, 'Their Shops Are Dens', p. 92.
[86] Records of the Prerogative Court of Canterbury. Thomas Hutchins Probate Inventory. 1745. Probate 3/44/66.
[87]Records of the Prerogative Court of Canterbury. Thomas Turner Probate Inventory. 1768. Probate 31/533/120. p. 10.

grew in popularity as a means of display.[88] Even Josiah Wedgwood invoked the domestic setting in his spacious showrooms. In 1774, Wedgwood began renting Portland House, an epic venture, with a ground floor that included a spacious entrance hall, a large four windowed 'shop' and a counting house.[89] On the first floor, in the 'Great Room', Wedgwood re-created a sense of domesticity by laying out dinner services, suggesting that dinner was about to be served.[90] In 1767, he had already planned how he wished to use his larger showroom 'not to show or have a large stock of Ware in Town' but rather to enable him 'to shew various Table and desert services completely set out on two ranges of Tables, six or eight at least'. He further stressed that 'such services are absolutely necessary to be shewn.'[91] By placing new items in a familiar setting, he counteracted worries about innovative objects and built an imagined scenario available for consumption.[92] Simultaneously, the familiarity of the dinner setting interrupted the formality of the retail environment and encouraged shoppers to reach out and touch. Hence, beside a bounty of various goods, retailers also realised the need to present the objects in an accessible way. Dealers used the material environment to encourage customers to explore and converse. They blurred the boundaries of friendship, momentarily

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[88] As, Charles Saumarez Smith argues, the creation of 'atmosphere' in domestic environments as a late eighteenth century phenomenon. Charles Saumarez-Smith, *The Rise of Design: Design and the Domestic Interior in Eighteenth-Century England* (London, 2000), p. 197. Also, as Glennie and Thrift argue, these shopping environments also affected the design on domesticity at home. See Glennie and Thrift, 'Consumers, Identities, and Consumption', p. 34.

[89] Una des Fontaines, 'Portland House: Wedgwood's London Showrooms 1774-94', *Proceedings of the Wedgwood Society*, 2:8 (1970), p. 203.

[90] Cox and Walsh, 'Their Shops Are Dens', p. 93.

[91] As cited in Eliza Meteyard, *The Life of Josiah Wedgwood* Vol. II (London, 1866), pp. 32-33.

[92] For more on the importance of 'narratives' when selling goods see Cynthia Wall, 'The English Auction: Narratives of Dismantlings', *Eighteenth-Century Studies*, 31:1 (1997), pp. 1-25.

establishing relationships with their potential customers, resulting in investments of trust and time on the part of the shoppers.

**Skilful Navigators?**

In light of the structure of the sales and distribution network, the range of new goods and issues of quality, representations of ceramic dealers as skilful navigators heroically crossing the terrain of production appear accurate. Yet, this depiction assumes much about the customers who viewed it. It assumes that customers retained no connections with production and were unable to judge quality and workmanship for themselves. It supposes that shoppers were geographically, socially and economically removed from making. Contemporaries' experiences, however, challenge these assumptions.

Despite the distances that the majority of goods travelled, production did continue near urban environments, particularly London.[93] For instance, between 1740 and 1790 five of the twenty-five porcelain factories active in England, operated just outside the capital, these included Bow, Chelsea, Vauxhall, Limehouse and the works of Charles Gouyn.[94] Thus, the continual representation of production at a huge distance was misleading. Moreover, consumers were not just geographically close to production, they also created and retained other connections to the manufacturing process, such as direct ordering. Admittedly, it was the elite who subsumed the majority share of those contemporaries able to create

[93] See Helen Clifford, 'Making Luxuries: The Image and Reality of Luxury Workshops in Eighteenth-Century London', in P.S Barnwell, M. Palmer and M. Airs (eds), *The Vernacular Workshop: from Craft to Industry, 1400-1900* (York, 2004), pp. 17-27.
[94] Young, 'Manufacturing Outside the Capital', p. 258.

and maintain a workable connection to the key manufacturers of the time. Yet despite this, the continuation of practices such as direct ordering demonstrate that customers could and did navigate their own course through the foreign realm of production.

Hence, in considering how retailers represented themselves, it is important to consider the receptions they excited. Berg and Clifford have argued that, 'As shoppers became further and further divorced from the process of making, so the image of manufacture became more attractive'.[95] Chapter one's examination of manuals and industrial tours demonstrates just how attractive production was. It also shows that contemporaries managed their seeming divorce from the process of making by seeking out information. Like Mrs Phillip Lybbe Powys, other shoppers often had their own experiences of production, which affected how they interacted with the retailing of objects. By taking into account that contemporaries did retain connections to production in various forms this chapter questions their reception of representations of manufacturing. It looks to consumers in order to ask how they used the depictions provided by advertising and how they circumvented them.

**Consuming Production**

Although advertising and marketing techniques were highly sophisticated by the late eighteenth century, it is important not to read them as evidence of a fully-fledged consumer society. The historical scholarship that arose in the 1990s in response to Neil McKendrick's *The Birth of a Consumer Society*

[95] Berg and Clifford, 'Selling Consumption in the Eighteenth Century', p. 162.

has done much to enlighten historians' views of the complexity of consumption in the late eighteenth century.[96] Economic and cultural historians alike have critiqued the existence of a consumer society, as a conscious, political entity in eighteenth-century Britain. As John Brewer asserts, 'The consumer as a political actor, or as a category of person who needed protection or had interests had to await the nineteenth century'.[97] Brewer's view is echoed by Frank Trentham who argues that 'The task ahead is to write histories of consumption, not consumerism.'[98] In its place historical actors have arisen who offer a more nuanced look at the varieties of consumption in the eighteenth century. This more nuanced approach is important, as a means of beginning to understand the complexity of each consumption decision.

In light of this complexity, customers cannot be read as passive bystanders in the process of consumption; openly manipulated by the persuasion of marketing. Were consumers able to circumvent product information formulated by retailers? As we saw in chapter one, through reading manuals and experiencing industrial tours, contemporaries sated their curiosity for understanding making. As this chapter goes on to show, contemporaries, when acting as consumers, created and retained other connections to the production process, such as direct ordering. It examines the importance of economic power in creating these connections and looks

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[96] McKendrick, Brewer and Plumb, *The Birth of a Consumer Society*. For more on the historiographical development of this field see Sara Pennell, 'Consumption and Consumerism in Early Modern England', *The Historical Journal*, 42:2 (1999), pp. 549-564; John Brewer, 'The Error of Our Ways: Historians and the Birth of Consumer Society' [Unpublished Paper]. Presented as part of the Cultures of Consumption Programme (ESRC-AHRB), The Royal Society, London. 23 September 2003; Berg, *Luxury and Pleasure*, pp. 1-16; Jean-Christophe Agnew, 'Coming Up For Air: Consumer Culture in Historical Perspective', in John Brewer and Roy Porter (eds), *Consumption and the World of Goods* (London and New York, 1993), pp. 19-39.

[97] Brewer, 'The Error of Our Ways'.

[98] Frank Trentham, 'Beyond Consumerism: New Historical Perspectives on Consumption', *Journal of Contemporary History,* 39:3 (2004), p. 401.

to the strategies, such as information networks, adopted by the middling orders in their search of their consumer agency.

Unearthing the agency of the eighteenth-century customer presents an unending difficulty. In recent years particular case studies have done much to reveal the diverse consumption experiences of individuals. Amanda Vickery's close reading of Elizabeth Shackleton's engagement in consumption has shown the multifaceted strategies adopted by individuals in their acquisition of objects and stuffs.[99] Similarly, Marcia Pointon's examination of Elizabeth Harley has also shown the fluidity of consumption and ownership in the eighteenth century.[100] Yet, as Sara Pennell asserts, difficulties in the field of consumption have arisen from generalizing outward from the evidence of individual examples; a gendered reading of eighteenth-century consumption as particularly female has emerged from such work.[101] Margot Finn's work has done much to reshape this vision by adding an examination of four male consumer experiences to emerging narratives.[102] Here men are seen as active participants in the purchase and distribution of a variety of goods, including domestic and culinary products.[103]

It is now clear that both men and women acted as customers in late eighteenth century Britain, many contemporaries also acquired goods outside the conventional market place. Sub-markets, such as the second-

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[99] See Amanda Vickery, 'Women and the World of Goods: A Lancashire Consumer and her Possessions, 1751-1781', in John Brewer and Roy Porter (eds), *Consumption and the World of Goods* (London and New York, 1993), pp. 274-301; Amanda Vickery, *The Gentleman's Daughter: Women's Lives in Georgian England* (New Haven and London, 1998).
[100] See Marcia Pointon, *Strategies for Showing: Women, Possession, and Representation in English Visual Culture 1665-1800* (Oxford, 1997).
[101] Pennell, 'Consumption and Consumerism', p. 554.
[102] Margot Finn, 'Men's Things: Masculine Possession in the Consumer Revolution', *Social History*, 25:2 (2000), pp. 133-155.
[103] Finn, 'Men's Things', p. 138.

hand market, continued as a means of obtaining goods.[104] Moreover, contemporaries also consumed objects in entirely non-monetary ways. Gifting, inheritance and lending practices circulated goods between members of social and kinship networks.[105] Consumers were able to retain a mixture of acquisitive practices and thereby circumvent some of the conventions offered by new retailing experiences, such as advertising. Meanwhile, more direct means of circumventing retail practices appeared in the form of direct ordering from manufacturers

Although manufacturers did much to court connections with wealthy families as a means of promoting their own goods, there is evidence that these families were equally keen to create a relationship, to reap the benefits that such a connection offered. It gave individuals an esteemed role within the family structure. When in charge of ordering for various family members and strands, these individuals wielded hefty cultural and economic leverage. For instance, in the mid-1760s Lady Henrietta Grey (later Countess of Stamford) began what turned into a protracted process of ordering on behalf of her brother. Lady Grey's role in this negotiation stemmed not only from her ability to judge tastefully, but also from her connection with 'our friend' Josiah Wedgwood.[106]

On 1 October 1764, the order process began and Lady Grey reassured her brother of her hope that 'it will not be long before I acquaint

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[104] Stana Nenadic, 'Middle-Rank Consumers and Domestic Culture in Edinburgh and Glasgow, 1720-1840', *Past and Present*, 145 (1994), p. 133. For more on the second-hand market for clothers see Beverly Lemire, *Fashion's Favourite: The Cotton Trade and the Consumer in Britain, 1660-1800* (Oxford, 1991), pp. 61-76 and pp. 176-9.

[105] See Vickery, 'Women and the World of Goods', pp. 274-301; Pointon, *Strategies for Showing*, pp. 15-57; Finn, 'Men's Things', pp. 133-155. Evidence of intra-family inheritance and lending in the Portland Family Papers. University of Nottingham Special Collections, Nottingham. Portland Papers. Letter from Lady Hervey to Third Duke of Portland. 29 April 1766. PwF 5071.

[106] Portland Papers. Letter from Henrietta, Lady Grey [later Countess of Stamford] to her brother, Duke of Portland. 22 September 1767. PwF 4557.

you with them being finished.'[107] Her connection, she hoped, would help expedite her order. Elizabeth Montagu held a similar hope whilst negotiating the purchase of a tea vase from Matthew Boulton during the 1770s. In October 1771 she found herself writing to Boulton to remind him of the tea vase order that she had placed with him previously.[108] In October 1772 she was still 'in hopes, before this time to have been in possession of a tea vase.[109] By January 1773 she despaired, 'I have lived in hope of an elegant tea vase, but alas no Vase is arrived'.[110] Despite a strong relationship with Boulton, built on mutual calls and invitations, Montagu was not saved from the lengthy process. Lady Grey fared better though, and within three months the Staffordshire wares she had ordered 'arrived safe' to her brother.[111]

The process, however, was not over. One part of the order, the tea set required by the Duke of Portland, had not arrived because 'Grooby's Friend at Burslem is trying to make an improvement upon it'.[112] Her close connection to Staffordshire, and to Wedgwood in particular, put Lady Grey in a complex position. She was at once consumer extraordinaire, on top of the latest fashions and developments, yet simultaneously her intimacy with those developments meant that she had a close relationship to the production process. By using her close connection, Lady Grey managed to entirely circumvent the representations of production proffered by

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[107] Portland Papers. Letter from Henrietta, Lady Grey [later Countess of Stamford] to her brother, Duke of Portland. 1 October 1764. PwF 4528.
[108] Birmingham Central Library, Birmingham. Matthew Boulton Papers. Letter from Elizabeth Montagu to Matthew Boulton. 31 October 1771. MS 3782/13/53/45.
[109] Matthew Boulton Papers. Letters from Elizabeth Montagu to Matthew Boulton. 26 October 1772. MS 3782/13/53/51-60.
[110] Matthew Boulton Papers. Letters from Elizabeth Montagu to Matthew Boulton. 23 January 1773. MS 3782/13/53/51-60.
[111] Portland Papers. Letter from Henrietta, Lady Grey [later Countess of Stamford] to her brother, Duke of Portland. 24 December 1764. PwF 4531.
[112] Ibid.

retailers. She mentioned to her brother that she hoped to show him the new tea set when they both met in London, suggesting that she had taken on the role of retailer herself and offered her own interpretation of production as a world of 'friends', attempting to make 'improvements'.

Consumers' use of direct ordering allows us to question how contemporaries received retailers' representation of production as foreign and unknowable. As both chapter one and the above example demonstrate, contemporaries knew production. Yet as domestic production of porcelain and fine earthenware expanded in the second half of the eighteenth century the use of direct ordering had limitations. Shoppers were not able to procure the range of stock open to ceramic dealers. Hence, direct ordering by individuals ebbed in the second half of the eighteenth century.[113] Thus ceramic retailers provided a different means of navigating shopping. At the same time, however, shoppers developed other ways of finding independent information about goods. One method was through information networks.

Members of the provincial gentry, keen for up-to-date information about goods and shopping, largely relied on informal social networks.[114] Friends and family, who had handled goods in showrooms, visited various warehouses or saw objects in others' houses, offered advice and information. The material culture habits of Elizabeth Shackleton confirm that highly complex networks of information between kin and other connections allowed contemporaries to accumulate consumption knowledge.[115] Although the members of these networks did read information supplied by retailers in newspapers and on circulated trade

[113] Weatherill, 'The Business of Middlemen ', p. 66.
[114] Stobart, 'Selling (through) Politeness:', p. 311.
[115] Vickery, 'Women and the World of Goods', p. 290.

cards, these networks allowed members to construct alternative narratives about production and consumption. These other perspectives circumvented advertising and offered contemporaries a different means of understanding ideas of making and production.

**Conclusion**

Contemporaries' access to forms of information outside of retailers and manufacturers' influence led to a complex weave of ideas concerning production. Retailers used various forms of marketing – newspaper advertisements, trade cards, billheads, and shop displays – encouraging potential shoppers to think of their wares as 'consumer goods', which they had procured from distant lands. Businesses tended to represent the consumption of goods as a process removed from production. When retailers represented manufacturing, it appeared in the form of a rural idyll – something romantic and nostalgic. Yet despite the ever-increasing geographical, social and imaginary distance between production and consumption, contemporaries continued to retain their own means of gaining knowledge of production. Their ability to do this was important as they walked through the shop door, into the shop itself.

Alongside direct ordering and information networks consumers developed other means of procuring independent knowledge. Once inside the shop they handled a selection of goods and made their choice. In handling the goods, shoppers met with the actual physical evidence of the process of making. Hence, through this process they obtained another form of independent information as the next chapter goes on to explore.

# Chapter Three

## It 'entertained me for an hour':

## Consumers and the Pursuit of Workmanship


Fig. 3.1. Duesbury & Co. 1774. Trade Card.
Victoria and Albert Museum, London.[1]

Duesbury & Co. issued the above trade card in 1774, to advertise the Bedford Street warehouse in Covent Garden as the main outlet for the Derby Porcelain Factory. Vases, terrines, ewers, plate and a tea service surround the central oval. Here in the middle Duesbury & Co. listed the many attributes of their 'large & elegant' suite of rooms. Below this, in small typeface at the bottom of the text they added a brief note, 'N.B. The Rooms are well air'd'. Duesbury & Co. and their London manager Joseph Lygo were keen to stress that the shopping experience their premises

[1] Victoria and Albert Museum, London. Print and Drawing Collection. Trade Card of Duesbury & Co., Manufacturers of Derby and Chelsea Porcelain, Bedford Street, Covent Garden, London. 1774. E. 1638-1907.

offered was at one remove from the olfactory norm - a norm that was clearly hot, dusty and smelly.

Similarly, an advertisement featured in *The Times* on 26 February 1788, made claims of pleasant coolness on behalf of Turner, Abbott & Newbury. At the end of a long advertisement espousing the virtues of the ware sold in their premises at No. 82 Fleet Street, they noted that 'The Ware-rooms are kept agreeably warm.'[2] The amicable tone of both these notes spoke to polite consumers everywhere, it also appealed directly to their senses. Just as Thomas Peacock, discussed in chapter two, used his trade card to stress the town-like environment of his retail space so other retailers used their advertisements to stress space and comfort.

Ceramic dealers further emphasised the pleasantries of their shop environments through the use of light. Just as manufacturers increasingly noticed the importance of light in making objects, so retailers realised that customers required light in order to see the goods on sale.[3] Light, however, was scarce in the eighteenth-century retail space. As window spaces performed the important function of displaying a variety of goods, the shop window provided little light. It was necessary therefore for retailers to provide it by other methods. In 1755, a French visitor to London commented that skylights were a particularly useful means of allowing light in. 'These shops they make as deep as possible they can; the further end is generally lighted from above'.[4] Ceiling windows, skylights and

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[2] As cited in A. P. Ledger, *The Bedford Street Warehouse and the London China Trade 1773-1796* Vol. 2 (Derby, 2002), p. 473.

[3] For more on manufacturers noticing the importance of light in making objects see chapter five.

[4] Cited in Claire Walsh, 'The Newness of the Department Store: A View from the Eighteenth Century', in Geoffrey Crossick and Serge Jaumain (eds), *Cathedrals of Consumption: The European Department Store, 1850-1939* (Aldershot and Brookfield, 1999), p.

cupolas became increasingly common features in shops in the second half of the eighteenth century. Retailers also developed more inventive ways of introducing light. By 1807 Pellatt & Green had patented their "Glass Illuminators" which admitted daylight into the internal parts of buildings.[5]

In contrast, larger warehouses, such as Wedgwood's Portland House showroom, used more direct forms of natural light, benefiting from large windows and first floor locations. As can be seen at the top of the plan, shown below, the 'Great Room' on the first floor ran along the full width of the house and thus the light from seven windows lit the objects displayed inside.[6]

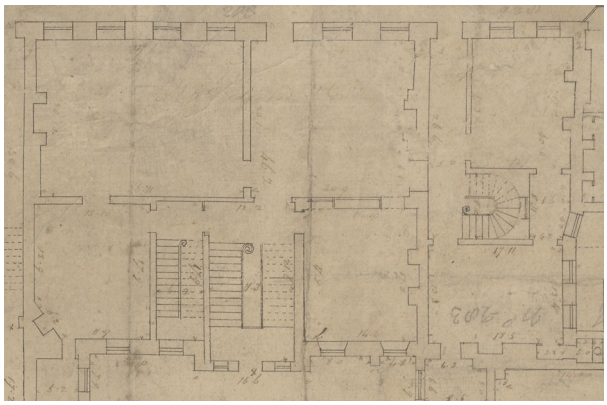

Fig. 3.2. Ground Plans of Soho House, Greek Street. University of Nottingham Special Collections, Nottingham.[7]

Retailers used mirrors to further exploit natural light sources. It could also be bolstered through the use of lamps, candlesticks and sconces.[8] With light flooding in from the front of the building and mirrors and lamps producing yet more light, the showroom epitomised polite, spacious retailing. In

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49; Bernard Denvir, *The Eighteenth Century: Art, Design and Society 1689-1789* (London, 1983), p. 44.

[5] Kathryn A. Morrison, *English Shops and Shopping: An Architectural History* (New Haven and London, 2003), p. 38.

[6] Walsh, 'The Newness of the Department Store', p. 64.

[7] University of Nottingham Special Collections, Nottingham. Portland Papers. Ground Plans of Soho House Greek Street. P1 E1 0/5/16-17. The plan is littered with written references to Mr Wedgwood.

[8] Walsh, 'The Newness of the Department Store', p. 49.

contrast to the polite connotations of well-lit showrooms, sales by candlelight were notorious for facilitating the sale of stolen goods. Natural light allowed a more correct stage for politeness and its assumed transparency, artlessly attempting to guide contemporaries through social interactions. Yet, this chapter asserts, elaborate displays, spacious environments, air and light must be read as more than polite settings for retail transactions.

**The Shop Space**

In 1759, London was home to at least 21,603 shops.[9] Different types of shops intermingled on the bustling streets of the capital.[10] Some vendors continued to sell from their shop windows, which allowed quick sales and high turnovers.[11] Other retailers filled their windows with glass and choreographed elaborate window displays. As discussed in chapter two, ceramic retailers employed particularly complex window displays. Such displays encouraged customers to enter the shop and engage with the retail environment. Early eighteenth-century contemporaries, such as Daniel Defoe, recognised the new importance of the shop interior and its ability to manipulate.[12] In 1726, he described how 'Never, was such painting and gilding, such sashings and looking-glasses, among the shopkeepers as there

[9] Hoh-Cheung Mui and Lorna H. Mui, *Shops and Shopkeeping in Eighteenth-Century England* (London, 1989), p. 40.
[10] As Kathryn Morrison argues, glazed fronts did not automatically oust open front shops at a single stroke. A print depicting a view of Bishopgate in 1737 shows the two types of shops coexisting. See Morrison, *English Shops and Shopping*, p. 41.
[11] Nancy Cox and Claire Walsh, '"Their Shops Are Dens, The Buyer Is Their Prey": Shop Design and Sale Techniques', in Nancy Cox, *The Complete Tradesman: A Study of Retailing, 1550-1820* (Aldershot and Vermont, 2000), p. 81.
[12] Cox and Walsh, 'Their Shops Are Dens', p. 90.

is now'.[13] In ceramic retail environments, shopkeepers used shelves, hooks and bookcases to house row after row of objects. By the second half of the eighteenth century, the majority of retail concerns had acquired glazed windows, establishing the importance of the shop interior as *the* selling space.[14]

Nancy Cox has argued that during the eighteenth century the role of salesmanship gained new ground, a view echoed in the work of Helen Berry.[15] Shop assistants were required to invoke the widely understood rules of politeness in order to ease the social interaction of the shop. Yet as the eighteenth century wore on, politeness, as a means of interaction, became less pervasive. Contemporaries were increasingly critical of its ability to bridge social gaps and began to regard it as a form of affectation.[16] Fanny Burney's biting description of the emasculation of shop men is a case in point. In Burney's 1778 novel *Evelina or the History of a Young Lady's Entrance into the World*, Evelina's distrust of shop men is palpable, 'such men! So finical, so affected…they recommended caps and ribbands with an air of so much importance, that I wished to ask them how long they had left off wearing them.'[17]

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[13] As cited in Ibid.

[14] For example, by 1750 Cheapside (relatively poorer than the fashionable areas in the west of London) was lined with shops with glass windows. See Morrison, *English Shops and Shopping*, p. 42. Moreover, The visual motifs included on trade cards demonstrate this shift. As Philippa Hubbard notes, 'later cards largely rejected visual references to the street, instead emphasising the closed shop space, and the private exchanges therein.' Philippa Hubbard, 'The Art of Advertising: Trade Cards in Eighteenth-Century Consumer Cultures' (Unpublished PhD Thesis, University of Warwick, 2009), p. 93.

[15] Nancy Cox, *The Complete Tradesman: A Study of Retailing, 1550-1820* (Aldershot and Vermont, 2000), p. 133; Helen Berry, 'Polite Consumption: Shopping in Eighteenth-Century England', *Transactions of the Royal Historical Society*, 12 (2002), p. 377.

[16] R. H. Sweet, 'Topographies of Politeness', *Transactions of the Royal Historical Society*, 12 (2002), p. 364.

[17] Fanny Burney, *Evelina or The History of a Young Lady's Entrance into the World* [1778] (London and New York, 1965), p. 16.

Hence, this chapter argues that in the second half of the eighteenth century, before the more impersonal shopping of the nineteenth century, the retail environment was something more complex than a polite space. This was particularly true of ceramic retailers who advertised their shops as light and spacious. Light allowed visitors to see, clean air encouraged potential shoppers to breath and smell. Light and space made the shop experience sensory and encouraged customers to engage their senses, reach out and touch. Thus, this chapter asserts that alongside politeness, light and space framed the shop environment as sensory.

In the previous chapter, this thesis argued that retailers used advertisements, trade cards, and shop displays to represent production as something removed from the retail environment; an almost separate realm that could only be navigated with their help. Yet customers could and did circumvent these representations by using personal links to the production process and maintaining alternative information networks. As with chapter one, eighteenth-century contemporaries conjured up multiple ways of understanding production. This chapter argues that the sensory space created and promoted by ceramic retailers encouraged consumers to employ their senses – to reach out and touch. It argues that through touching and handling goods consumers viewed production and gained independent information about the quality and workmanship of ceramic objects.

**Handling Workmanship**

Research by Berry, Walsh and Stobart, Hann and Morgan has placed increasing emphasis on the primacy of browsing and handling goods whilst navigating the retail experiences of the eighteenth century.[18] If the customer had not already perused a variety of goods on display, tentatively touching and looking, then they expected to be shown a variety of goods by the shop assistant. The assistant would produce one object after another, either taking them down from nearby displays, bringing them in from stock rooms, or, in the case of smaller goods, producing them from behind the counter. Shop assistants used this practice to imbue the process with a sense of 'selective revelation'.[19] The goods were passed to the customer and retailers allowed them to experience a momentary sense of ownership.[20] Encouraged by the sensual nature of the retail environment, customers employed various sensory skills; they touched, saw, smelled, tasted and even listened in order to produce multiple perceptions of each object. Thus, sensory interaction with the goods was an important part of shopping practice.

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[18] See Berry, 'Polite Consumption', pp. 375-94; Andrew Hann and Jon Stobart, 'Sites of Consumption: The Display of Goods in Provincial Shops in Eighteenth-Century England', *Cultural and Social History*, 2 (2005), p. 183; Jon Stobart, Andrew Hann and Victoria Morgan, *Spaces of Consumption: Leisure and Shopping in the English Town, c. 1680-1830* (London and New York, 2007), p. 166; Claire Walsh, 'Shop Design and the Display of Goods in Eighteenth-Century London', *Journal of Design History*, 8:3 (1995), p. 171; Walsh, 'The Newness of the Department Store', p. 59; Claire Walsh, 'The Advertising and Marketing of Consumer Goods in Eighteenth-Century London', in Clemens Wischermann and Elliott Shore (eds), *Advertising and the European City: Historical Perspectives* (Aldershot, 2000), p. 89; Claire Walsh, 'Shops, Shopping and the Art of Decision Making in Eighteenth-Century England', in John Styles and Amanda Vickery (eds), *Gender, Taste and Material Culture in Britain and North America 1700-1830* (London and New Haven, CT, 2006), p. 170; Claire Walsh, 'Shopping at First Hand? Mistresses, Servants and Shopping for the Household in Early-Modern England', in B. E. Hussey and Margaret Ponsonby (eds), *Buying for the Home: Shopping for the Domestic from the Seventeenth Century to the Present* (Aldershot, 2008), p. 16.

[19] Walsh, 'Shop Design and the Display of Goods', p. 172.

[20] Walsh, 'Shops, Shopping and the Art of Decision Making', p. 170.

This chapter builds on the work of these scholars by questioning the effect of browsing on eighteenth-century understandings of luxury objects, particularly in terms of quality and workmanship. The chapter argues that retail experiences exposed shoppers to different objects which subsequently shaped their understanding of the material world. It asks how sensory interaction with objects enabled contemporaries to construct a framework through which to conceptualise the material culture around them. More particularly, it argues that sensory interaction with multiple goods was one of the key means by which shopper's comprehended concepts of workmanship.

This chapter focuses on consumer purchases of ceramic objects and examines a variety of sources, from engravings to objects, in order to demonstrate the role of haptic skills in this act. Sensory interaction with objects, however, was not simple. As anthropologists of the senses, such as Constance Classen and David Howes stress, the senses are cultural, as well as physical.[21] The use of the senses, and the understandings that contemporaries constructed through them, were historically and culturally bound. Hence the chapter begins by exploring how different literary sources described browsing for goods in gendered and satirical terms. The chapter then contrasts these readings against visual evidence to illustrate how handling goods was also represented positively.

This chapter understands the skill of handling goods as a practice, which required experience and competence. It asks what information shoppers gained from touching various objects. Through an examination of

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[21] Constance Classen, 'Foundations for an Anthropology of the Senses', *International Social Sciences Journal*, 153 (1997), p. 401; David Howes, 'To Summon the Senses', in David Howes (ed.), *The Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses* (Toronto, Buffalo and London, 1991), p. 3.

diary sources, letters, and objects this chapter argues that manufacturers, retailers and consumers all understood that tactile interaction with goods allowed potential shoppers to gain independent information about the quality of products.

The chapter then concludes by demonstrating how repetitive handling in search of quality meant that shoppers gained their own conception of what constituted workmanship. For this thesis, the process of handling must be seen as one of the key ways in which contemporaries acknowledged 'workmanship'.

**Browsing**

According to many eighteenth-century commentators, numerous women spent the majority of their mornings flitting from shop to shop. As Mary Ann Hanway described in her 1798 novel *Ellinor*, 'in fashionable language, they were gone a shopping.'[22] Certainly, much fiction written in the second half of the eighteenth-century demonstrates that the reading public perceived shopping as a regular morning activity for genteel city inhabitants.[23] What then did going 'a-shopping' actually entail?

In a collection of essays entitled *The Plain Dealer* published in 1727, a mercer is depicted complaining about the way ladies 'tumble over my goods, and deafen me with a round of questions'.[24] Here, shopping involved browsing through a variety of goods, asking questions of the

[22] Mary Ann Hanway, *Ellinor; Or The World As It Is* Vol. 1 (London, 1798), p. 162. <Eighteenth-Century Collections Online> (17 February 2009).
[23] See Fanny Burney, *Cecilia, or Memoirs of an Heiress* [1782] (Oxford and New York, 1988), p. 52; Helen Maria Williams, *Julia, A Novel* Vol. I (Dublin, 1790), p. 33; Agnus Maria Bennett, *Juvenile Indiscretions. A Novel* (London, 1786), p. 227. <Eighteenth-Century Collections Online> (19 June 2008).
[24] As cited in Walsh, 'The Advertising and Marketing of Consumer Goods', p. 88.

retailer and gaining information. Similarly, in *Evelina*, Fanny Burney's young heroine described how the mercers 'produced so many, I knew not which [silk] to fix upon; and they recommended them all so strongly, that I fancy they thought I only wanted persuasion to buy everything they showed me.'[25] In the first half of the eighteenth century, the perceived ubiquity of this practice led to the creation of the term 'Silk Worms' by hackney carriage drivers to describe women who regularly went 'a-shopping'. These women supposedly encouraged shop assistants to unravel multiple lengths of textiles and then bought nothing.[26]

Hackney carriage drivers were not alone in their critique of shopping practices. Fiction writing regularly depicted consumers as concerned at the tenacity of some fellow shoppers. In her 1796 novel *Camilla or a Picture of Youth*, Fanny Burney describes her central character's response to the shopping practices of an acquaintance. Camilla explains how the pretext of gathering information allowed Mrs Mittin to enter 'almost every shop, with inquiries of what was worth seeing, she attended to no answer nor information, but having examined and admired all the goods within sight or reach, walked off to obtain, by similar means, a similar privilege further on.'[27] Here, browsing involved moving from shop to shop and interacting with various goods not only by sight, but also through handling. Yet Camilla appears surprised that Mrs Mittin is not taking the shopping process seriously. Her apparent lack of attendance to the information she is gathering worries Camilla.[28]

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[25]Burney, *Evelina*, p. 16.
[26] Berry, 'Polite Consumption', p. 387.
[27] Fanny Burney, *Camilla, or a Picture of Youth* [1796] (Oxford University Press Edition: Oxford, 1983), p. 607.
[28] Burney, *Camilla*, p. 607.

The extent of inconvenience retailers would tolerate was frequently perceived as entirely dependent on the rank of the customer, as Mrs West noted in her novel of 1799, *A Tale of the Times*. She described how, 'Lady Arabella…ordered and counter-ordered; bought and returned; thought this monstrous pretty, and that monstrous frightful; gave as much trouble as her rank would possibly enable her to impose'.[29] Yet despite the perception that the act of browsing inconvenienced retailers, other evidence suggests that they actively encouraged it to promote sales.

Commercial literature, such as Robert Campbell's 1747 work *The London Tradesman,* advised that mercers should not be 'an aukward clumsey Fellow, such a creature would turn the Lady's Stomach in a morning, when they go their Rounds, to turn Silks they have no mind to buy'.[30] Moreover, it was not just mercers who encouraged browsing. In 1767, Josiah Wedgwood described to his soon-to-be London partner Thomas Bentley how he required a larger showroom 'to shew various Table and desert services completely set out on two ranges of Tables, six or eight at least' with which 'to do the needful with the Ladys in the neatest, genteelest, and best method.'[31] Hence, in order to avoid being labelled an 'awkward clumsy fellow', retailers employed politeness and sociability alongside well-crafted shop design in the hope that customers would linger for longer.

At the turn of the century, all the complexities surrounding browsing remained silenced beneath the weighty continuance of the 'gadding' female stereotype. William Gilpin's remarks in his 1807 work

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[29] Mrs West, *A Tale of the Times* Vol. II (London, 1799), p. 114.
[30] As cited in Cox, *The Complete Tradesman*, p. 143.
[31] As cited in Eliza Meteyard, *The Life of Josiah Wedgwood* Vol. II (London, 1866), pp. 32-33.

*Dialogues on Various Subjects* demonstrate the longevity of this negative image.[32] In *The Advantages of a Town Life, and Country Life, Compared*, both protagonists, although in disagreement about the merits of town and country life, nevertheless agreed that greater control over women's activities in town was necessary. If only to 'keep many a gadding female out of mischief – it would save the shopkeeper much trouble – it would make the streets more comfortable, and commodious for those who had real business'.[33] For them it was clear that women were not involved in 'real business' and therefore their presence was open to criticism.

The endurance of these gendered stereotypes obscures two important aspects. First, browsing was not just an elite female activity; a wide range of people practiced it. Notwithstanding Amanda Vickery's stress on the importance of female consumption work, Margot Finn has shown, both men and women shopped for everyday and dynastic items.[34] For instance, Oliver Fairclough's research into the consumption habits of Sir Watkin Williams Wynn demonstrates regular male involvement in china purchases.[35] Alongside evidence of men making purchases, sources such as James Schofield's 1796 *Scarborough Guide* and Charles Topham's 1791 pocket-sized *Tour of Ireland*, illustrate that men also engaged in the practice of browsing.[36] Schofield described how 'Shopping, especially for

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[32] As cited in Deidre Shauna Lynch, 'Counter Publics: Shopping and Women's Sociability', in Gillian Russell and Clara Tuite (eds), *Romantic Sociability: Social Networks and Literary Culture in Britain, 1770-1840* (Cambridge, 2002), p. 223.
[33] William Gilpin, *Dialogues on Various Subjects* (London, 1807), p. 153.
[34] Amanda Vickery, *Behind Closed Doors: At Home in Georgian England* (New Haven and London), p. 128; Amanda Vickery, 'His and Hers: Gender, Consumption and Household Accounting in Eighteenth Century England', *Past and Present*, Supplement 1 (2006), p. 12; Margot Finn, 'Men's Things: Masculine Possession in the Consumer Revolution', *Social History*, 25:2 (2000), p. 142.
[35] Oliver Fairclough, 'Buying Ceramics and Glass in the 1770s: the case of Sir Watkin Williams Wynn', *English Ceramic Circle Transactions*, 19:1 (2005), pp. 46-70.
[36] James Schofield, *The Scarborough Guide* (2nd edn, Hull, 1796), p. 63; Charles Bowden Topham, *A Tour Through Ireland* (Dublin, 1791), p.52. Thanks to Anna Moran for

articles of foreign elegance, is a very usual amusement among the ladies, who are not unfrequently attended by the gentlemen.' He went on to note that, 'both sexes have only to attend, and they will not only find various things they really want, but very many others they may *fancy* they do.'[37] Moreover, Topham was delighted with Mr Kennedy's glass and china shop in London and exclaimed that it 'entertained me for an hour.'[38] In addition to the inclusion of men, research by Glennie and Thrift has shown, rather than merely an elite activity, the middling-sort and ordinary labouring people also entered shops 'in order to look at goods, to touch them, and to talk about them.'[39] Hence, for many, browsing was an important means of understanding the material world.

Finally, alongside evidence of wider engagement in the shop, the image of 'gadding female' is further weakened by positive representations of browsing. Engravings portray browsing as a thoughtful, meditative act - that is, as 'real business'.

**The Work of Browsing**

Female work, especially work using hands, was a problematic entity in eighteenth-century culture. The social status of fictional female characters, from Daniel Defoe's Moll Flanders to George Elliot's Dinah Morris, was

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suggesting this source. For discussion of male browsing in seventeenth century see P. D. Glennie and N. J. Thrift, 'Consumers, identities, and consumption spaces in early-modern England', *Environment and Planning A*, 28 (1996), p. 30.

[37] Schofield, *The Scarborough Guide*, p. 63.

[38] Topham, *A Tour Through Ireland*, p.52. Mr Kennedy was an agent for the Waterford Glass House but also sold ceramics.

[39] Glennie and Thrift assert that witness depositions in court cases for alleged shoplifting show that the 'presence of labouring people looking at cotton prints or handkerchiefs was certainly not considered unusual.' These sources counter previous research looking at sales ledgers, which by primarily recording buying activity offer an exaggerated view of class segregation in shops. Glennie and Thrift, 'Consumers, identities, and consumption spaces ', p. 36.

consistently determined by the condition of their hands.[40] If we consider browsing as a form of hand*work*, the derogative reference to the 'gadding female' should be understood as a symptom of a more controversial issue: women's work. Yet while women's efforts to browse and shop were critically received on one level, these practices were crucial in the selection of good quality products. Therefore, while anecdotally critical, numerous representations attest to the importance of handling objects as the following images illustrate.


Fig. 3.3. Messrs Harding, Howell & Co., c.1810. Engraving.
Bodleian Library, University of Oxford.[41]

Despite the prominence of terms such as 'Silk Worm' in the eighteenth century, the unknown artist responsible for this depiction of the showroom of chintz dealers Harding, Howell & Co. shows a more conservative view

[40] Daniel Defoe, *Moll Flanders* [1722] (Oxford and New York, 1998); George Eliot, *Adam Bede* [1859] (Oxford and New York, 1998).
[41] Bodleian Library, University of Oxford, Oxford. John Johnson Collection. Messrs Harding, Howell & Co. c. 1810. Trades and Professions 6 (44).

of textile shopping practices. Located in Schomberg House at 89 Pall Mall, the ground floor showroom of Harding, Howell & Co was separated into four different departments by glazed mahogany partitions.[42] As the eye glances to the scenes in the foreground, it is drawn to the light cast on four sets of shoppers involved in furtive negotiations with shop assistants. Colourful swathes of fabric drape down from rolls of fabric in cylindrical wall stores or from mounts attached to pillars. Each shopper is cast touching various pieces of fabric. Clearly, it is not enough to see the fabric; it must be felt and touched too, in order to gauge the weight and hang of the material. Here, shopping practices appear thoughtful and highly sensory.


Fig. 3.4. Interior view of Wedgwood and Byerley, York Street, St James's Square, Westminster, 1809. Engraving. Guildhall Library, London.[43]

[42] Morrison, *English Shops and Shopping*, p. 40.
[43] Guildhall Library, London. Collage Collection. Interior view of Wedgwood and Byerley, York Street, St James's Square, Westminster. 1809. 29195.

Likewise the above engraving of the Wedgwood and Byerley showroom on York Street in St James's Square, published by Rudolph Ackerman in 1809, presents the 'principal room of a suite' awash with magnificent light.[44] Sunshine splashes in through the sash windows on the right of the image. Glass cabinets and vast tables display the variety of objects on offer. Surfaces glint and gleam catching the eye. The lines of the floorboards drag the eye back to furthest corners of the room, emphasising the space within. Similarly, long vertical pillars and windows give a further sense of room and light. Potential customers, alone or in couples, use the space. All their senses are engaged as they walk, sit, and browse.

Only one figure stands out in the foreground. She is a lone woman, wearing red. She has been attracted by the display of goods neatly arranged on a table in the centre of the room. She stands by the table and is pictured looking almost pensive in the act of reaching out. Her attention is held by two ceramic objects, which she grasps in either hand. As Elizabeth Harvey argues, in the early modern period 'the hand… appears with some regularity as a signifier of touch.'[45] Hence, in the midst of all these objects, light and activity, the lone figure appears silently engrossed in the act of touching and comparing the objects before her. In this instance, shopping practices are portrayed as thoughtful, meditative and sensory.

A whole variety of goods were browsed for in this way. Shopping for everyday items such as foodstuffs required particularly high levels of haptic skills.[46] Account holders rarely trusted proxy shoppers such as servants with active shopping requiring sensory discernment and price

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[44] *The Repository of Arts, Literature, Commerce, Manufactures, Fashions and Politics* (London, 1809), p. 102.
[45] Elizabeth D. Harvey, 'Introduction: The "Sense of All Senses"', in Elizabeth D. Harvey (ed.), *Sensible Flesh: On Touch in Early Modern Culture* (Philadelphia, 2002), p. 10.
[46] Walsh, 'Shopping at First Hand?', p. 16.

negotiation.[47] In the 1780's, Betsy Sheridan was at pains to make her sister aware of the complex nature of shopping and the time she was required to invest at Carnaby Market.[48] She wrote, 'I assure you Madam that I have business on my hands. I went myself to market this morning.' The reason for her going was made clear, her presence was needed in order to establish herself as a shopper. 'I have already establish'd my self as Customer to Fish Monger and Poulterer so that I have only to chuze what I wish, my Butcher calls every morning, I go sometimes to shew that I am willing to attend to these matters.' Housewifery manuals giving advice about purchasing foodstuffs stressed the need for shoppers to establish knowledge independently of the shopkeeper's advice by using sensory skills.[49] Shoppers were encouraged to be proactive in their touching. Pulling, squeezing, pinching and poking were all necessary skills in establishing the freshness of food.[50]

**Quality and Workmanship**

Apart from foodstuffs, the purchase of goods such as textiles and ceramics also depended on sensual interaction with a variety of wares in order to discern independent information about objects.[51] Although not all consumers purchased luxury consumer goods after a period of browsing in various shops, shopkeepers did encourage it.[52] Moreover, it provided shoppers with the means to accumulate valuable information on the quality

[47] Stobart, Hann and Morgan, *Space of Consumption*, p. 154.
[48] William LeFanu, (ed.), *Betsy Sheridan's Journal: Letters from Sheridan's sister 1784-1786 and 1788-1790* (London, 1960), p. 36.
[49] Walsh, 'Shopping at First Hand?', p. 16.
[50] Ibid.
[51] Berry, 'Polite Consumption', p. 387.
[52] Stobart, Hann and Morgan, *Spaces of Consumption*, p. 156.

and suitably of the object. The tastefulness of an object could primarily be discerned by sight, but, in a world of non-standardised goods where, as Mimi Hellman argues, the production of sameness was a cause for wonder and marvel, quality and workmanship had to be sought out and felt.[53]

As in earlier periods, 'consumers were used to assessing the different qualities of non-standardised goods'.[54] The importance of this skill then continued throughout the eighteenth century and in the later decades it increased, particularly in the ceramics industry. As discussed in chapter two, during the late seventeenth century and early eighteenth century, as new, largely imitative goods came onto the market, ideas of workmanship became more important.[55] Simultaneously the fashion for dinner services and tea sets made a virtue out of standardisation and sameness. In the same period, as guilds power to search and regulate quality reduced and product batches increased, notions of quality became increasingly unstable.[56] Hence, consumers had to work hard to gain useful, independent information about the quality of goods and their production.

Porcelain and earthenware manufacturers acknowledged the problems that remained inherent within the eighteenth-century ceramics industry. Making pieces 'alike' was a particular problem. As the Derby

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[53] Mimi Hellman, 'The Joy of Sets: The Use of Seriality in the French Interior', in Dena Goodman and Kathryn Norberg (eds), *Furnishing the Eighteenth Century: What Furniture Can Tell Us About the European and American Past* (New York and Abingdon, 2007), p. 140.
[54] Walsh, 'The Advertising and Marketing of Consumer Goods', p. 80.
[55] Jan de Vries, *The Industrious Revolution: Consumer Behaviour and the Household Economy, 1650 to the Present* (Cambridge, 2008), p. 146; Joel Mokyr, *The Enlightened Economy: An Economic History of Britain 1700 to 1850* (New Haven and London, 2009), p. 116; Maxine Berg, *Luxury and Pleasure in Eighteenth-Century Britain* (Oxford, 2005), p. 26; Maxine Berg, 'From Imitation to Invention: Creating Commodities in Eighteenth-Century Britain', *The Economic History Review*, 55:1 (2002), pp. 1-30.
[56] Alexander L. Howard, *The Worshipful Company of Glass-Sellers of London: From its Inception to the Present Day* (London, 1940), p. 28; Michael Berlin, '"Broken all in Pieces": Artisans and the Regulation of Workmanship in Early Modern London', in Geoffrey Crossick (ed.), *The Artisan and the European Town, 1500-1900* (Aldershot and Brookfield, VT, 1997), pp. 75-91.

Porcelain London manager, Joseph Lygo, bemoaned in 1789, 'In respect to tea pattern No. 100 the difference in it being finish'd is that of doing the sprigs, some sets have more on each piece than others in proportion to their sizes – I have not had two sets alike'.[57] The quality or workmanship of the body of the item was also a cause for constant worry.

In North Staffordshire, with the onset of separate biscuit and glost firings, when biscuit ware was substandard it was generally smashed to save additional costs of glazing and firing. An exception to this rule was made for wares where decoration might satisfactorily cover the faults.[58] Writing to his London agent Thomas Bentley in 1769, Josiah Wedgwood revealed the use of gilding and decoration to cover up faults. 'I agree with you that it is very desirable that Vases of the same kind, should be done the same way, but it cannot always be so – they are done different ways to hide different defects which was the case with the Candlesticks with gilt Listels'.[59]

Although defects in the candlesticks could be covered by gilt, the faults in vases were more difficult to correct. As Giorgio Riello has shown, consumers felt a certain amount of anxiety about the quality of products they received from forms of production such as subcontracting.[60] Yet, as the above quotes demonstrate, even 'brands' such as Wedgwood could not be entirely trusted. Thus, as many faults were often hidden beyond sight, the purchase of these objects required highly tuned tactile skills to uncover the various problems they contained.

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[57] Derby Local Studies Library, Derby. Derby Porcelain Archive. Letter from Joseph Lygo to William Duesbury. 9 January 1789. DL82 1/188.
[58]Robin Reilly, *Wedgwood* Vol. 1 (London, 1989), p. 170.
[59] Wedgwood Museum Trust, Barlaston. Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 28 December 1769. E25-18278.
[60] Giorgio Riello, 'Strategies and Boundaries: Subcontracting and the London Trades in the Long Eighteenth Century', *Enterprise and Society*, 9:2 (2008), p. 267.

**The Importance of Touch**

Touch, then, was an important tool for any shopper intent on choosing a ceramic object for purchase. Despite much scholarship highlighting the rise of the visual in eighteenth-century Britain, relatively little attention has been paid to the role of the other senses in various aspects of contemporary life.[61] Such focus on the visual is perhaps more indicative of the sensory bias of Western culture in the twenty-first century, than the sensory order of the eighteenth century.[62] Visitor practices in museums demonstrates that contemporaries trusted touch as a valid sense and considered it a particularly valuable means of assessing objects - not only in shops.

On a trip to the British Museum in 1786, Sophie von la Roche privileged touch as a means of interacting with the objects she encountered. She wrote, 'With what sensations one handles a Cathtagian helmet, household utensils from Herculaneum…Nor could I restrain my desire to touch the ashes of an urn on which a female figure was being mourned. I felt it gently with great feeling.'[63] Before the mid nineteenth century, when museums catered for larger publics and curators were more concerned with conservation, museums encouraged touch as an important means by which

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[61] Perhaps with the exception of Penelope J. Corfield, 'Walking the City Streets: The Urban Odyssey in Eighteenth-Century England', *Journal of Urban History*, 16:2 (1990), pp. 132-174; Emily Cockayne, *Hubbub: Filth, Noise and Stench in England, 1600-1770* (New Haven and London, 2007). For more on the rise of the visual see Peter De Bolla, *The Education of the Eye: Painting, Landscape, and Architecture in Eighteenth-Century Britain* (Stanford, CA, 2003).

[62] For more on this see Elizabeth Edwards, Chris Gosden and Ruth B. Philips (eds), *Sensible Objects: Colonialism, Museums and Material Culture* (Oxford and New York, 2006); Anthony Synnott, 'Puzzling Over the Senses: From Plato to Marx', in David Howes (ed.), *The Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses* (Toronto, Buffalo and London, 1991), pp. 61-76; Howes, 'To Summon the Senses', p. 4.

[63] As cited in Constance Classen and David Howes, 'The Museum as Sensescape: Western Sensibilities and Indigenous Artifacts', in Elizabeth Edwards, Chris Gosden and Ruth B. Phillips (eds), *Sensible Objects: Colonialism, Museums and Material Culture* (Oxford and New York, 2006), p. 202.

to access knowledge.[64] As Sophie von la Roche's experience demonstrates, taking time to handle museum objects allowed visitors to confirm or contradict what they learned from sight. While in the nineteenth century touch was increasingly criticised as a primitive sense, in the eighteenth century touching objects marked visitors out as serious and contemplative. Contemporaries believed that handling objects allowed greater insight and intimacy with the cultures and people who made and owned them.

In contrast, ceramic objects, particularly dinner services with individual settings, serving terrines and teacups with fine handles, played an important role in controlling bodily deportment and reducing tactile interaction. Yet despite this, the changing form of ceramic objects demonstrates that manufacturers designed objects that spoke to the importance of touch. The lead-glazed earthenware teapot below appears almost over laden with different textural motifs.[65] Its three lion's-mask-and-paw feet lift the teapot above the surface on which it is placed. Moving upwards from the legs, the body of the pot is spherical and the glazed surface is festooned with stems of grape leaves and rosettes, which spring from the handle.

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[64] Classen and Howes, 'The Museum as Sensescape', p. 201.
[65] See Bernard Rackham, *Catalogue of the Glaisher Collection of Pottery & Porcelain in the Fitzwilliam Museum, Cambridge* Vol. 1 (Cambridge, 1935), p. 95.

Fig. 3.5. Lead-Glazed Earthenware Teapot. 1750s.
Fitzwilliam Museum, Cambridge.[66]

The crab stock design of the handle and spout creates a richly textural surface, entirely different from the rest of the object. This difference appears to remove the handle and spout from the body, highlighting the symmetrical, spherical nature of the body itself. Finally, the lid of the pot is adorned with a bird, encouraging another tactile engagement.

Touching goods in the retail environment focused shoppers' attention on the objects. Unlike contemporaries confronting objects in their own home, in shops goods were free from a pre-existing web of meanings. In the retail environment, shop assistants or displays presented and framed the goods, encouraging the shopper to focus on the item and its physical attributes. Hence, the retail environment forced customers to encounter products as discrete objects, as substances present-at-hand.[67] The process of browsing was one of the few moments when contemporaries actually encountered objects in this way and formed a conscious understanding of them.

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[66]Fitzwilliam Museum, Cambridge. Glaisher Collection. Lead-Glazed Earthenware Teapot. 1750s. AAL13&A/2006.
[67] Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Chicago, 2002), p. 18.

**Using Touch**

By considering objects from the period, we begin to appreciate the multiple techniques involved in assessing goods. Handling these objects also demonstrates how this process encouraged shoppers' awareness of making and workmanship. Here are two teapots, made in the same period (the 1750s), in the same geographical area (Staffordshire in England), by similar processes (earthenware). The first teapot, salt-glazed earthenware, aped the more stylish mode for white wares. While the second, boasts the cloudy colours connected to Thomas Whieldon's pottery, amongst others.[68] Yet, although different in style and colour, they are similar in terms of form.

Fig. 3.6. Staffordshire Salt-Glazed Teapot with Lid. c.1750.
Fitzwilliam Museum, Cambridge.[69]

[68] Arnold R. Mountford, 'Thomas Wedgwood, John Wedgwood and Jonah Malkin Potters of Burslem: Analysis of Certain Unpublished Eighteenth-Century Documentary Sources with Particular References to the Manufacture and Distribution of Earthenware and Stoneware' (Unpublished MA Thesis, University of Keele, 1972), p. 75.
[69] Glaisher Collection. Staffordshire Salt-Glazed Teapot with Lid. c. 1750. GL529/1928.

Fig. 3.7. Staffordshire Lead-Glazed Teapot with Lid. c. 1750.
Fitzwilliam Museum, Cambridge.[70]

Both pots have depressed globular bodies on three legs, with crabstock handles and spouts, and decorative applied mouldings. They are relatively small, standing at 11.9 centimetres and 11.2 centimetres respectively. They are also light, weighing little more than 400 grams each.[71] Handling the object, consumers were made aware of its size and consequently, its capacity and potential function. Would it hold the tea it was destined to carry? Would it pour correctly? In grasping the objects, it was not just size that became clear, but also a sense of proportion. The handles and spouts make the body of both teapots appear small and disjointed. The lid merited further consideration. Just as consumers of wine decanters handled the stopper to ensure it fitted correctly, ceramic shoppers asked if the lid fitted correctly.

The surfaces of the two pots are also quite different. The first pot has a slightly more matt finish, whilst the second is shiny and smooth. This

[70]Glaisher Collection. Staffordshire Lead-Glazed Teapot with Lid. c.1750. GL669/1928.
[71] 439 grams and 269 grams.

difference is both visual and tactile. The shiny surface reflects light, and is perhaps more pleasurable to touch, linked as it is to polished metal, a valuable material in eighteenth-century culture. In comparison, the matt surface appears dull.

Potential shoppers could also employ other senses to reveal details about the structure and material of the teapots. Just as they needed to test a teapot's pouring mechanism, the customers would also have to consider its ability to hold hot liquids. What was the thickness of the body? Would it retain heat? What was the quality of finish inside the pot? A short tap would reveal sounds that alluded to the truth of the shape and the type of material. A tap would also reveal any hidden faults, such as decoration covering cracks or faults.

Hence, in touching, objects revealed signs of their making and quality. Just as in chapter one, when the industrial tourists viewed production and understood it in terms of consumption, so when handling goods, shoppers actively confronted issues of design, quality and workmanship. As Topham asserted when describing his hour-long browse in a glass and china shop, 'I did not expect to meet in this island such models of refined taste and accurate execution'.[72] Thus, browsing was not only a means of finding 'quality'. This chapter argues that it was also a means of formulating a conception of the very idea of quality or workmanship.

[72] Topham, *A Tour Through Ireland*, p.52.

**Developing Haptic Skills**

In order to develop the necessary sensory skills, and in order to acquire a strong understanding of the objects on the market, contemporaries had to handle many goods. As David Pye argues, 'The expertise we acquire [in knowing things] is built up by making comparisons, and we make a judgment about something by considering what it looks like among all the things we have already seen.'[73] Retailers were aware of the need to compare in order to arrive at judgments about quality and workmanship and even encouraged comparison with poorer examples. Writing to his London manager, William Cox, in 1769, Josiah Wedgwood encouraged him to show customers poorer pieces, in order that they might appreciate the workmanship of other products. He wrote, 'They must either be sold cheap as foils to those of my own composition, & manufacture or laid by & not shewn at all, for I would not have them pass for my own legitimate children on any account. The workmanship is too coarse, & vulgar,'.[74] In fact the proliferation of seconds shops meant that customers always had a ready point of comparison.

Each object handled by a customer added to their relative scale of experience and knowledge. As Susan Stewart notes, we perceive the world through our senses, but the understanding we have of a particular object is shaped by our bodily 'somatic memory' of previous interactions with other objects.[75] Forming that 'somatic memory' required work, in the form of an

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[73] David Pye, *The Nature and Art of Workmanship* (London, 1971), p. 41.
[74] Wedgwood Museum Trust, Barlaston. Liverpool Collection. Letter from Josiah Wedgwood to William Cox. 20 May 1769. L17681-98.
[75] Susan Stewart, 'Prologue: From the Museum of Touch', in Marius Kwint, Christopher Breward and Jeremy Aynsley (eds), *Material Memories: Design and Evocation* (Oxford and New York, 1999), p. 19.

active participation in shopping through multiple trips. In the late eighteenth-century, Joanna Schopenhauer defined shopping as 'going into at least twenty shops'.[76] Similarly, as discussed earlier in regard to Evelina – one of the important lessons about browsing was that it did not have to result in purchase, but rather was an accepted part of shopping practice. When shopping for the first time, Evelina experiences confusion and embarrassment when she failed to grasp, in her inexperienced state, that the process of 'selective revelation' did not necessarily end in a purchase.[77] Even when carried out under false pretences, the process of handling goods allowed shoppers to accumulate both visual and non-visual information about particular goods, which was then employed at a later point.

At the same time, while covering ground and handling multiple goods, repeating handling practices meant that consumers' haptic skills became more adept. Just as the expansion of print culture created readers who accumulated knowledge through reading different texts and simultaneously improved their reading skills, so shoppers used the expansion of markets to accumulate information and also improve their shopping skills.[78] Hence, only by covering much ground could contemporaries hope to acquire information and develop their skills enough to make good shopping decisions. Rather than gadding, therefore, they were involved in 'real business'.

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[76] As cited in Walsh, 'The Newness of the Department Store', p. 59.
[77] Walsh, 'The Advertising and Marketing of Consumer Goods', p. 89.
[78] Alberto Manguel, *A History of Reading* (London, 1996), p. 19.

**A Concept of Workmanship**

By exploring shoppers' browsing as a form of information gathering that required constant updating, we begin to understand how it affected contemporaries' understanding of material culture. It was through this activity that contemporaries primarily interacted at close hand with the world of goods. The repetitive interaction with a variety of goods facilitated the construction of concepts such as design, quality and fashion. George Lakoff and Mark Johnson argue that, there is a strong link between perception and conceptualisation. They assert that, 'the very mechanisms responsible for perception, movements, and object manipulation could be responsible for conceptualisation and reasoning'.[79] Whilst handling objects, consumers pragmatically searched for a largely abstract notion of 'workmanship', a concept that was made increasingly concrete through sensory interaction with a large number of goods. Hence, the sensual experiences offered by shopping created an arena in which contemporaries negotiated initial conceptions of skill and workmanship. It was to these experiences that any subsequent concepts of workmanship would be linked. By understanding how the haptic skills of shoppers operated, we gain an important insight into how contemporaries began to understand design, form and workmanship in the late eighteenth century.

[79] George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought* (New York, 1999), p. 38.

**Conclusion**

Once inside the shop interior, customers were greeted by behaviours and surroundings that were simultaneously familiar and exciting. Retailers worked hard to ensure that they offered up hospitality, civility and politeness through themselves and the stage they choreographed. That stage, and the props it held also reassured and stimulated shoppers' sensory schema. Displays were designed to reach out to consumers and encourage tactile interaction. Through experience customers were able to navigate such scenes, deploying politeness and props as confidently as the retailers themselves. The performance was brought to its finale by the shopper venturing into a sustained interaction with a series of objects, which simultaneously involved the retailer as facilitator. It was here at the point of interaction that customers became involved in the various aspects of ceramic production; they felt the materials used, the consistency of the glaze and the trueness of the form. Through this handling process they had to pick out quality and workmanship as well as taste. Rather than 'gadding', shoppers used this haptic process and the assessments of quality and workmanship it involved, to understand the material world around them. Here, workmanship was a process made material.

Finally, it is necessary to return once more to the lone woman dressed in red, who stands in the centre of the Wedgwood and Byerley showroom on York Street. As she reaches out and compares the objects before her, silently calculating which is 'better', she stands on the precipice between production and consumption. Rather than following her home to observe her use of the object and the meanings she attached to it, we now

follow the object back from where it came – to a factory in North Staffordshire, known as Etruria.

# Chapter Four

## 'I could not make our Modellers please me at all': The Difficulties of Designing Workmanship

In the autumn of 1767, Thomas Bentley, Josiah Wedgwood's London agent, hired Mr Chubbard, on a piece-by-piece basis. Bentley employed him to construct a model and a mould for a terrine.[1] We know very little about Chubbard's previous work or experience.[2] His working practices are, however, suggested at in the details of Bentley's commission. In 1767, Bentley lived in Liverpool and as he was responsible for the commission, it is likely that Chubbard also lived there. In addition, Bentley's commission suggests that Chubbard worked by contracting out his modelling skills to various businesses. As Giorgio Riello has demonstrated, the sub-contracting market in large cities, such as London, particularly for the consumer goods trade, was vibrant and profitable in this period.[3] Finally, Chubbard's skills and experience were questionable. Soon after being hired, he was dismissed. Wedgwood's correspondence with Bentley suggests that Chubbard's work fell significantly short of the required standard.

In a letter to Bentley, written on 17 December 1767, Wedgwood criticised Chubbard's terrine model and mould. The beginning of the letter

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[1] A terrine is a large dish, which is used to serve cooked food.

[2] Using Eliza Meteyard's *The Life of Josiah Wedgwood*, Robin Reilly suggests that Mr Chubbard may have been Thomas Chubbard who was principally a landscape painter based in Liverpool. Robin Reilly, *Wedgwood* Vol. 1 (London, 1989), p. 195.

[3] Giorgio Riello, 'Strategies and Boundaries: Subcontracting and the London Trades in the Long Eighteenth Century', *Enterprise and Society*, 9:2 (2008), pp. 243-280. See also Helen Clifford, 'Making Luxuries: The Image and Reality of Luxury Workshops in Eighteenth-Century London', in P.S. Barnwell, Marilyn Palmer and Malcolm Airs (eds), *The Vernacular Workshop: From Craft to Industry, 1400-1900* (York, 2004), p. 19.

makes clear that Bentley received the model and mould from Chubbard, and then wrote to Wedgwood warning him of 'the imperfections' they contained. Bentley then sent the model and mould to Wedgwood for his consideration. In response, Wedgwood stated that 'The Terrine is capitally defective in point of truth in the form of the ends & sides, which do not correspond at all with each other'. He pointed out that 'there is the same fault in the ornaments & likewise in the top of the dish, & the cover.' In addition, Wedgwood noted that 'The carv'd ornaments are not finish'd'. Consequently, he exclaimed that 'the whole shews such a want of that Masterliness necessary in the execution' that it 'quite discourages me from thinking of employing him again as a modeller.'[4]

It is possible that Wedgwood issued this negative report on the model in order to avoid the significant charges modellers' expected. The prices paid for models ranged from shillings to pounds. For instance, in 1758 John Baddeley of Shelton paid William Bullock 15s for models, whilst in 1761 he owed £21 19s 6d to 'W. Bullock for Modells'.[5] Yet in general, Wedgwood paid modellers, even when their work was unsatisfactory, as in the case of Mr Tebo explored below. Hence, within these transactions other significant dynamics were in play. First, it is clear that Bentley's judgment alone was inadequate. Bentley's description was not enough to effect Chubbard's dismissal. Wedgwood also needed to judge the workmanship, and his judgment was more important. It was certainly more final. Clearly, Wedgwood kept a firm grip on the quality or otherwise, of models and moulds. Due to his ceramic knowledge and because of his role as overseer

[4] Wedgwood Museum Trust, Barlaston. Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 17 December 1767. MS E25-18177.
[5] As cited in Hilary Young, *English Porcelain 1745-1795. Its Makers, Design, Marketing and Consumption* (London, 1999), p. 103.

of operations, decisions about product design rested with him. Second, it is noteworthy that Bentley sent the actual physical object to Wedgwood for him to make his judgment. His need to see and handle the model demonstrates the importance he placed on his sensory interaction with it. As noted in chapter three, ceramic objects required handling to find faults.

Finally, Wedgwood made recurrent use of the term 'execution'. This term emphasised the process between the design and its realisation as a model, namely the creative space in which skill and workmanship operated. His use of this term suggests that Chubbard formulated some form of design, or that Bentley gave him a design to follow, and that he failed to execute what it demanded. In a later letter, Wedgwood described his critique of Chubbard's work in even more succinct terms. He wrote, 'I admire his disposition, but his head & hand would require a seven year apprenticeship to make them of any use to us.'[6] His critique suggests that Chubbard failed to execute the model correctly because he lacked skills and experience. Yet Wedgwood's judgment upon Chubbard's skill contains another assumption – that Chubbard was fully aware of the intended design, and only failed to *execute* it properly. Yet the plausibility of Chubbard's full awareness is open to question, as this chapter goes on to explore.

**Design and Workmanship**

After considering the changing role of 'workmanship' in both general discourse and in consumption, this thesis now turns to examine ideas of

[6] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 31 December 1767. MS E25-18182.

workmanship in the production processes of the late eighteenth-century ceramics industry. Before the next chapter considers how workmanship operated in the main manufacturing processes, this chapter explores how it functioned in design and modelling. The following examination considers how manufacturers, designers and modellers used the term 'workmanship' to judge their work. Moreover, it questions what this term meant to these historical actors. The chapter considers the subjective nature of such judgments and particularly questions how they related to both intention and execution.

The chapter uses a range of sources from the Wedgwood Museum Trust Archive at Barlaston to examine the design process, including the Wedgwood and Bentley correspondence, a set of letters between William Greatbatch (1735-1813) and Wedgwood, and William Hackwood's (c.1753-1836) notebook. It also explores a series of correspondences, relating to the design process at the Derby Porcelain Factory, between William Duesbury (1725-1786) and Benjamin Vuillamy (1747-1811), which are held at the Derby Local Studies Library in Derby.

This chapter's analysis of these sources focuses on five modelling commissions. It examines modelling orders given by Josiah Wedgwood and Thomas Bentley to Mr Chubbard, Mr Tebo, William Greatbatch and William Hackwood. The chapter also considers a model contracted by Benjamin Vuillamy from William Duesbury. It uses these commissions to critically assess how manufacturers judged the models that modellers executed, particularly in terms of workmanship. The introduction to this thesis stated that in the eighteenth century 'workmanship' constituted the amount of labour that workers' executed on a particular task. Yet by

exploring how workmanship operated in the design process its nature becomes more complicated. This chapter finds that, rather than the application of labour and skill, workmanship was bound to expectations created by design.

**The Workmanship of Design**

In *The Nature and Art of Workmanship*, first published in 1968, David Pye outlined two categories of workmanship. First, he described the 'workmanship of risk', as when 'the quality of the result is continually at risk during the process of making.'[7] In contrast, the 'workmanship of certainty' was when 'the quality of result is exactly predetermined before a single saleable thing is made.'[8] Yet amidst these two definitions, Pye recognised that the 'workmanship of risk' rarely operated in a pure sense due to workmen always devising ways to limit risk.[9]

Pye also stipulated that other factors, such as design, shaped workmanship. Despite deploring the attention given to design rather than workmanship, much of Pye's thesis analysed the relationship between the two. He argued that 'Design is what, for practical purposes, can be conveyed in words and by drawing', whilst 'workmanship is what, for practical purposes, cannot.'[10] Although Pye's definition regarded workmanship as 'purely physical procedures', he also viewed it in close relation to design, as that, which executes design.[11]

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[7] David Pye, *The Nature and Art of Workmanship* (London, 1971), p. 7.
[8] Pye, *The Nature and Art of Workmanship*, p. 7.
[9] Ibid., p. 8.
[10] Ibid., p. 5.
[11] Glenn Adamson, *Thinking Through Craft* (Oxford and New York, 2007), p. 73.

In addition, Pye asserted that *judgments* upon workmanship, rather than being entirely based on the results of physical procedures, are also made in terms of the design intention. For instance, good workmanship is 'that which carries out or improves upon the intended design, whilst bad workmanship is what fails to do so and thwarts the design'.[12] In his analysis, design and workmanship are separate entities, intimately linked. For Pye, 'workmanship and design are extensions of each other.'[13] Clearly, although design is intention and workmanship is execution, it is difficult to separate them in anything but a theoretical sense. While the execution of a particular design takes skill, the correct execution of a design takes workmanship. His analysis of the relationship between design and workmanship provides a particularly useful starting point for this chapter.

Rather than simple mirroring Pye's theory, this chapter argues that a further issue is at stake within the process – namely, the communication of the design intention. By reinstating the problem of communication into the equation, this chapter closely examines the link between design and execution. It questions how the communication of design intention shaped the modeller's ability to successfully achieve execution. More specifically, it argues that as design and execution became increasingly removed in the late eighteenth century, the communication of design information and intention became more and more important in achieving commendations of 'good' workmanship. Rather than a purely physical process, the enactment of workmanship was increasingly shaped by design.

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[12] Pye, *The Nature and Art of Workmanship*, p. 14. As Adamson argues, Pye's equation regarding the ability to understand and judge workmanship breaks down if the judge is not aware of the intention. See Adamson, *Thinking Through Craft*, p. 74.
[13] Pye, *The Nature and Art of Workmanship*, p. 66.

**The Role of Design and Modelling**

In the latter half of the eighteenth century, as the market simultaneously demanded variety and consistent quality, manufacturers produced new shapes and decorations to uniform standards by using techniques such as press-moulding and slip-casting. Slip-casting was a process whereby liquid clay was poured into a mould and the excess was drained away to leave a thin layer. The process produced highly intricate and delicate wares. Although technically simplistic, slip-casting was vastly time consuming until the introduction of deflocculants speeded up the drying process in the nineteenth century.[14] In contrast, ceramic manufacturers regularly used press-moulding, in the second half of the eighteenth century.

The technique of press-moulding was not new; the process had been in use since the 1640s. Before the 1740s, potters press-moulded wares by pressing sheets of clay over a carved and fired unglazed pottery form or on a hump mould.[15] After the 1740s, North Staffordshire potters turned to new technology – plaster of Paris moulds. It is likely, but not certain, that the experiments of John and David Elers exposed North Staffordshire potters to this technology in the late seventeenth century. Yet potters' use of plaster of Paris moulds only started to make a substantial impact in the 1740s. William Pitt's *Topographical History of Staffordshire* (1817) and Simeon Shaw's *History of the Staffordshire Potteries* (1829) both suggest that the Staffordshire potter Ralph David of Colbridge, who had recently returned

[14] Miranda Goodby, 'Moulds and Modellers in the Early Eighteenth-Century Staffordshire Potteries: Slip-Casting, Press Moulding and the Wood Family', *English Ceramic Circle Transactions*, 17:2 (2000), p. 216.
[15] Goodby, 'Moulds and Modellers', p. 219.

from working in a French pottery, introduced plaster moulds in the 1740s.[16] Manufacturers used these moulds to produce increasingly delicate and elaborate forms. The subsequent increase in the production of moulded wares led to a demand for modellers and blockmakers. As Hilary Young has argued 'it was with the increasing use of moulds for finely potted wares around 1740 that we first detect the emergence of a category of workman clearly recognisable as a ceramic designer: the Staffordshire block maker.'[17]

The first stage of the design process for models and blocks was the creation of two-dimensional designs. As Wedgwood explained to Bentley in 1769, 'We next looked over all our prints & drawings of Vases for simple, easy-to-make handles, such as Daniel could model & his boys could make'.[18] The seemingly simple process he outlined of two-dimensional drawing, three-dimensional model, and then production hid many nuances. Replicating processes found in other luxury trades, ceramic manufacturers, managers and agents took inspiration for their initial design ideas from a wider array of sources than just 'all our prints & drawings'.[19] For instance, a 1770 audit of the books jointly owned by Wedgwood and Bentley reveals a number of potential design sources.[20] From Stella's *Vases of the Louvre* to Hogarth's *Analysis of Beauty,* the library belonging to these

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[16] Ibid., p. 220.
[17] Hilary Young, 'The Birth of the Ceramic Designer in England', in Tom Walford and Hilary Young (eds), *British Ceramic Design 1600-2002* (Beckenham, 2003), p. 19.
[18] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 1 October 1769. MS E25-18264.
[19] John Styles, 'Manufacturing, Consumption and Design in Eighteenth-Century England', in John Brewer and Roy Porter (eds), *Consumption and the World of Goods* (London and New York, 1993), p. 543.
[20] Mrs Robert D. Chellis, 'Wedgwood and Bentley Source Books', *The Seventh Wedgwood International Seminar, April 26-28, The Art Institute Chicago* (1962), p. 63; Harwood A. Johnson, 'Books Belonging to Wedgwood & Bentley the 10th of August 1770', *Arts Ceramica*, 7 (1990), p. 19.

two entrepreneurial spirits covered a wide breadth of subjects.[21] Wedgwood's copy of Anne Claude Philippe Caylus' 1761 work *Recueil d'antiquites Egyptiennes, Etrusques, Grecques, et Romaines* demonstrates how he annotated, traced and sketched onto these source books to create new designs and patterns.[22] Although Wedgwood's use of antique design sources was atypical, the principle of using printed pattern books to formulate designs was increasingly widespread in the second half of the eighteenth century.[23] Publications such as Robert Sayer's *The Ladies Amusement: Or Whole Art of Japanning Made Easy* (1762) provided ample design inspiration as well as sources for copying.[24]

Two-dimensional design sources also found their way to manufactories from clients and other contacts. In the last quarter of the eighteenth century, as Wedgwood moved towards the final years of his life, he increasingly ascertained design advice from female acquaintances.[25] For instance, he regularly commissioned designs from the silhouettist and artist Lady Elizabeth Templetown.[26] At the same time, he asked female acquaintances to provide paper cut-outs of their ceramic collections.[27] Wedgwood also maintained contact with male collectors. For instance, following an invitation in July 1776, Wedgwood visited Arbury Hall in Warwickshire to take casts from a collection of marbles belonging to Sir

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[21] Chellis, 'Wedgwood and Bentley Source Books', p. 63; Johnson, 'Books Belonging to Wedgwood & Bentley', p. 19.
[22] For example of markings see the copy held at University of Wisconsin-Madison Special Collections Library. Anne Claude Philippe Caylus, *Recueil d'antiquites Egyptiennes, Etrusques, Grecques, et Romaines, Tome I* (Paris, 1761), Etruscan Plate XXXIII.
[23] Young, 'The Birth of the Ceramic Designer in England', p. 21.
[24] Ibid; Anne Puetz, 'Design Instruction for Artisans in Eighteenth-Century Britain', *Journal of Design History*, 12:3 (1999), p. 223.
[25] Gaye Blake Roberts, 'Wax and Wooden Wonders: Design Sources Used by Josiah Wedgwood', in Tom Walford and Hilary Young (eds), *British Ceramic Design 1600-2002* (Beckenham, 2003), p. 119.
[26] Roberts, 'Wax and Wooden Wonders', p. 119; Bevis Hillier, *Master Potters of the Industrial Revolution: The Turners of Lane End* (London, 1965).
[27] Young, 'The Birth of the Ceramic Designer in England', p. 22.

Roger Newdigate.[28] Similarly, in 1768 he paid the modeller John Coward to make sketches of certain objects in the Duke of Richmond's collection.[29] While Wedgwood entrusted women's taste and skill in producing sketches and cut outs, he visited male acquaintances to take his own sketches.

As the eighteenth century wound on, manufacturers gave artists more freedom. They increasingly encouraged artists to interact with collections and produce original designs. In the late 1780s, when Wedgwood set up a studio in Rome, he encouraged artists such as Camillo Pacetti, Giuseppe Angelini and Angelo Dalmazzoni to choose their own subjects and forms of inspiration.[30] The studio also liberated the three sculptor/modellers who made up its nucleus – namely John Flaxman, Henry Webber (who had become head of the ornamental works at Etruria) and John de Vaere.[31] Together, these artists produced a wide array of design drawings and models to meet the increased demand created by the jasper ware range.

Some artists, such as those in the Wedgwood studio in Rome, produced models as well as design ideas. Otherwise, once manufacturers and managers or commissioned artists had formulated designs in their mind's eye they had to communicate them to modellers and workers through sketches, pattern shapes, written words and verbal instructions. Modellers then made these ideas manifest, in clay or wax. Yet as this chapter goes on to demonstrate, these seemingly simple activities of communication and execution were full of difficulties. Nevertheless, these processes were increasingly significant. Just like modellers working in

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[28] Roberts, 'Wax and Wooden Wonders', p. 120.
[29] Ibid., p. 112.
[30] Ibid., p. 116; Robin Reilly, *Josiah Wedgwood 1730-1795* (London, 1992), pp. 295-6.
[31] Reilly, *Josiah Wedgwood*, pp. 295-6.

Derby, Worcester, Bristol and London, 'by the third quarter of the eighteenth-century the modeller was a highly important craftsman in North Staffordshire.'[32]

Once the modeller had made the model, a block maker created the mould. He or she used a model (often they made it themselves) to create a master block, a negative of the original design.[33] From the master block, they produced a master case mould, creating a positive identical of the original model. The master block and the master case mould were highly valuable as they enabled the production of new moulds. The block-maker then made a working block from the master case mould. This working block was then used to cast a working case mould, and from that, the block maker produced a working mould.[34] Potters used the working mould in the production process, and once it became worn and unworkable the mould maker created further moulds from the working case mould. Hence, the finished product was far removed from and yet identical to the original model and thus mould making extrapolated every mistake in the modelling process. Consequently, manufacturers valued accurate work by the modeller and block maker.

In the second half of the eighteenth century, manufacturers such as Wedgwood employed modellers and block makers to work full time at the factory, as in the case of William Hackwood, a highly trusted employee, who worked as a modeller and repairer in the Wedgwood factory for sixty-three years. Yet as demand for models increased, full time modellers

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[32] Goodby, 'Moulds and Modellers', p. 222.

[33] Examples of female block makers and mould makers exist. For instance Mary Massey is listed as a 'mould maker' in Josiah Wedgwood's 'Analysis of Hands' for both 1790 and 1793. Etruria Collection. Josiah Wedgwood Commonplace Book.c. 1760-1790. MS E39-28409.

[34] For more information on this process see Goodby, 'Moulds and Modellers', p. 216-228.

struggled to complete the workload. Hence, manufacturers commissioned other modellers, such as Mr Chubbard, on a piece-by-piece basis. Subcontracting allowed manufacturers to benefit from specialised skills on a temporary basis and thus respond to the market quickly.[35] Aside from workload demands, factories, such as Wedgwood's, also employed highly skilled artists and sculptors, such as John Voyez and John Flaxman, on a temporary basis.[36] Although more expensive, these men added considerable cache to a factory and its products.

Whether they were temporarily contracted in or full-time employees, modellers used their skills to realise a specific design idea in wax or clay. Faced with a two-dimensional design or a set of verbal or written instructions modellers created a three-dimensional model. It was at this point that the division between the design process and the modelling process occurred. The inflows of two-dimensional design sources discussed earlier, made it increasingly simple for manufacturers to stipulate the design intention they wanted modellers to achieve. Rather, than simply applying their skills, therefore, manufacturers required modellers to realise their design ideas. Yet the process of realising a particular design as a model was not a simple one.

**The Difficulties of Execution**

Mr Tebo, possibly an anglicised version of the French name Thibaud, was hired as a modeller for the Wedgwood factory in October or early

[35] Matthew Craske, 'Plan and Control: Design and the Competitive Spirit in Early and Mid-Eighteenth Century England', *Journal of Design History*, 12:3 (1999), p. 206.
[36] Reilly, *Josiah Wedgwood*, pp. 291-2.

November 1774.[37] Unlike Chubbard, who had been subcontracted for a certain job, Tebo was based at the Etruria factory in North Staffordshire for the course of his contract. Geoffrey Godden's early research suggested that Tebo may have worked as a modeller for other factories, such as Bow, Worcester, Plymouth, Bristol, Caughley and Chamberlain, before and after his time at Wedgwood's, although this now looks less likely.[38] His role at the Wedgwood factory, between 1774 and 1775, was to complete various modelling tasks and to assist William Hackwood.

Over a fourteen-month period, Wedgwood articulated a series of criticisms of the standard of Tebo's modelling work. Frustration built up both on the part of his employers, and most likely on the part of the employee. Even Wedgwood's very first mentions of Tebo conveyed exasperation: 'Mr Tebo, our new Modeler, did not return here of some days after me, & I am glad he did not for he would have made a shocking Ugly thing of the Lamp if he had been left to himself.'[39] The tone of this extract suggests a certain level of relief that Tebo had sprained his arm and was currently incapacitated, because what he produced when working was likely to be 'ugly'. There is a serious tension between Wedgwood's admission that Tebo had recently been hired explicitly to carry out modelling and the recognition that he was inept at performing any modelling task. The syntax of the first sentence in the quote suggests that

[37] Robin Gurnett, 'Mr Tebo At Wedgwood's: And An Alternative Occupation', *English Ceramic Circle Transactions*, 19:1 (2005), p. 73.
[38] The suggestion, made by Geoffrey Godden, that Tebo may have worked for those factories is cited in Gurnett, 'Mr Tebo At Wedgwood's', p. 73. For Godden's more recent pronouncement, that the marking is more likely that of china modeller John Toulouse, see Geoffrey Godden, *Caughley and Worcester Porcelains 1775-1800* (London, 1969), p. 10.
[39] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 5 November 1774. MS E25-18561.

the term 'modeller' was used with a healthy dose of sarcasm and could be read 'our so-called Modeller'.

It is likely that Wedgwood acquired Tebo's skills during the Annual Hiring or 'Martinmas Day Hiring'. Thus, for the year he was contracted to Wedgwood, he was not allowed to work for any other factory.[40] Rather than dismissing Tebo, as had been the case with Chubbard, Wedgwood gradually extended his tasks to include other activities. Robin Gurnett has recently argued that Tebo fulfilled the role of translator whilst at the factory, helping Wedgwood's manager Peter Swift to communicate with foreign merchants.[41] In addition, the correspondences show a still broader repertoire of involvement in factory life for the increasingly infamous Tebo. For instance, in November 1774, Wedgwood described Tebo as a 'Modeler', whereas by January 1775 he had become a 'usefull hand'.

Tebo's change of activities is perhaps the strongest indication of how poorly Wedgwood judged his workmanship; his demotion to 'usefull hand' was a clear marker of Wedgwood's diminished respect for his skill. The allusion Wedgwood makes is a reference to the production of everyday items at the Useful Works, and thus Tebo's removal from the Ornamental Works where most of the modelling took place.[42] Moreover, the use of the term 'hand' suggests that Wedgwood now considered Tebo only capable of assisting in works, rather than completing them independently.

His fall from grace appears to ebb by the end of January 1775 when he was trusted with repairing and assisting the ever loyal and skilful, Hackwood. Tebo's situation, however, failed to continue in such a positive

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[40] Gurnett, 'Mr Tebo At Wedgwood's', p. 75.
[41] Ibid.
[42] For instance, in June 1790 Josiah Wedgwood recorded that he employed one full-time modellers at his useful works, while he employed five at his ornamental works. See Etruria Collection. Josiah Wedgwood Commonplace Book. c.1760-1790. MS E39-28409.

vein for long. The crux of the problem reared its head again in July 1775. At this point Wedgwood lost all patience with his incompetent employee. In a letter to Bentley, Wedgwood constructed a multi-layered description of Tebo's ineptness.[43] He began by emphasizing the number of attempts Tebo had been allowed in modelling 'a Coast of Hares Head'. He then pointed out the length of time Tebo had taken, 'before him some time' and that 'he has made many attempts at sundry times'. Then came the crushing judgment that despite all this time, effort and work, the models were still 'not a likeness' and that 'Mr Tebo cannot model anything like the face of a Hare'. Wedgwood laboured the point of Tebo's poor work by likening his attempts to 'a drown'd Puppy' and 'full as like Pigs as hares'. Wedgwood concluded by summarily declaring that he would happily throw out the models if he 'could find a pocket to dispose of them into.'[44]

The laboured way in which Wedgwood constructed this description ultimately implies that the mistakes Tebo made were monumental rather than minor. Wedgwood criticised his work because, despite employing his time, experience and skill, he was unable to model the clay in a way that realised the intended design. Wedgwood's treatment of Tebo and Chubbard reveals the complicated relationship between intention, execution and workmanship in the modelling process. Wedgwood's use of the phrase, 'it is not a likeness', demonstrates that he had a clear idea of what it was that he wanted to produce, and that Tebo entirely failed to execute that form. Moreover, Wedgwood's exasperation with Mr Tebo suggests that this modeller lacked the necessary skills. Yet, as in the case of

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[43] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 11 July 1775. MS E25-18609.
[44] Ibid.

Chubbard, the clarity of this conclusion is complicated by our lack of sources from Tebo's perspective. Clearly, Tebo and Chubbard struggled with the tasks given, but the certainty of this deduction leads us to question how clearly the task was communicated. Were they entirely inept? Or was the necessary information badly communicated?

First, it must be remembered that in employing workers for the factory, Wedgwood usually adopted a system of checks and referencing. For instance, when he informed Bentley about three hands he had employed from Liverpool he noted that a certain James Bakewell was able to provide character references for them.[45] Given the procedures Wedgwood ventured into in order to guarantee the character and skill of his workers it seems surprising that in hiring Mr Chubbard and Mr Tebo they encountered such thoroughly deficient workers. In fact, during a positive moment in 1775, when Tebo was employed repairing some figures and heads, Wedgwood remarked to Bentley that Tebo was doing 'these large things very well'.[46] Tebo was clearly skilled. Hence, the failure of Mr Chubbard and Mr Tebo to correctly execute these designs, suggests that aspects other than their skills played a role. As cited above, if good workmanship is the successful realisation of a specific design, the clear communication of a particular design intention is crucial.

[45] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 8 June 1770. MS E25-18308.
[46] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 24 January 1775. MS E25-18587.

**Communicating Design**

Despite the importance of communicating design information clearly, it was a particularly difficult process. The following examination of a design process involving multiple parties demonstrates the complexities of communicating design.

In 1784, the silversmith Benjamin Vulliamy commissioned the Derby Porcelain Manufactory to create a series of figures to attach to his clocks.[47] Unusually in relation to the factory's normal practices, Vulliamy oversaw the design, modelling and production of the figures he commissioned and also held the rights to them.[48] The atypical nature of the commission, however, makes it particularly interesting in terms of design communication. In the series of correspondences to the Derby factory manager William Duesbury, Vulliamy stipulated and reiterated his design vision, with varying effect.

The letters show that Derby had previously supplied Vulliamy with various figures. It might be assumed, therefore, that the creation of further figures was relatively simple. Moreover, as Helen Clifford has demonstrated, Vulliamy's interaction with his own clients and their design needs ensured he was well versed in managing the design process.[49] Here were two men well practiced in the language of design. Yet despite these precedents Vulliamy's design negotiations with Duesbury frequently became fraught.

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[47] Derby Local Studies Library, Derby. Derby Porcelain Collection. Letters from Benjamin Vulliamy to William Duesbury. MS DL82 5/1-17.
[48] Young, *English Porcelain 1745-1795*, p. 98.
[49] Helen Clifford, *Silver in London: The Parker and Wakelin Partnership 1760-1776* (New Haven and London, 2004), p. 155.

Vulliamy's words and sketches demonstrate that he had a clear sense of the figures he wanted manufactured. For instance, when Duesbury sent him a figure of 'Time' in 1785, Vulliamy responded by requesting that three-eighths of an inch be sliced off his right wing. To clarify his request, Vulliamy included a sketch stipulating the specific location of the slice. Rather than communicating his exacting instructions directly to the modeller involved, a Mr Dear, Vulliamy wrote to Duesbury. Yet the specificity of his request was clearly lost in this chain of communication and in 1787 Vulliamy expressed his deep disappointment at the quality of the figures he had received. He explained how 'the last figures that' he had received 'are no better than plaister [sic] figures they are a blue white…& soft, extremely carelessly repaired'.[50] He ended the note by exclaiming how, 'I never in the course of business met with a disappointment that I feel so much as this'.[51] His despondency at the failure of the commission is palpable

Similarly, Wedgwood's dealings with William Greatbatch also demonstrate the importance of clear design information to the modelling process. Greatbatch started his pottery career in 1753, as an apprentice to Thomas Whieldon at Fenton Vivian.[52] For many potters in North Staffordshire, apprenticeships with Whieldon were transformative. Josiah Spode and Josiah Wedgwood were also apprentices to Whieldon and both went on to become master potters.[53] During this apprenticeship Greatbatch learned to model, and as his career progressed, his modelling skills

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[50] Derby Porcelain Collection. Letter from Benjamin Vulliamy to William Duesbury. 12 February 1787. MS DL82 5/5.
[51] Ibid.
[52] David Barker, *William Greatbatch: A Staffordshire Potter* (London, 1991), p. 39.
[53] Yet it should be remembered that formal apprenticeships were increasingly rare and thus they were generally entered into so that the apprentice became a master potter.

increased. He left Whieldon in 1759 to set up his own manufactory. In 1762, Greatbatch procured his own site on Lower Lane, Fenton and from there he worked as a supplier of wares and models to Josiah Wedgwood and others.[54] Problems arose for the business in the 1780s, and in 1782 he was officially declared bankrupt.[55] After this, Greatbatch went to work for Josiah Wedgwood directly as a general manager at the useful ware factory. He stayed in that position until around 1807.[56]

When supplying models, Greatbatch encountered negotiations that demonstrate the power Wedgwood held over the design process. On 11 November 1764, Greatbatch requested clarification of the design that Wedgwood required him to execute. He stipulated that 'As to reserve in modelling it is far from one, it is the want of a proper design which makes me neglect finishing as I would do.'[57] Due to the lack of a full design, Greatbatch felt unable to complete the model and refused to begin again until Wedgwood gave further instructions. Despite working together as apprentices, Greatbatch did not understand what Wedgwood wanted. He used the letter to express his current frustration and included 'two unwrought drafts' to encourage a new stream communication. He further stimulated communication by specifically asking for Wedgwood's 'sentiments' on his designs. Greatbatch's exasperation at the process is clear. Consequently he prompted Wedgwood to 'form' something in order that he might understand more vividly what was sought.[58]

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[54] Barker, *William Greatbatch*, p. 40.
[55] Ibid., p. 62.
[56] Ibid., p. 63.
[57] Etruria Collection. Letter from William Greatbatch to Josiah Wedgwood. 11 November 1764. MS E30-22390.
[58] Ibid.

At times, when modellers, like Greatbatch, Chubbard or Tebo, entirely failed to meet his expectations, Wedgwood applied his own modelling skills. Writing to Bentley on 16 November 1774, Wedgwood bemoaned the inability of modellers to realise his design ideas. 'We have Model'd a small Tea bord [sic], of which you shall have a sample soon, & I wish you may like it. I could not make our Modelers please me at all, in this simple thing, by all the instructions I could give them, so I sat down & did it myself'.[59] Wedgwood explicitly stated that the problem with the modellers' work was their inability to realise the design he imagined. Surely, in general, the possibility of modellers executing a design exactly was limited. In this instance, however, it is clear that the most direct means of achieving good workmanship was employed, and he sat down and made the object himself.

Yet, as the Greatbatch example demonstrates, Wedgwood was perhaps more responsible for the apparent failure of the modellers than he recognised. He saw that 'by all the instructions I could give them' he 'could not make our Modelers please me at all'. What were those instructions? How full and exhaustive were they? Was the language he employed shared?[60] The Greatbatch example certainly questions Wedgwood's ability to communicate the necessary design information. As stated above, Pye asserts that good workmanship, 'is that which carries out or improves upon the intended design', a tenet that Wedgwood agreed with.[61] Hence, modellers such as Chubbard, Tebo and Greatbatch did not necessarily fail in their skills; they failed in their workmanship.

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[59] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 16 November 1774. MS E25-18564.
[60] Styles, 'Manufacturing, Consumption and Design in Eighteenth-Century England', p. 545.
[61] Pye, *The Nature and Art of Workmanship*, p. 13.

In the ceramics industry, when manufacturers commissioned models an intended design existed in their mind. Manufacturers judged modellers in terms of their ability to realise that particular design 'idea', in terms of workmanship. Thus, for modellers, the achievement of workmanship was dependent on a clear understanding of the design intention and the successful application of skill to realise it. To gain a clear understanding of the design intention, its clear communication was crucial. Only the best understanding of the design allowed modellers a chance at applying their skills correctly. Both intention and execution were mutually dependent upon communication.

**Successful Modelling**

Amongst the heavy criticism heaped onto the likes of Chubbard and Tebo, it is easy to assume that no one met Wedgwood's exacting standards. The example of William Hackwood, however, complicates this narrative of over-wielding manager, always at odds with his workers and their skills. This long-time employee of Wedgwood, received respect and at times even admiration from his employer. Over time, Hackwood developed the most important skill – an ability to understand what it was that Wedgwood actually wanted.

Hackwood joined the pottery as a boy and stayed for sixty-three years.[62] As a full-time employee, his primary role was to 'repair' others work and form models. As his career progressed Wedgwood gave him greater freedom and autonomy. Ultimately, he applied the finishing

[62] Reilly, *Josiah Wedgwood*, p.293.

touches to many Wedgwood products in this period. Although his 'style' is not easy to detect, his importance to the Wedgwood enterprise was great. Robin Reilly has described Hackwood as 'the most important resident modeller ever to be employed by Wedgwood'.[63]

Wedgwood's recognition of Hackwood's importance is demonstrated in a letter written to Bentley in September 1774. Wedgwood informed Bentley that he was about to send him 'a few of the new model'd figures as they are'. He was unable to send more complete models, as Hackwood 'has no time for it at present'. Although Wedgwood was not entirely persuaded that Hackwood was 'capable of giving character to their faces, & improving the draperies', he was convinced that he 'would mend them considerably'.[64] As a result, there is a disappointed tone inherent within Wedgwood's admittance that Hackwood had no time to work on them. Wedgwood's tone suggests that Hackwood was the only member of the Wedgwood factory capable of finishing these figures to the standard required.

The admission that Hackwood 'has no time for it at present' hints that he was required for work deemed more necessary. Indeed, at that time Hackwood was involved in the manufacture of a set of busts that Wedgwood hoped customers would consider 'the finest Heads in this World'. Wedgwood resolved that making the busts would employ Hackwood for 'a year or two'. The vagueness of this time scheme indicates, not only the importance and scale of the collection in production, but also Wedgwood's fluid approach to Hackwood's work. Wedgwood stated, 'I must set upon having it so, being fully persuaded they will be a capital

[63] Ibid.
[64] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 11 September 1774. MS E25-18558.

article with us, & Hackwood finished them admirably'. He remarked that the busts produced by Hackwood 'are infinitely superior to the Plaister ones we take them from, as you will see more fully when you come to Etruria'.[65] It is not entirely clear from this remark whether Hackwood was producing models, finished objects, or moulds. What is clear is that Hackwood improved upon the design intention – 'the Plaister ones we take them from' – and created good workmanship.

The longevity of Hackwood's employment with Wedgwood provided him with a distinct advantage in respect of realising designs. As Pye observes, even though it is possible to write down the exact proportions and measurements of an intended design, the *essence* of the design can still remain elusive.[66] If good workmanship was the ability to realise an intended design, then it was vital to know and understand the intentions of the designer and the essence of his designs. The alternative perspective offered by Hackwood again points to the intertwined nature of intention and execution. Yet it also asks questions about communication. Was it simply experience that meant Hackwood understood Wedgwood's intentions – or was it a particular form of communication?

**Design Language**

In the middle decades of the eighteenth century, the period prior to that under discussion in this thesis, the communication of design information underwent a transformation in Britain. During the 1750s, when competition with continental Europe and Asia over the production of luxury goods was

[65] Ibid.
[66] Pye, *The Nature and Art of Workmanship*, p. 56.

fierce, a variety of writers authored pamphlets and articles concerning what they considered to be Britain's design deficit. These printed materials depicted British artisans as lacking creativity and artistic genius. Through the clamour of voices, a central solution was heard: the artisans of Britain needed to improve their drawing skills.

The eighteenth-century debate on design standards perhaps began with Robert Campbell's 1747 work, *The London Tradesman*.[67] Here Campbell recommended a good knowledge of drawing as the central means of ensuring originality and thus competitiveness for the manufacturing trades. Based on evidence from the French model, Campbell viewed drawing skills as the central means of communicating and envisioning new design ideas. This thinking, which greatly privileged two-dimensional design, reflected moves within wider contemporary culture towards the visual, both in terms of visual appreciation and visual representation.[68] Worries regarding the competitive nature of Britain's manufacturing sector clearly propelled other writers to join the fray. In the 1750s, John Gwynn, Malachy Postlethwayt, Jean Roquet and William Hogarth all joined Campbell in the debate.[69]

In 1749, John Gwynn, one of the founding members of the Royal Academy, asserted the need for a national academy to boost design skills in his *Essay on Design*.[70] Five years later an article appeared in the *Spectator* requesting a petition, adding further volume to the increasing calls for a

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[67] Charles Saumarez-Smith refers to Campbell's work as the first of many concerning design. Charles Saumarez-Smith, *Eighteenth-Century Decoration: Design and the Domestic Interior in England* (London, 1993), p. 136; Charles Saumarez-Smith, *The Rise of Design: Design and the Domestic Interior in Eighteenth-Century England* (London, 2000), p. 121.
[68] Peter de Bolla, *The Education of the Eye: Painting, Landscape, and Architecture in Eighteenth-Century Britain* (Stanford, CA, 2003), p. 4.
[69] See Saumarez-Smith, *Eighteenth-Century Decoration*, p. 136.
[70] Puetz, 'Design Instruction for Artisans', p. 232; Saumarez-Smith, *Eighteenth-Century Decoration*, p. 136.

design institution.[71] In 1755, a campaign took shape under the leadership of the architect Henry Cheere. Later that year he submitted a petition on behalf of twenty-six leading artists, mainly from the St Martin's Lane academy, to the Society of Arts, pushing for the establishment of an academy.[72] Despite the persistent nature of these calls, an academy did not emerge until 1768. Moreover, when the Royal Academy did finally take shape it did little to meet the needs of artisans who wanted to further their drawing skills for manufacturing design purposes. Rather it represented the needs of the artistic elite such as Thomas Gainsborough and Joshua Reynolds.

In lieu of an official academy, artisans and manufacturers established schools to train workers in drawing and design. First, drawing masters, such as William Shipley, formed private schools offering drawing instruction to apprentices from a variety of trades, most particularly textiles.[73] Outside of the capital, other people established schools. For instance, by 1759, the enamel and trinket manufacturer John Taylor asserted that Birmingham boasted two or three drawing schools.[74] Manufacturers also became increasingly aware of the need to encourage young apprentices to hone their drawing skills. When Peter Parisot opened his carpet and tapestry factory in Fulham in 1753, he simultaneously formed an establishment to provide tuition in drawing.[75] The ceramics industry was slightly later in formulating such proposals. Writing to Bentley on 23 May 1770, Wedgwood suggested the idea of creating a

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[71] Puetz, 'Design Instruction for Artisans', p. 219.
[72] Ibid.
[73] Moira Thunder, 'Improving Design for Woven Silks: William Shipley's School and the Society of Arts', *Journal of Design History*, 17:1 (2004), p. 8.
[74] Young, *English Porcelain, 1745-95*, p. 100.
[75] Saumarez-Smith, *Eighteenth-Century Decoration*, p. 138.

drawing school. He wrote, 'I have a Waking notion haunts me very much of late, which is the beginning a regular drawing, & modelling school to train up Artists for our selves.'[76]

Alongside drawing schools, a proliferation of printed guides, some didactic and some inspirational, also met the demand for instruction. Books such as Henry Parker's *The Complete Drawing-Master* published in 1763 or Carington Bowle's *Artist's Assistant in Drawing* published in 1787, chiefly acted as sources from which aspiring draughtsman copied and thus practised their skills. Just as young gentlemen headed south to test their artistic talents amongst the source book of the Italian landscape during their Grand Tour, so designers learned through reproducing drawings and thus acquiring a bodily experience of the action of drawing well. Other authors aimed to provide instruction that moved pupils beyond merely copying. These writers privileged knowledge of the principles of drawing as the means to understanding and improving design skills. For instance, Matthias Lock's *The Principle of Ornament* used the raffle leaf as a shape which when drawn and reverse-drawn revealed the underlying principles of drawing forms.[77] Establishing drawing schools and publishing drawing manuals, not only encouraged originality in design, it also created a standardised design language. The effect of this change was particularly significant for manufacturers and artists attempting to communicate design intentions to modellers and workers.

Within this wider context, the British ceramics industry was a particular case. It faced fierce rivals in the form of imports from continental Europe. As noted above, from the seventeenth century onwards, finer,

[76] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 23 May 1770. MS E25-18302.
[77] Puetz, 'Design Instruction for Artisans ', p. 225.

whiter, porcelain wares adorned with unusual decorations and designs, also flooded in from Asia. In response, British manufacturers had to rethink the objects they made and the processes they used to make them. In the light of this pressure, ceramic manufacturers benefited from the design debate in two different ways. First, as noted above, manufacturers increasingly imitated and transformed designs found in published materials. Hence, the initial stages of the design process – producing design ideas – benefited from an increased input of shapes, forms and compositions. Second, establishing design schools and publishing training books placed a new emphasis on drawing skills. Manufacturers benefited not only from a greater number of artisans with these skills, but also from the standardisation of visual language created through shared learning. Through this, the communication of design information achieved greater clarity. Although the Vulliamy example demonstrates how fraught the use of visual language remained, that example and that of Greatbatch also shows how important drawings were. A shared visual language allowed manufacturers, modellers and workers to communicate across distance.

Hence, design restricted production by providing a tighter definition of the intended physical form of the object.[78] Yet, at the same time, negotiation over the space between intention and execution remained, disrupting presumed authority and contributing to the continued importance of communication. Thus, by reading the same books, and learning in the same ways as manufacturers, modellers and workers increasingly did, communication became clearer and thus execution more successful.

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[78] Ken Alder, 'Making Things the Same: Representation, Tolerance and the End of the Ancien Régime in France', *Social Studies of Science*, 28:4 (1998), p. 504.

**Illuminating Design**

Returning to the example of Hackwood in the light of wider changes in design communication, what is particular about his case? As stated above, Wedgwood's letters demonstrate his pleasure at working with Hackwood, whom he trusted to produce pieces that met his expectations. Moreover, his Commonplace Book reveals that Wedgwood wrote detailed critiques of Hackwood's work.[79] For instance, in 1779 Wedgwood recorded a series of remarks about 'Michael Angelo's Seal', a tablet produced by Hackwood. He noted that the 'middle figure, carrying a basket' needed 'to be strengthened & raised' whilst all the others 'to be made more flat & delicate'. Similarly, he found that the 'man holding a cup to the horse' was 'too heavy in his limbs, and too bulky for his height.'[80] If Wedgwood showed Hackwood these notes, which seems likely, he offered him a detailed description of his exact expectations. More than just Hackwood's experience, these notes demonstrate how thoroughly Wedgwood communicated his thoughts to Hackwood. Nevertheless, these letters reveal little about Hackwood's response. How did Hackwood understand what Wedgwood wanted?

Hackwood's notebook reveals some of the strategies he employed.[81] Here, in a bound volume, he sketched various designs for the decoration of objects. These sketches suggest that he successfully communicated with Wedgwood not only because of his experience of Wedgwood's working

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[79] Etruria Collection. Josiah Wedgwood Commonplace Book. c. 1760-1790. MS E39-28408. p. 118.
[80] Ibid.
[81] Wedgwood Museum Trust, Barlaston. William Hackwood Notebook. c.1790-1799. WHNB1/12.

practices, but also because of his ability to communicate ideas in different ways. Hackwood's sketches demonstrate his proficiency in a wide range of drawing techniques. Some were intricately drawn in ink, demonstrating full confidence in the design he executed. The fixed nature of ink, also suggests that Hackwood used the drawings as blueprints from which he produced models in wax or clay. Much more than basic sketches, these drawings were highly elaborate and included multiple features. For example, one of Hackwood's design features wreaths, hanging ribbons, arrows and torches.

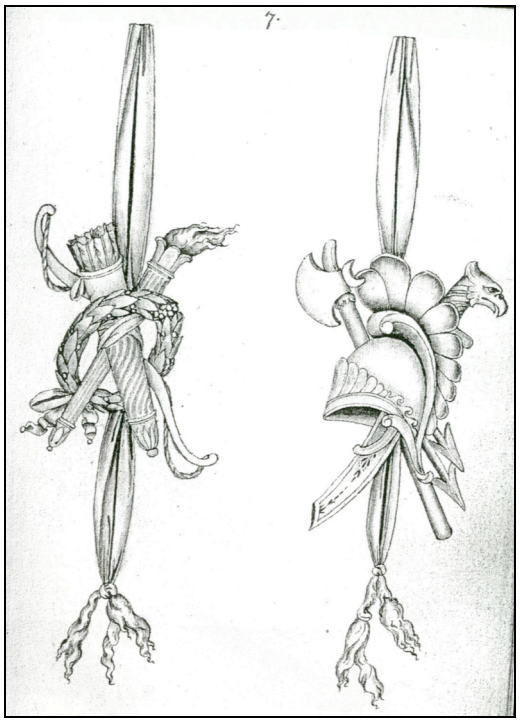


Fig. 4.1. Detail for page seven. William Hackwood Notebook. c.1790-1799. Image courtesy of Wedgwood Museum Trust, Barlaston, Staffordshire. [82]

The design demonstrates the full complexity of the reliefs being produced to decorate vases. Similarly, their intricacy also attests to Hackwood's skills. Wedgwood employed Hackwood for sixty-three years. Hence, it is

[82] William Hackwood Notebook. c.1790-1799. WHNB1/12. p. 7.

probable that he learned his drawing skills on site. Moreover, it is highly likely that Hackwood extended his skills through perusing the same set of drawing manuals and source books as Wedgwood. Clearly, Hackwood was well versed in the same visual language as Wedgwood. Through his use of drawing skills, Hackwood spoke the language of the time.

The notebook also includes much looser and rougher drawings. On page fifteen of the notebook Hackwood used pencil to sketch out ideas for a decorative pattern featuring fruits and leaves. The lines of the drawing are loosely interlinked and no part of the sketch is fixed by ink. The sketch appears uncertain and meditative.

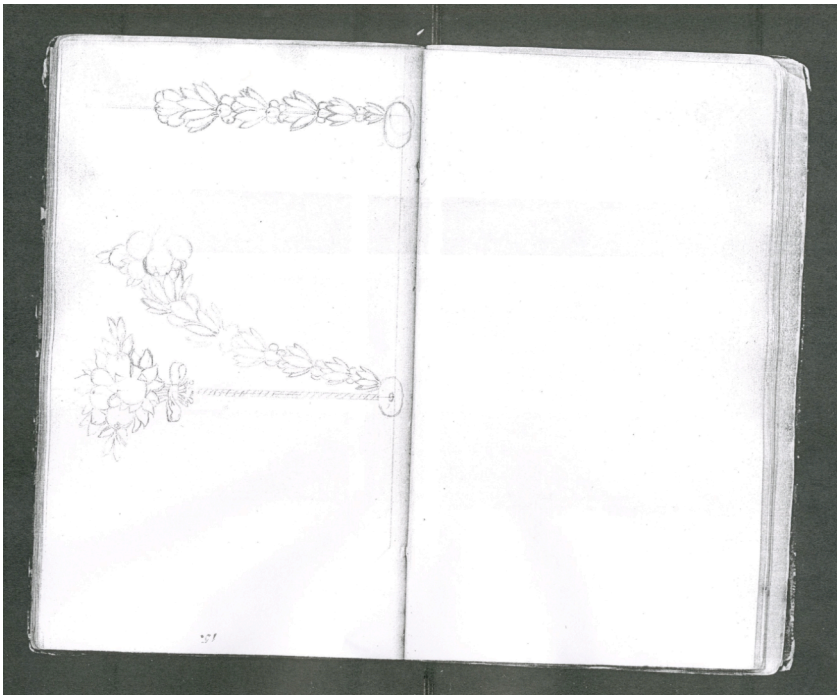

Fig. 4.2. Page fifteen. William Hackwood Notebook. c.1790-1799.
Image courtesy of Wedgwood Museum Trust, Barlaston, Staffordshire.[83]

The inclusion of these types of drawings in the notebook suggests that Hackwood used it as a space not only for finalising drawings but also for

[83] Ibid., p. 15.

testing them and thinking them through. These drawings indicate the reflexive nature of workmanship. For Hackwood, execution was not simply a physical process in three-dimensional terms, rather he also used two-dimensional forms to test, probe and consider. The range of drawing styles used in his notebook suggests that Hackwood worked to facilitate different stages of negotiation about designs and models. Wedgwood did ask Tebo to complete drawings before modelling, so it is likely that he also asked this of Hackwood.[84] By creating drawings that could be checked at different stages, Hackwood fully understood his own ideas and gained information on the particularities Wedgwood sought.

Two-dimensional drawings, and the information they collected in response to them, gave modellers a means of ensuring the success of the workmanship they enacted while modelling. Two-dimensional designs cannot be regarded as a separate entity but rather need to be viewed as an aspect of execution, as an aspect of workmanship.

**Conclusion**

In the ceramics industry during the second half of the eighteenth century, workmanship was not just a purely physical process. Due to the changing dynamic of design and modelling the achievement of workmanship was subjective, an unachievable ideal that shaped and distorted the process of execution. Amidst this, the clear articulation of a design idea, both internally and externally, was an essential aspect. By exploring the relationship between design and workmanship it is possible to show how

[84] For example of this see Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 24 January 1775. MS E25-18587.

the successful application of workmanship was greatly dependent on a thorough communication of design. Thus the design debate's push for drawing skills, was not only to extend design, it also sought to extend workmanship, by encouraging more workers to understand certain forms of communication. Consequently, while tightening definitions of the physical form the object should take, these two-dimensional forms also gave modellers greater skills of reflection and allowed them to consider their own understandings in comparison with those of others. Workmanship was not just a matter of execution, rather execution happened in a context of expectation and intention. Hence, design increasingly acted as an affective representation of workmanship and production. This context was significant for the various processes of production, as the next chapter goes on to explore.

## Chapter Five

## 'We do better now': Manufacturing Skill at Etruria

In the second half of the eighteenth century, as various innovative products came on to the market, customers waited with a sense of expectation for the arrival of new ceramic objects. Discussing the difficult development of jasper ware with Thomas Bentley in 1773, Josiah Wedgwood remarked on the seemingly eternal patience of his customers. 'When they see a head polish'd, & a figure unpolish'd, they will not believe it impossible to be done & will wait till we have brought them to that perfection, as many of my Customers you know have waited years, & some of them to this day for white ware.'[1] How long customers actually waited is unknown, yet their desire for new and novel objects continued throughout the second half of the eighteenth century. Earthenware manufacturers responded to this demand in different ways. Benefiting from developments in the early eighteenth century, manufacturers in the later decades produced more intricate shapes requiring new designs and different throwing skills, press moulding and slip casting. They also created creamware, variegated ware, cane ware and jasperware. Printers decorated these unusual bodies using technological innovations such as transfer printing, while painters hand-painted and enamelled the latest designs. Producing these objects and applying these technologies, required increasingly specialised skills.[2]

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[1] Wedgwood Museum Trust, Barlaston. Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 14 June 1773. MS E25-18472.

[2] Although as Liliane Hilaire-Pérez has shown invention was not always greeted positively. See Liliane Hilaire-Pérez, 'Diderot's Views on Artists' and Inventors' Rights: Invention, Imitation and Reputation', *The British Journal for the History of Science*, 35: 2 (2002), pp. 129-150.

In addition to originality, customers who shopped in the ceramic market also sought perfection. After all, any object obviously below this mark constituted a second, a worse second or a third. As chapter three demonstrated, in the second half of the eighteenth century, as the range of ceramics goods expanded, customers became increasingly experienced at comparing goods and detecting faults. Few defects passed unnoticed and as Charles Topham described it in 1791, shoppers purchased goods of 'accurate execution'.[3] In addition, the fashion for ornamental vase sets and larger dinner services in the later decades of the eighteenth century further encouraged shoppers to demand particular standards. As the Adams style grew in popularity from the 1760s onwards, leading to the integrated aesthetic of domestic interiors, each ceramic object purchased by a consumer was increasingly part of a set. A particular teacup belonged in a specific tea set, whilst a plate fitted into a dinner service and a vase was part of a pair. Consequently, making pieces 'alike' was significant. In the British market, the other pieces in the set, service or pair showed the customer what they should expect in the piece they held. They demonstrated the design, proportions and quality necessary for the particular piece to fit.

Hence, alongside the development of consumer skills, sets increased the demand for standardisation and created expectations about how pieces should be. Yet, as chapter three noted, in the second half of the eighteenth century, due to the inherent fragility of the ceramic production process manufacturers struggled to produce goods of this exact standard, they struggled to make pieces alike. Nevertheless, according to the industrial

[3] Charles Bowden Topham, *A Tour Through Ireland* (Dublin, 1791), p.52.

spy Barthelemy Faujas de Saint-Fond, in the case of Wedgwood that standard was met. In 1770, in his *Travels through England, Scotland and the Hebrides* he described Wedgwood's wares as being popular chiefly because of their 'excellent workmanship'.[4] This chapter asks how manufacturers, such as Wedgwood, produced that 'excellent workmanship' in light of the dual demands of novelty and 'accurate execution'.

**Novelty and Quality**

Moving on from design and modelling, this chapter analyses how the concept of workmanship operated in the production processes of the British ceramics industry, or more specifically the earthenware industry. This chapter questions how ideas of workmanship affected the formation of goods by returning to the much visited archive material produced by Wedgwood's time at Etruria. Although many scholars have used the Wedgwood Museum Trust archive, it still provides the richest source for analysing the intricacies of earthenware production in the latter decades of the eighteenth century. In response to the evidence in those archives, this thesis asserts that in the second half of the eighteenth century, workmanship was not just the application of effort and skill it was also a judgment. Like the design and modelling process examined in chapter four, in production manufacturers judged the level of 'workmanship' by examining the distance between intention and execution. In production the intention became increasingly demarcated by the move to standardisation and thus the pressure for exact execution increased. Hence, manufacturers

[4] Barthelemy Faujas Saint-Fond, *Travels in England, Scotland and the Hebrides; Undertaken for the Purposes of Examining the State of the Arts, the Sciences, Natural History and Manners, in Great Britain* Vol. 1 (London, 1799), p. 97.

increasingly sought new ways of controlling the distance between intention and execution. This chapter explores those strategies in order to probe the changing meaning of workmanship.

At the Wedgwood manufactory, during the latter decades of the eighteenth century, workmanship was achieved through a concentration on the details of production. Looking beyond Neil McKendrick's focus on discipline and specialisation, this chapter argues for the importance of the built environment, guidance and collaboration in the creation of excellent workmanship.[5] In this analysis, this chapter focuses on three overlapping periods – namely 1710-1760, the 1760s and 1760-1790.

First, this chapter argues that it is important to view the changes, which manufacturers instigated in the second half of the eighteenth century, in light of those that occurred in the first. By understanding the industry in this way, it is clear that developments were slow and multifaceted. In addition, it also demonstrates how factors other than discipline and specialisation became important to the earthenware industry. Moreover, this approach ensures that despite focusing on changes enacted by Wedgwood, the chapter does not regard those changes as necessarily pioneering, but rather sees them in the context of North Staffordshire's long-term development.

Second, the chapter examines correspondence from the 1760s, which relates to Wedgwood's plans for the building of the Etruria factory. Many different historical scholars have used these sources due to the detail they

[5] Neil McKendrick, 'Josiah Wedgwood and Factory Discipline', *The Historical Journal*, IV:I (1961), pp. 30-55.

offer.[6] Scholars' focus on Etruria, particularly its organisational structure, suggests it to be a special case. Yet in the context of the ceramics industry and North Staffordshire more specifically, it was very much of its time. Without denying the significance of Etruria in terms of its size, this chapter reads the specialisation instituted at Etruria as part of the longer-term developments in North Staffordshire. There, specialisation dated back to the 1730s and was already well established by the 1760s.[7] Hence, rather than specialisation, this chapter asserts that Etruria's significance is found in the details of its other attributes, such as its built environment.

Building Etruria marked the end of a particularly formative period for Wedgwood and the ceramics industry generally. After leaving the Thomas Whieldon partnership in 1759 Wedgwood set up business at Ivy House and then again in 1763 in the larger premises of the Brick House Works. Such movements required a constant reassessment of working practices and organisation and thus, a constant reassessment of how to achieve 'excellent workmanship'. Planning Etruria provided an opportunity for further detailed consideration of current working practices and, more particularly, the effect of the built environment upon them. Alongside these experiences, consumers' demands changed. The period between 1735 and 1760 instituted a greater focus on quality in North Staffordshire.[8] In the 1760s standardisation was increasingly important to manufacturers and consumers alike. Thus, Wedgwood's plans for Etruria

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[6] For instance, see McKendrick, 'Josiah Wedgwood and Factory Discipline', pp. 30-55; Maxine Berg, 'Factories, Workshops and Industrial Organisation', in Roderick Floud and Donald McCloskey (eds), *The Economic History of Britain Since 1700. Volume 1: 1700-1860* (Cambridge, 1994), p. 143; John Rule, *The Labouring Classes in Early Industrial England 1750-1850* (London and New York, 1986), p. 136.

[7] Lorna Weatherill, *The Pottery Trade and North Staffordshire 1660-1760* (Manchester, 1971), p. 145.

[8] Weatherill, *The Pottery Trade and North Staffordshire*, p. 145.

and the built environment he created demonstrate both his critique of contemporary ceramic practice and his ideas for fostering higher standards of quality and workmanship.

Finally, this chapter shifts to the end of the eighteenth century and examines a series of audits performed by Wedgwood in the 1790s that recorded workers' different roles. These audits suggest a sustained interest in working practices and specialisation from the 1760s onwards. They also demonstrate how the organisation of specialisation was not only skill, but also product specific. In addition, they indicate that by 1790 the type of worker specialisations was largely fixed. Yet in the period between the 1760s and the 1790s although workers specialised in a particular branch of the production process, specialisation in terms of the products they worked on was not rigid. Reading the audits alongside correspondence evidence shows the fluidity of worker roles. Specialisations changed and evolved in the face of new products and new demands. At the same time, once in a particular role, potters produced the same object again and again. Rather than static, the dual demands of variety and consistency ensured that repetitive work continually challenged workers and revealed new insights into practice. Wedgwood's oft-quoted desire to 'make such Machines of the men as cannot Err' represents his manufactory as a highly regulated entity filled with mindlessly submissive workers.[9] Yet his correspondence brings the accuracy of that image into question. Wedgwood's correspondence demonstrates that alongside changes to the built environment, he addressed the changing demands on workers, and the insights they revealed, through collaboration and repetition.

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[9] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 9 October 1769. E25-18265.

This chapter tracks the shifting make-up of earthenware production in order to demonstrate how manufacturers used a range of strategies to create 'excellent workmanship'. These different strategies reveal both the continued importance of workers' tacit knowledge alongside the development of other factors such as the built environment, technology and techniques. Hence, the continued importance of tacit knowledge demonstrates that specialised work was both mindful and flexible.

**North Staffordshire 1710s to 1760s**

According to Lorna Weatherill, the period from 1745 to 1790 was one of sustained growth for the North Staffordshire pottery industry.[10] Moreover, Weatherill argues that the period from 1710 to 1750 created many of the innovations that flourished into full-grown developments in later decades.[11] Before 1760, lathes smoothed objects; hovels regulated heat and moulds standardised shapes. Over the subsequent decades, these innovations developed and evolved into key ceramic technologies, which contributed to the production of better quality wares. Consequently, the changes in the second half of the eighteenth century must be read through the context of the first, as this chapter will now explore.

From 1720 onwards, North Staffordshire potters' inventories all include potters wheels of a distinctly higher value than had previously

[10] Lorna Weatherill, 'The Growth of the Pottery Industry in England, 1660-1815: Some New Evidence and Estimates', *Post-Medieval Archaeology*, 17 (1983), pp. 27-28.
[11] Weatherill, 'The Growth of the Pottery Industry in England, 1660-1815', p. 26.

been the case.[12] These more expensive pieces of equipment gave potters better control.

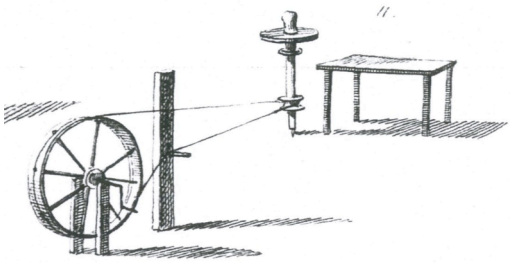

Fig. 5.1. Detail of sketch 'Drive for potters wheel'.[13]

During his tour of Staffordshire, and more specifically Hanley, in the early 1750s, Reinhold Angerstein sketched into his travel diary the above illustration of a potter's wheel. Clearly, this new type of wheel was of interest to the industrial spy. As the sketch demonstrates these new wheels benefited from an independent power source - namely a boy cranking a wheel. Hence, these wheels allowed potters to concentrate fully on throwing, and consequently facilitated the production of more intricate wares. In addition, they reinforced the need for specialised labour by employing both a thrower and a boy.

In contrast, although introduced at the start of the century, lathes only came into use gradually. Nevertheless, by 1760 the majority of North Staffordshire potteries owned four of them.[14] By the start of the nineteenth century, lathes had become such an important piece of equipment that North Staffordshire could support three lathe makers; Thomas Bell in

[12] Lorna Weatherill, 'Technical Change and Potters' Probate Inventories 1660-1760', *Journal of Ceramic History*, 3 (1970), p. 6.
[13] *R. R. Angerstein's Illustrated Travel Diary 1753-1755: Industry in England and Wales from a Swedish Perspective*. Trans. Torsten and Peter Berg (London, 2001), p. 341.
[14] Weatherill, *The Pottery Trade and North Staffordshire*, p. 50.

Burslem, John Baddeley in Hanley and William Less in Lane End.[15] Turners used lathes to turn thrown or moulded goods while they scraped the surface with a sharp tool. Turning resulted in a smoother surface and a precise form, making higher standards possible. Consequently, they affected consumer expectations about the look and feel of ceramic forms and surfaces. The earliest appearance of a lathe in an inventory was listed in 1714 as being in the workhouse of Aaron Shaw and was valued at 10s. North Staffordshire potters used lathes more widely from the 1720s onwards as a result of the increased production of salt-glazed wares and finer earthenwares, which were made on the wheel and then turned.[16]

In the first half of the century, North Staffordshire potters also changed their use of ovens. They instituted separate 'biscuit' and 'glost' firings, saving both glaze and coal. Enoch Booth of Tunstall is usually credited with the introduction of this technique, but the excavation in Burslem of perfect, unglazed pieces from the late seventeenth century suggests an earlier origin.[17] After the biscuit firing, potters smashed sub-standard wares and glazed only perfect wares. In terms of quality control, this practice was key. Potters did sometimes avoid such rules by using the glazing process to cover any faults revealed after the biscuit firing. Yet generally separate firings demonstrated a move towards standardisation, as did the increased use of moulds in North Staffordshire from the 1740s onwards, as discussed in chapter four. By 1760, the use of wheels, lathes, moulds, and separate firings culminated to produce more intricate, finer and more standardised forms in North Staffordshire.

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[15] *The Staffordshire Pottery Directory* (Hanley, 1802), p. 80 and p. 134.
[16] Weatherill, *The Pottery Trade and North Staffordshire*, p. 34.
[17] Ibid., p. 39.

The potter's ability to apply these new technologies was facilitated by the discovery of improved materials. In North Staffordshire in particular, although the use of local clay continued until the late eighteenth century, it was the increased use of ball clay from Dorset and Devon that enabled the production of a white earthenware body. Until around 1765, North Staffordshire manufactories produced two different types of white body. First, until 1765, the white, strong body of salt-glazed stoneware was an important product, which allowed North Staffordshire potters to compete with tin-glazed delftware. Rather than primitive and coarse, the introduction of press-moulding and slip-casting in the 1740s facilitated the production of intricate forms using this material. Second, cream-coloured earthenware or creamware, which replaced salt-glazed stoneware in the 1760s, was produced from the early 1750s onwards. Creamware combined a white clay and flint body, which was fired at around 1250 to 1350 degrees centigrade. A lead glaze was then applied to the body before the ware was fired again, this time at a lower temperature of around 900 to 1100 degrees centigrade. It was the production of this earthenware that allowed manufactories to compete with porcelain.

Moreover, the development of refining processes created cleaner materials at a faster pace. Potters increasingly prepared clay indoors, in more controlled settings. For instance, clay was increasingly blunged indoors. Thus blunging, the manual process of mixing clay with poles and paddles, was less affected by contamination and weather. Starting sometime before 1732, indoor blunging became the usual method by 1760.[18] Coal-fired kilns, which dried clay indoors, also quickened the pace of clay

[18] Ibid., p. 19.

preparation. Places for drying clay were frequently detailed in inventories from the 1730s. The earliest use of this technology may have been the first decade of the eighteenth century but it was certainly in use from the second decade.[19]

Using the new processes and technologies outlined above, potters produced higher quality wares in larger quantities. Hence, these changes led to both new standards of quality and a new emphasis on quality. Moreover, these processes also led to the specialisation of skills and spaces. For instance, new processes, such as blunging indoors, required designated space. The first mentions of specialist houses for processes such as turning and throwing, appear in inventories in the 1730s and by the 1760s, more provision for specialisation had occurred. By this point larger potteries had several houses for the same function. For instance, Peter Bagnall's inventory of 1761 lists that he had four warehouses and a packing house, whilst John Baddeley's inventory of the same year noted that his pottery made china and redwares in separate houses.[20] Specialist workers increasingly filled these particular spaces.

Sarah Richards has argued that 'The notion that an individual craftworker was ever solely responsible for the making of ceramic vessels, sculptures or ornament in West European culture would represent the exception, rather than the rule.'[21] The diversity of processes involved in making ceramic wares meant that pottery manufacture had long used groups of workers rather than individuals, as few were well versed in all the different aspects of the trade. This was particularly true of an area such

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[19] Ibid., p. 20.
[20] Ibid., p. 62.
[21] Sarah Richards, *Eighteenth-Century Ceramics: Products for a Civilised Society* (Manchester and New York, 1999), p. 50.

as North Staffordshire, which, due to its local resources, slowly acquired a cluster of potteries and potters. Simeon Shaw drew attention to the early specialisation within the pottery district. Writing in the first quarter of the nineteenth century, he noted that even within the last fifty years a good workman was defined as a potter who could 'throw, stouk, lead and finish' as, in fact, 'very few being expert at more than two or three branches.'[22] As the recollections of John Fletcher further demonstrate, the earlier Staffordshire works used specialised labour. Fletcher, who turned eighty-three in 1816, recalled how he had begun work as a ball-maker for Josiah and Richard Wedgwood. He left their employment for another equally specific role - to 'turn the lathe' for Moses Marsh.[23] Between 1714 and 1731 the specialisation of labour received formal recognition in the wording of apprenticeship indentures.[24] From this point on employers apprenticed workers to train for specific tasks, such as throwing. Hence, before 1750 the specialisation of workmen in different techniques was well developed.

Eighteenth-century contemporaries agreed that above all specialised labour improved quality. Adam Ferguson argued in his 1767 work *An Essay on the History of Civil Society*, that the division of labour ensured not only diminished expenses and increased profits but also the level of workmanship needed to satisfy eighteenth-century consumers.[25] He wrote that 'The consumer too requires, in every kind of commodity, a

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[22] Simeon Shaw, *History of the Staffordshire Potteries* (Hanley, 1829), p. 104.
[23] Potteries Museum and Art Gallery, Stoke-on-Trent. Enoch Wood Papers. Enoch Wood Folio. PM 1/1/1-2. p. 9.
[24] Weatherill, *The Pottery Trade and North Staffordshire*, p. 60.
[25] 'Specialisation of labour' tends to consider the question of organisation from the perspective of workers, whilst 'division of labour' explores organisation from the point of view of the capitalist or manager. This chapter uses 'specialisation of labour' rather than 'division of labour' because although it is considering how Wedgwood created excellent workmanship it is considers Wedgwood as part of the workforce, not entirely removed from it.

workmanship more perfect than hands employed on a variety of subjects can produce; and the progress of commerce is but a continued subdivision of the mechanical arts.'[26] For Ferguson, the key means of producing standardisation was to use increasingly specialised labour. Hence, the increased division of labour experienced by the ceramic industry in the eighteenth century could be read as a direct attempt to ensure high levels of workmanship in the objects they produced and sold. Yet as the breadth of changes instituted in the early decades of the eighteenth century demonstrate other factors were also highly important in creating good workmanship. It was in the context of all these changes that Etruria was built, in many ways representing a culmination of the different developments of the first half of the eighteenth century.

**North Staffordshire 1767-1769 – Building Etruria**

Wedgwood formally opened his new factory, to much fanfare, on 13 June 1769. He had bought the Ridgehouse Estate, a property of around 350 acres situated near Burslem, in December 1767. More than a collection of buildings and land, the estate particularly benefited from its proximity to the planned Trent Mersey Canal. To mark the opening of the works Wedgwood threw six black basalt vases, while Bentley cranked the wheel. Black basalt ware, manufactured from 1768 onwards, epitomised both Wedgwood's current business success and his link to the ancient world. These 'Etruscan' wares also fitted the name of the factory, Etruria.[27] Hence,

[26] As cited in Richards, *Eighteenth-Century Ceramics*, p. 50.
[27] Its namesake was an Italian city, from which Greek pottery was excavated and wrongly presumed to be Etruscan. Robin Reilly, *Josiah Wedgwood 1730-1795* (London, 1992), p. 67.

Wedgwood linked himself to the ancients in multiple ways. At the same time, the design of the Etruria factory also spoke to the recent technological developments in the North Staffordshire pottery industry. Etruria was simultaneously modern and ancient.

As McKendrick has argued, a key part of Etruria's claim to modernity was Wedgwood's implementation of discipline and highly regulated organisation.[28] Etruria was undoubtedly on a new scale in terms of the workforce. By February 1770, Wedgwood complained to Thomas Bentley of the difficulties of keeping '150 hands of various professions, & more various tempers and dispositions, in tolerable order'.[29] Although the number of people employed in individual potteries had increased considerably between 1715 and 1761 they remained small concerns compared to the numbers employed at Etruria. For instance, between 1750 and 1753, Thomas Whieldon employed a labour force of around twenty to twenty-five people, whilst between 1759 and 1761 John Baddeley's pottery at Shelton employed around forty people.[30] Such potteries and those that were still smaller continued to exist in Staffordshire into the nineteenth and twentieth century.[31] In contrast, the size of Etruria's workforce was more equivalent to porcelain factories such as Derby and Bow who employed between one hundred and two hundred workers in the 1760s.[32]

McKendrick has asserted that Wedgwood eased his difficult task of keeping order through the use of rules and bells and that it was these forms

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[28] McKendrick, 'Josiah Wedgwood and Factory Discipline', p. 34.
[29] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 3 February 1770. MS E25-18287.
[30] Weatherill, *The Pottery Trade and North Staffordshire*, p. 51.
[31] Richard Whipp, '"A Time to Every Purpose": An Essay on Time and Work', in Patrick Joyce (ed.), *The Historical Meanings of Work* (Cambridge, 1987), p. 225.
[32] Roger Massey, 'The Size and Scale of Eighteenth-Century English Porcelain Factories', *English Ceramic Circle Transactions*, 17:3 (2001), p. 449.

of discipline that ensured consistent work and production. Yet North Staffordshire was accustomed to these forms of discipline. For instance, potters in this area had long used sound to signal the different times of the day, from the start of working day to breakfast, dinner and the end of working day. In North Staffordshire the horn was the traditional sound of choice. Wedgwood, however, opted to use a bell after his move to the Brick House Works in 1763 and as a result the works became known locally as the 'Bell Works'. Wedgwood accompanied these older systems of regulating attendance with new ones, such as 'registering' each worker each day at the counting house.[33]

By 1790, Wedgwood employed approximately 282 workers and as the works grew bigger he delegated management responsibilities to others.[34] For instance, Wedgwood's 1793 'Analysis of Hands' lists John Beardmore as the overlooker for jasper ware and Daniel Greatbatch appears in the same role for black ware.[35] These more senior workers organised and managed workers and proved particularly useful when difficulties arose. For instance, in 1772, rather than negotiating with the workers himself, Wedgwood dispatched Daniel Greatbatch to inform them that he had determined to reduce their prices.[36] Yet, despite greater regulation in these forms, amongst others such as rulebooks and 'Potters Instructions', difficulties often occurred.[37] In this instance, delegating the communication of such news was ineffective and the following Monday morning Wedgwood found his workers gathered and ready to 'settle the

[33] McKendrick, 'Josiah Wedgwood and Factory Discipline', p. 41.
[34] Massey, 'The Size and Scale of Eighteenth-Century English Porcelain Factories', p. 454.
[35] Etruria Collection. Josiah Wedgwood Commonplace Book. c.1760-1790. MS E39-28409.
[36] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 22 July 1772. MS E25-18381.
[37] For note on 'Potters Instructions' see McKendrick, 'Josiah Wedgwood and Factory Discipline', p. 40.

matter' with him.[38] Moreover, the overlookers themselves caused problems. Wedgwood remarked in a letter to Bentley written 3 February 1770 of how 'Dan does pretty well when at work, & I am here every day, but he often leaves the works, & drinks two or three days together, & had no taste to direct, at anytime, & for the Warehouse I have nobody at all'.[39] Although some of Wedgwood's management strategies were highly effective, the feasibility of others is open to question. Yet, building plans for Etruria reveal that Wedgwood understood that factors other than discipline affected work practice.

**The Built Environment**

As recent research by Dell Upton has demonstrated, the built environment is an affective force, which shapes the actions and behaviours of those exposed to it.[40] Upton also argues that plans for building works are representative of how contemporaries wish to live and interact. They represent their ideals and express how contemporaries think and feel about their own identities.[41] Similarly, this chapter argues that building Etruria encouraged Wedgwood to consider anew the effects of the built environment and material culture on working practices. Hence, in these plans he expressed how workmanship could be shaped and created.

Like Peter Bagnall and John Baddeley's potteries before, Wedgwood wanted the various buildings of Etruria to house the different parts of the

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[38] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 22 July 1772. MS E25-18381.
[39] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 3 February 1770. MS E25-18287.
[40] Dell Upton, *Another City: Urban Life and Urban Spaces in the New American Republic* (New Haven, CT and London, 2008), p. 15.
[41] Upton, *Another City*, p. 9.

production process. Writing to Bentley in 1767, Wedgwood outlined his plans for the proposed buildings. He wanted the ornamental and useful works housed in three blocks linked by courtyards, at the corners of which would be ovens.[42] He envisioned a central building for the manufacture of useful wares, managed by the partnership of Josiah and Thomas Wedgwood.[43] Wedgwood wanted the useful wares buildings flanked on either side by buildings for making plate and ornamental wares to be managed by the partnership of Josiah Wedgwood and Thomas Bentley. From December 1767 onwards, Wedgwood worked closely with Joseph Pickford to design the building for each works and was exacting in what he wanted.

Like the purpose-built Worcester Porcelain Factory and its 'eleven different rooms', discussed in chapter one, Wedgwood and Pickford designed a factory that divided the workers into different rooms to perform different tasks.[44] Workers entered these workshops through individual external staircases, thus increasing the security of process secrets. At the end of July 1769, a month after Etruria opened, Wedgwood noted that despite his frequent changes he never abandoned, 'the scheme of keeping each workshop separate, which I have much set my heart on'.[45] As noted earlier, North Staffordshire potters separated processes into different buildings from the 1730s onwards. Hence, Wedgwood's use of this

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[42] As cited by Reilly, *Josiah Wedgwood*, p. 67.
[43] Although it was not until 1772 that the Wedgwoods finally vacated the Brick House and 'Red Workhouses' and transferred the remaining workers to Etruria.
[44] Emily J. Climenson (ed.), *Passages from the Diaries of Mrs Philip Lybbe Powys 1756-1808 of Hardwick House, Oxon. A.D. 1756 to 1808* (New York and Bombay, 1899), pp. 125-126. For more on Worcester as a purpose-built factory see Hilary Young, *English Porcelain 1745-95: Its Makers, Design, Marketing and Consumption* (London, 1999), p. 23.
[45] As cited in McKendrick, 'Josiah Wedgwood and Factory Discipline', p. 31.

organisational structure as the basis for his factory buildings represented a continuation of regional practice.

Apart from these larger scale design issues, Wedgwood also implemented smaller scale changes to the built environment of Etruria. Although little commented on by previous scholars, it is these smaller scale changes that highlight most vividly his views on current practices and the production of workmanship.[46] Clearly, Wedgwood considered current working practices too open to the effects of external forces, such as light, and believed that a more thoughtful design of building and fittings could control those forces and improve the quality of his pottery.

**Light**

In the catalogue to her 1954 exhibition in London's Whitechapel Gallery, the sculptor Barbara Hepworth, eloquently discussed the relationship between light and form. She wrote, 'the wonderful realm of light – light which transforms and reveals, which intensifies the subtleties of form'.[47] For Hepworth, light picked out the intricacies of form that often went unnoticed. In 1769 Wedgwood expressed similar views on the significance of light.

In a letter to Bentley discussing the design of the lathe room at Etruria, Wedgwood described the difficulty of correctly positioning the room in relation to the light. As noted earlier, North Staffordshire potters used lathes from the 1720s onwards to produce finer, neater goods.

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[46] Reilly notes the smaller scale changes examined below, but in terms of the importance of light he offers little analysis. See Reilly, *Josiah Wedgwood*, p. 74.
[47] From the catalogue of *Barbara Hepworth Retrospective* exhibition, at the Whitechapel Gallery, London, 1954.

Turning a pot on a lathe, potters slowly shaved away rough edges and areas of thickness. They also used the lathe to cut delicate patterns on the surface of their wares. Potters used lathes to transform wares from thrown objects to smooth, intricate forms, qualities customers felt. For Wedgwood, like Hepworth, light was crucial in judging the intricacies of these forms. He felt that in the production process light shaped the worker's perception of form by providing the outline of the shape they worked. Deciding upon the location of the lathe room was, therefore, highly significant and became so for other porcelain and earthenware manufacturers during the eighteenth century.[48] Wedgwood concluded that the ground floor was best, as 'Here the lights are high enough'.[49]

More particularly, Wedgwood felt that the way light *fell* in a workspace affected the potter's ability to judge form, which was especially important in creating intricate wares, such as vases. Writing to Bentley he explained that 'I have thought of another alteration for the lathes too, which though it may not be of much consequence for common things, will, I think, be a great help to the workman in turning plain Vases, where a true outline, free of any irregular swellings, or hollows, are of the first consequence.'[50] Hence, Wedgwood understood that the space and design of each workshop was crucial to reducing irregularities and producing standardised wares.

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[48] It is uncertain as to whether other manufactories were also aware of the importance of light in rectifying work practices. Yet a later publication *The Process of Making China* published by the Worcester Porcelain Manufactory in 1810 certainly highlights the centrality of windows in the processes of throwing and turning. *The Process of Making China* (London, 1810).

[49] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 9 April 1769. MS E25-18237.

[50] Ibid.

Wedgwood's idea for altering the lathes was very simple. He asserted that the 'alteration I propose is to set the lathe so that the turner shall have an end light instead of a front one, which they now have.'[51] Wedgwood managed this situation by constructing the built environment of the workplace in a certain way. He dictated that the lathes must be positioned in the space of the workshop and, perhaps more importantly, in the 'light space' of the workshop – so that the light revealed the true form of the objects. As Wedgwood told Bentley, 'If you hold a Mug both these ways to the light, you will soon see the advantage I propose from this alteration.'[52] Wedgwood, like Hepworth, appreciated the importance of light in illuminating form. Wedgwood's appreciation of this relationship allowed him to manage that relationship, and ultimately ensure that his potters benefited from the light, rather than suffer by it.

Wedgwood worked closely with his turners to test his hypothesis. He recorded how 'I have try'd the experiment upon Abrams Lathe & it answer'd to my wishes – On shutting out his front light, & leaving the Window on his right hand open, he had much ado to shave a piece of ware even enough to please himself.[53] His experiment demonstrated to him how crucial light was in forming wares to exact standards. Perhaps even more than separate rooms, these seemingly minor insights honed through experience, improved production processes and the objects manufactured. When planning the details of his workrooms at Etruria Wedgwood devoted time to working out how different elements of the built environment affected work practices. His devotion to this problem indicates his critique

[51]Ibid.
[52]Ibid.
[53]Ibid.

of current working practices, as inexact and imperfect. Clearly, Wedgwood wanted to institute changes that would remove the ambiguities of the working process and aid his workers in creating perfect shapes, again and again.

**Tools**

In the 1760s, most potteries in North Staffordshire regularly used tools such as moulds, casts, wheels and lathes. Like the light in each workshop, tools such as these had the potential to reduce the 'risks' of workmanship.[54] Steven Lubar has argued that technological representations, such as designs, instructions and gauges, 'make it easier to bring technological actions under the control of authority.''[55] By making intention more explicit, or by restricting the boundaries of work greater control is enacted. In this reading, tools created firmer boundaries within which potters operated. They were objects against which potters laboured and which defined the potential object in new, more precise ways.

Nevertheless, not all tools succeeded, certain tools failed. By 1774 tablets, plaques and medallions were an important part of the Wedgwood business. A Wedgwood catalogue of the same year, listed a total of ninety-three different tablet designs, made in black basalt or white biscuit.[56] During this period Wedgwood also worked on creating tablets using his new jasper body. Writing to Bentley on 22 August 1774, Wedgwood discussed the difficulties he was experiencing in adjusting the processes

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[54] David Pye, *The Nature and Art of Workmanship* (London, 1971), p. 7.
[55] Steven Lubar, 'Representation and Power', *Technology and Culture*, 36 (1995, suppl.), p. S55.
[56] Robin Reilly, *Wedgwood* Vol. 1 (London, 1989), p. 576.

required to make tablets for his new jasperware. He noted the 'greater difficulty of having perfectly true planes to place them [tablets] upon, has hitherto prevented my attempting to use them [the rollers].'[57] Clearly, without the seemingly simple addition of 'perfectly true planes', pieces of technology such as rollers were ineffective. In addition to this he struggled in 'making balls exactly round, & of the same size one with another'.[58] The combination of these two problems resulted in Wedgwood failing to implement the use of 'Balls & Rollers' to shape tablets. Clearly, Wedgwood aimed to standardise the process by rolling out perfectly sized balls onto flat surfaces, yet in 1774 this proved impossible and it is uncertain as to whether he achieved it at a later date. Nevertheless, Wedgwood's pursuit of this technology suggests his confidence in the ability of tools to reduce risk and increase standards of execution.

Tools that succeeded often required lengthy periods of negotiation, involving numerous parties. As noted above, a key piece of ceramic technology in the second half of the eighteenth century was the lathe. This wheel based equipment turned the pot as a turner finished and buffed its surface. By 1763, Wedgwood was familiar with the engine-turned lathe but only regularly used it in his workshops from 1767 onwards.[59] The engine-turned lathe was similar to the simple lathe previously used in North Staffordshire, albeit using the engine-turned lathe turners decorated vases and wares in new, more intricate ways. Wedgwood used the lathe to cut various patterns such as rosettes and crowns into the surface of the wares and it was particularly useful for decorating vases and redware. The

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[57] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 22 August 1774. MS E25-18554.
[58] Ibid.
[59] Reilly, *Wedgwood* Vol. 1, p. 306.

engine-turned lathe worked by having an assistant turn a large wheel, which rotated a horizontal shaft upon which a piece of ware was mounted. The turner then applied a static tool to the moving piece in order to create the required finish. As seen in the image below, working the engine-turned lathe took much concentration and skill on behalf of both the turner and their assistant.

Despite all its inherent advantages, the introduction of this new technology was particularly difficult. In the initial stages of using the engine-turned lathe Wedgwood regularly wrote to his then friend Bentley. In these writings Wedgwood asked Bentley to offer pieces of clarification and advice based on his readings of J. Plumier's 1701 work *L'Art de Tourner*.[60] A particular problem in using this piece of technology was deciphering the optimal position of various weights and springs in order to offset the 'tremulous shake, or motion' created by the lathe.[61] As the image below from Enoch Wood's 1827 pocket-sized publication *A Representation of the Manufacturing of Earthenware* shows balancing the lathe was complex.

[60] Ibid., p. 691.
[61] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 16 February 1767. MS E25-18136.

Fig. 5.2. Detail of Plate Five. 'The Turner turning in a lathe and regulating clay ware which the "thrower" has formed.' Courtesy of The Winterthur Library: Printed Book and Periodical Collection.[62]

At the same time as his consultations with Bentley and various texts, Wedgwood also entered into a series of negotiations and trials with his workers. In finally deciding on the correct position of the different weights and springs involved, Wedgwood wrote to Bentley in order to describe to him how the workmen had found 'The utility of having the rest as near as possible to the work, & if you consider the tool as a Lever. The rest at its centre, & the work bearing against or rather upon, the end of the tool, as a weight, the reason I think will be very obvious.'[63] As the image above shows, the ware was placed onto the lathe at the end point in order to retain the balance of the equipment and to achieve a sound edge.

Hence, although designed to aid potter's work and standardise process, the implementation of such tools was not simple. Like the light in

[62] Enoch Wood, *A Representation of the Manufacturing of Earthenware* (London, 1827), pl. 5.
[63] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 16 February 1767. MS E25-18136.

the lathe room, the successful application of such tools required several mediators and much time. In successfully implementing the technology Wedgwood concluded that 'My Workmen have found out by practice, what you say, you are not certain of the reason why it is so.'[64] As skilled workmen, they possessed the 'knack' of practice and, as J. R. Harris has argued, 'the essence of a "knack" is its difficulty of communication.'[65] In contrast to narratives asserted by Veblen, amongst others, rather than simply removing or reconstituting skill, the successful use of technology required the creative application of tacit knowledge through trial and error.[66] Tools were 'things' to think through, rather than against.

Similarly, once a certain tool was in use in the production process, further negotiations were apt to take place as workers' different techniques created new problems and solutions. For instance, agate wares were particularly popular in the 1760s and 1770s. Made of coloured clay, or decorated with coloured slip or glazes, these bodies were well suited to ornamental and table wares. Mixing or wedging coloured clays created eye-catching combinations of colour and pattern. Potters mixed the colours to create wares that imitated marble, agate or stone. Wedgwood used this technique to create solid agate wares after 1768, although possibly before.[67] Yet mixing was a delicate process. As Wedgwood described to Bentley in 1776, when clays were perfectly mixed to create a pebble effect, 'if the Workman gives the batts a twist edgeways, instead of keeping them flat when he puts them into the mould, a line of stringiness is produc'd which

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[64] Ibid.
[65] J. R. Harris, 'Skills, Coal and British Industry in the Eighteenth Century', *History*, 61 (1976), p. 182.
[66] Thorstein Veblen, *The Instinct of Workmanship And the State of the Industrial Arts* (New York, 1964), pp. 338-339.
[67] Reilly, *Wedgwood* Vol. 1, p. 343.

shews the Pott instead of finely variegated Pebble.'[68] Simply twisting the batt of clay edgeways whilst trying to flatten it into the mould had distinctly negative ramifications. Like their relationship with light, potters' minor movements were essential to the creation of consistent quality. Once a technology was implemented it required further sensitive use from operatives in order to make it work effectively.

Wedgwood's concentration on the smaller scale ambiguities of the production processes indicates the importance he placed on surfaces, corners, shapes and light affecting work practice. For workers to produce 'excellent workmanship' Wedgwood had to reduce environmental ambiguities. Yet in implementing tools and techniques such as engine-turned lathes, rollers and batts Wedgwood relied on negotiation with his workers. Tools highlighted the importance of hand skills. Hence it was this knowledge, which remained consistently significant over the subsequent decades.

**Specialisation Reconsidered**

In June 1790, after twenty-one years at Etruria, Wedgwood's interest in the particularities of his employees' work manifested itself in the form of a detailed 'Analysis of All Hands'.[69] Examining these lists against correspondence evidence from the 1770s demonstrates that novelty and uniformity remained pressing concerns in the Wedgwood manufactory. Wedgwood failed to find an answer to these concerns but his continued

[68] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 27 January 1776. MS E25-18647.
[69] Etruria Collection. Josiah Wedgwood Commonplace Book. c. 1760-1790. MS E39-28409.

pursuit of them reveals different aspects of work practice and workmanship.

In his analysis, Wedgwood listed his workers' different roles in the useful and ornamental works. In June 1790, he listed 169 employees at the useful works and 110 employees at the ornamental works under various roles.[70] Wedgwood recorded, amongst others, claybeaters, platemakers, pressers and apprentices at the useful works. Similarly, in the ornamental works analysis he registered roles such as turners, blackhandlers, firemen and painters. Wedgwood included even the most specific roles in his analysis. For instance, the list records that Jonathan Hulley earned twelve shillings per week working as a 'Placer of Cameos' in the ornamental works. Clearly, the success of jasper ware required that one worker be fully involved in this task. He also recorded that Sam Eller earned three shillings per week by carrying and setting up wares in the warehouse of the useful works.[71]

It is uncertain why Wedgwood took up the task of recording the roles and weekly wages of each of his employees in June 1790 and then again in 1793 in the case of the ornamental works.[72] Obviously though, the exercise demonstrates that each worker had a particular task. The organisation of the list, by role rather than alphabetical position of name, further substantiates the defining nature production processes held for workers. For those employed at the ornamental works each position became more specific in this period as the works were split between blackware and jasper ware.

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[70] Ibid.
[71] Ibid.
[72] Ibid.

In the light of the use of annual hiring agreements, the lists also present a relatively stable picture of the works in this period. For instance, of the 110 workers employed at the ornamental works in 1790, sixty-two remained there in June 1793. Of those sixty-two, forty-three continued in the same role. Moreover, discounting the movement of apprentices into permanent positions, only eight employees actually changed role in the three-year period.[73] Hence despite changes in the organisation of the works, workers remained stable in their particular specialisation. In the final quarter of the eighteenth century, ceramic workers became increasingly identified by their tasks.

Hiring books and wage sheets from the factory during a later period, 1791 to 1812, demonstrate the continued development of various roles at Etruria. After Josiah Wedgwood died in 1795, responsibility for running the manufactory fell to his nephew Tom Byerley and his son Josiah Wedgwood. A list of workers recorded on the 13 April 1791 included roles, such as presser, turner, thrower, claybeater and gilder.[74] In 1810, when Josiah Wedgwood's sons, Josiah and John Wedgwood ran the business, a list records the roles in still more specialised terms. For instance, it noted William Grocatt's role as 'turner of lathe'.[75] Yet by 1812, the records deemed such terms ineffective and began to specify for whom the turners of lathes operated.[76] For instance, James Barker Junior was listed as turning the lathe for John Hackwood.[77] As well as attaching roles to the production processes of specific named workers, employment lists also began to register the roles to specific parts of the process. An employment list of 1811, exemplifies this

[73] Ibid.
[74] Etruria Collection. List of Persons Employed. 13 April 1791. MS E46-29119.
[75] Etruria Collection. List of Persons Employed. 5 December 1810. MS E46-29126.
[76] Ibid.
[77] Etruria Collection. List of Persons Employed. 12 December 1812. MS E46-29134.

pattern. Here, there was no longer a 'looker to ware' who oversaw the quality of the objects in general. Instead there was a certain William Bradbury, who specifically looked after the ware produced by the throwers.[78]

These different lists all indicate that specialisation remained an important principle of organisation at Etruria throughout the final decades of the eighteenth century. Each employee continued to perform a specific task. Reflecting on this in 1777 Wedgwood noted that employees 'were trained to one particular task and they had to stick to it.'[79] Such evidence suggests that, in concurrence with Ferguson's view, rigid specialisation was a key means of achieving workmanship in these years. Yet the correspondence between Wedgwood and Bentley from 1765 to 1776 offers a different narrative. Here, Wedgwood changed workers' specialisations. Hence, in the period between the building of Etruria and the audit of the 1790s, specialisation was largely unstable and Wedgwood faced negotiation and resistance as a result.

It is perhaps unsurprising that specialisations changed. Consumers demanded novelty, which in turned required flexible production practices.[80] Manufacturing creamware, black ware, agate ware and jasper ware all required specific skills and knowledge which workers had to learn. As J. R. Harris has argued, in this climate skills changed and adapted.[81] Yet like the implementation of new tools, new skills had to be mediated and implemented. Similarly, increasing demands for uniformity and

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[78] Etruria Collection. List of Workmen. 1811. MS E46-E29131.
[79] As cited in McKendrick, 'Josiah Wedgwood and Factory Discipline', p. 32.
[80] John Styles, 'Manufacturing, Consumption and Design in Eighteenth-Century England', in John Brewer and Roy Porter (eds), *Consumption and the World of Goods* (London and New York, 1993), p. 534.
[81] Harris, 'Skills, Coal and British Industry', p. 175.

standardisation put further strain on the manufacture of ceramic products. As a result of the regular changing of specialisations the dual demands of novelty and sameness continued to exert control over the working practices of potters and 'excellent workmanship' remained a challenge.

**The Problems of Novelty and Standardisation**

Before moving to Etruria in 1769, Wedgwood started trials to create a black basalt body. From the middle of the century, Staffordshire potters made hard black earthenware by staining the clay black. Wedgwood, however, intended to make black ware from inherently black clay. In 1768 he succeeded and began manufacturing black basalt objects, like the vase shown below.

Fig. 5.3. Black Basalt Vase. c. 1785.
Victoria and Albert Museum, London.[82]

[82] Victoria and Albert Museum, London. Black Basalt Vase. c. 1785. Museum number 1506-1855. <http://vam.ac.uk/images/image/38661-popup.html> (8 April 2009).

Wedgwood made the ware by mixing ball clay, carr (an oxide of iron suspended in water and drained from coal mines) and manganese. The body owed its rich colour to the manganese, while the high proportion of ball clay and a high firing temperature produced a dense texture. Black basalt appealed to fashionable consumers who wished to display their 'white hands'. As Josiah Wedgwood wrote to Thomas Bentley in 1772, 'I hope white hands will continue in fashion & then we may continue to make black Teapots 'till you can find us better employment.'[83] Alongside teapots, Wedgwood used black basalt to make vases, teapots, busts, gems, tablets, cameos, medals and intaglios. Nevertheless, manufacturing these wares was difficult and some workers refused to work with it. Wedgwood's workers, like those in other industries, resisted this form of technical change.[84] As Wedgwood recorded in a letter to Bentley marked 1769, 'we have now for thirty hands here, but I have much ado to keep the new ones quiet – some will not work in Black.'[85]

Why workers resisted working with this new material is unknown, possibly its novelty was reason enough. Potters' resistance to new techniques and products, however, was not unusual in the context of eighteenth-century Britain. Almost 400 labour disputes took place in the British Isles between 1717 and 1800.[86] Yet the resistance shown by the potters was not strike action, rather it was the individual refusal to take to a particular task. That Wedgwood's remarks on that refusal are almost casual

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[83]Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 26 December 1772. E25-18430.

[84] Maxine Berg, 'Workers and Machinery in Eighteenth-Century England', in John Rule (ed.), *British Trade Unionism 1750-1850: The Formative Years* (London and New York, 1988), p. 55.

[85] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 19 November 1769. MS E25-18269.

[86] Dobson, C.R., *Masters and Journeymen: A Pre-History of Industrial Relations 1717-1800* (London, 1980), p. 18.

suggests that workers resisted in vague terms. Yet even minor resistance suggests that workers knew the value of their current skills.

In addition to the creation of new bodies, Wedgwood produced a diverse range of shapes, which also caused difficulties for specialised workers. In May 1769 London was awash with 'vase mania'. As Mrs Byerley described 'Vases was all the cry'.[87] In response Wedgwood and Bentley's ornamental works produced increasing numbers. By 1772, they had more than one hundred different vase shapes in production. Yet as different shapes required new throwing skills, producing vases put a particular strain on the workforce. In 1769, Wedgwood struggled to encourage his men to acquire the skills necessary to throw these forms. He reported to Bentley that 'others say they shall never learn this new business, & want to be releas'd to make Terrines & sauce boats again. I do not know what I shall do with them'.[88] Although Wedgwood describes his surprise at workers' resistance, their reaction appears natural when considering that acquiring new skills required time and was accompanied by a drop in prices. Wedgwood frequently despaired at the reluctance of his workforce. He described to Bentley how 'we have business enough for them, if they knew how, or would have patience to learn to do it, but they do not seem to relish the thought of a second apprenticeship.'[89] Hence, rather than trained to only 'one particular task', workers also learned (or failed to learn) new tasks when new products demanded it.

The production of novelty was complicated, as was the creation of uniformity. In the summer of 1770, Wedgwood experienced a new set of

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[87] As cited in Reilly, *Wedgwood* Vol. 1, p. 439.
[88] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 19 November 1769. MS E25-18269.
[89] Ibid.

problems with the production of black ware. He could not achieve consistent quality. Writing to Bentley, he stressed that it was 'impossible to make the surface of the black Vases always alike'.[90] By 1772, problems continued to occur. Wedgwood wrote to Bentley, 'I observe what you say regarding the Vases – That one half of them may be deem'd defective & unsaleable.'[91] Producing identical goods of a consistent quality continued to be a challenge throughout the later decades of the eighteenth century. As new goods came onto the market workers had to retrain and change specialisation, causing regular instability. Moreover, once in a particular role they had to achieve uniform standards. Hence, this chapter argues that alongside specialisation, other factors were key to creating high levels of workmanship in the later decades of the eighteenth century. During these decades, alongside tackling problems created by the built environment and tools, Wedgwood met the challenges of novelty and uniformity through close guidance and collaboration, as well as through repetition.

**Guidance and Collaboration**

More than a matter of discipline, guidance and collaboration ensured the creation of best practice and consequently good workmanship. Despite rulebooks and instructions, Wedgwood's potters operated largely on the basis of applying tacit knowledge through trial and error. Similarly, in *The Craftsman* Richard Sennett explores the importance of tacit knowledge in

[90] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 11 August 1770. MS E25-18316.
[91] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 14 August 1772. MS E25-18385.

Stradivari's early eighteenth-century workshop.[92] Like Wedgwood, Stradivari involved himself in the different stages of production that workers' enacted in his workshop. He carefully managed the social space of the workshop and through his omnipresence controlled the boundaries within which workers operated. As Sennett argues, 'in a workshop where the master's individuality and distinctiveness dominates, tacit knowledge is also likely to dominate.'[93] In the Wedgwood workshops, tacit knowledge dominated. Yet, in contrast to the Stradivari workshop, although the historical writing often portrays Wedgwood as a dominant force, his correspondence demonstrates that in the innovation of practice he acted in collaboration with his highly skilled workforce.

By 1770 the problems presented by vase shapes, noted earlier, had eased and Wedgwood reflected that they had now succeeded. He described to Bentley how 'in my first essays upon Vases I had many things to learn myself, & everything to teach the workmen, who had not the least idea of beauty or proportion in what they did'.[94] Although Wedgwood described the initial stages of the process in terms of separation - him needing to learn and then him needing to teach his workers – when describing the situation in 1770 he painted a scene of unity. He noted that, 'none of our productions were what we should now deem tolerable, & the prices were fixed accordingly'.[95] Hence through the inclusion of 'our productions' and 'we', he records the development of a much more collaborative endeavour.

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[92] Richard Sennett, *The Craftsman* (London, 2008), p. 74.
[93] Sennett, *The Craftsman*, p. 78.
[94] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 10 January 1770. MS E25-18283.
[95] Ibid.

In the same letter Wedgwood went on to describe how he and his workers – 'they' – had developed their practices. After producing many flawed objects they had managed to create objects deemed something more than 'tolerable'. He described to Bentley that his 'workman [had] gone through' 'long practices from the best models & drawings' and had endured 'a long series of instruction'. Moreover they had also learned to use 'expensive apparatus' and described how both he and them were now masters of it. They were now able 'to get up good things'.[96] Finally he felt that the workmen were now 'improv'd in their wages, as well as in their workmanship, to double that sum.'[97] After much practice, instruction and with the right mix of tools, his workers successfully produced vases.

Hence, Wedgwood described the process of achieving wares above the standard of 'tolerable' as a long and exhausting process involving the collaboration of his workers and himself. As Maxine Berg and Liliane Hilaire-Pérez have argued the tacit knowledge held by workers and artisans ensured the close-sighted responses necessary to the successful application of new technologies.[98] Hence, in this aspect of earthenware manufacturing the artisanal many were as important as the few. Here were Joel Mokyr's 'unsung foot soldiers of the Industrial Revolution whose names do not normally appear in biographical dictionaries but who supplied that indispensable workmanship on which technological progress

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[96] Ibid.
[97] Ibid.
[98] Maxine Berg, 'The Genesis of "Useful Knowledge"', *History of Science*, xlv (2007), p. 128; Liliane Hilaire-Pérez, 'Technology as Public Culture in the Eighteenth Century: The Artisans' Legacy', *History of Science*, xlv (2007), p. 137. A point that Mokyr agrees with, but places less significance on. Joel Mokyr, 'Knowledge, Enlightenment, and the Industrial Revolution: Reflections on The Gifts of Athena', *History of Science*, xlv (2007), p. 185.

depended.'[99] The achievement of workmanship required active engagement with change. As Weatherill's work shows this did not begin with Wedgwood in the 1750s, but rather with the growth of the North Staffordshire pottery industry from the 1720s onwards.

**Repetition and Innovation**

In the late eighteenth century, active repetition and the channels of communication opened by the continual need for collaboration made for an innovative workforce in the earthenware industry. Even after the institution of best practice to produce consistent quality, this chapter argues that the repetitive nature of potters' work also pushed forward the processes of innovation in the industry. More than simply fixing problems, as a result of repeated making shapes evolved, bodies improved and new methods presented themselves.

Twentieth-century studio potters, such as Alan Caiger-Smith, have described how repetition often leads to innovation in ceramics production. For Caiger-Smith the creative act takes place across a broad temporal landscape, he argues that 'Shapes which are repeated begin to mature without undergoing obvious changes. The form evolves by itself, and if you compare two pots made to the same measurement at an interval of about five years you find that the shape has become more agreeable simply by being often made.'[100] Here then, we see the 'craft' of their work is found in

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[99] Joel Mokyr, *The Enlightened Economy: An Economic History of Britain 1700-1850* (New Haven and London, 2009), p. 110.
[100] Elisabeth Cameron and Philippa Lewis, *Potters on Pottery* (London, 1976), p. 44. See also, Alan Caiger-Smith, *Pottery, People and Time: A Workshop in Action* (London, 1995).

repeating the same object over long periods of time.[101] Thus despite changes due to new products, the intensity of North Staffordshire potters' work provided the equivalent of Caiger-Smith's temporal breadth.

Similarly, recent research by art historian Glenn Adamson has re-engaged with and reconstituted ideas of craft, complicating our reading of repetitive work. In *Thinking Through Craft* Adamson argues that the limits that craft gives rise to are intrinsically important and perhaps provide its most winning quality. For Adamson 'even the literal limits of time and space suggested by long days in a small shop all provide a kind of friction that keep pressing questions of form, category and identity open for further investigation.'[102] Thus limits create the friction and difficulty required to highlight both problems and solutions.

By repeating questions of form potters were asked to think through their practice and therefore extensively explored the shapes they created. As Wedgwood noted to Bentley in 1772, 'the heavy Teapots you very justly complain of have been made a good while since, Phillip Clark turned them & I was turning him off before I could prevail upon him to make them thin enough'. He ended such thoughts with the simple truism, 'we do better now.'[103] As Sennett argues, 'there is nothing mindlessly mechanical about technique itself.'[104] Rather repeated practice allowed potters to form and answer new questions. As Sennett argues, 'Every good craftsman conducts a dialogue between concrete practices and thinking; this dialogue evolves into sustaining habits, and these habits establish a rhythm between

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[101] The importance of time in craftsmanship. Richard Sennett, *The Culture of the New Capitalism* (New Haven and London, 2006), p. 127; Sennett, *The Craftsman*, p. 10.
[102] Glenn Adamson, *Thinking Through Craft* (Oxford and New York, 2007), p. 5.
[103] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 13 September 1772. MS E25-18404.
[104] Sennett, *The Craftsman*, p. 9.

problem solving and problem finding.'[105] Hence, repeated making was an innovative force and suggests the need to reassess previous assumptions concerning eighteenth-century technique.

**Conclusion**

Consumer demands for new, innovative products of consistent quality largely shaped ideas about workmanship in manufacturing. In seeking to execute an increasing range of objects to specific standards manufacturers and workers met with process failures, ambiguities and inconsistencies. Attempting to remove such problems, manufacturers such as Wedgwood turned not only to increased worker specialisation, but also to the built environment, tools, collaboration and repetition.

Hence, rather than depending on specialisation and discipline, manufacturers used a range of other strategies to ensure quality. Amongst those strategies, despite much separation and secrecy, potters worked collaboratively. In addition, potters relied on the repetitive nature of their work as a further means of creating solutions. Rather than mindless machines that 'cannot Err', Wedgwood's workers were highly skilled and actively engaged in their work and with their work environment.

[105] Ibid.

# Chapter Six:
# 'This is no easy job for a short man':
# Experiencing Manufacture in Late Eighteenth-Century North Staffordshire

Fig. 6.1. Enoch Wood Oval Biscuit Plaque showing 'The Descent of the Cross'. 1780. Christie's Auction House, London.[1]

Four years before his death, the potter and modeller Enoch Wood gathered together 'such pieces of my early modelling, as happened to fall into my hands'.[2] After ordering them into an arrangement, he presented the various pieces to his local church, The Church of St John the Baptist in Burslem, where he was a churchwarden. The display still stands in the church as a testimony to Wood's skill and centres on an original mould for 'The Descent of the Cross' (as seen above), which Wood modelled in around

[1] Enoch Wood Oval Biscuit Plaque moulded in relief with The Descent from the Cross, incised signature, E. Wood. Sculpt., on a royal blue ground within a gilt frame. <http://www.christies.com/LotFinder/lot_details.aspx?intObjectID=5072449> (11 July 2008).

[2] The Potteries Museum and Art Gallery, Stoke-on-Trent. Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p 38.

1780. Nevertheless, Wood's action was atypical and is one of the few examples of potters documenting how they valued their skills at the turn of the nineteenth century.

By 1780, the English pottery industry employed 5,500 people. Of those, 4,000 lived and worked in North Staffordshire.[3] Pottery production was the predominant form of employment in the area. The Victoria & Albert Museum's British ceramic collection provides ample evidence of the high levels of ability possessed by those in the industry. Similarly, using wages as an indicator of skill levels demonstrates that Staffordshire potters were highly competent.[4] In the 1760s turners and throwers at John Whieldon's factory earned between seven and nine shillings a week, which was comparable to the pay of other skilled craftsmen in the county.[5] Yet despite large numbers of dexterous pottery workers, few scholars have questioned how potters experienced work in the final decades of the eighteenth century.

After exploring how contemporaries, consumers, retailers and manufacturers comprehended workmanship, this chapter now turns to the potters themselves. It focuses on North Staffordshire, the most important region for earthenware production in the eighteenth century, in order to ask how those responsible for manufacturing consumer goods experienced their work.

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[3] Maxine Berg, *Luxury and Pleasure in Eighteenth-Century Britain* (Oxford, 2005), p. 82.
[4] H. M. Boot, 'How Skilled were Lancashire Cotton Factory Workers in 1833?', *The Economic History Review*, 43:2 (1995), pp. 298-299. Also see Joyce Burnette, 'How Skilled were English Agricultural Labourers in the Early Nineteenth Century?', *The Economic History Review*, 59:4 (2006), pp. 688-716.
[5] Berg, *Luxury and Pleasure*, p. 135.

**The Sources**

A lack of relevant sources restricts any examination of the work experiences of late eighteenth-century potters. Apart from the extensive archive left by Josiah Wedgwood, few other potters working between 1760 and 1800 wrote letters, diaries or commonplace books. Or rather, those that were written have not survived. As the working class autobiography only came into existence in the nineteenth century, potters' work experiences before that point, remain largely uncharted.[6] Nevertheless, apart from Wedgwood, one other potter left a considerable record of his experiences of working in the pottery industry of North Staffordshire. Hence, this chapter explores the multiple lenses through which workers understood their skills by examining the experiences of a specific potter, Enoch Wood (1759-1840).

Wood was the son of Aaron Wood (1717-1785) and Mary Meir (b.1717). Aaron was highly regarded in North Staffordshire for his work as a modeller. Enoch also became a modeller and from a young age Aaron prepared him for this occupation. At eleven years old, Aaron sent Enoch to stay with his aunt and uncle for three months to learn drawing and anatomy. His uncle, William Caddick (1719-1794), a portrait painter living in Liverpool, and his sons Richard and William, taught Enoch to draw.[7] On his return to Burslem, Enoch worked for a short time for Josiah Wedgwood at the Brickhouse Works, before being apprenticed to one of Wedgwood's commercial rivals, Humphrey Palmer of the Church Works in Hanley. There, he developed into a skilful modeller and at the age of twenty-four he

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[6] David Vincent, *Bread, Knowledge and Freedom: A Study of Nineteenth-Century Working Class Autobiography* (London, 1981), p. 18.
[7] Frank Falkner, *The Wood Family of Burslem: A Brief Biography Of Those Of Its Members Who Were Sculptors, Modellers and Potters* (London, 1912), p. 34.

decided to set up a business with his cousin Ralph Wood (1748-1795). In 1789, Enoch set up his own business at Fountain Place, a large manufactory situated in the centre of Burslem. A year later he entered into a partnership with the solicitor James Caldwell (1759-1838) that lasted until 1818. At this point, Enoch returned to business alone. Enoch Wood & Sons remained in business until 1846. Wood's firms made a variety of wares such as black basalts, jasper and possibly porcelain. They also produced large quantities of blue-printed earthenware, much of which they exported to America.

Enoch Wood recorded his experience of working in the pottery industry in the late eighteenth and early nineteenth century in different ways. This chapter focuses on three particular sources created by Wood - a series of written reminiscences, a map and a pamphlet. In so doing it examines the terms in which he recorded his working life.

First, this chapter analyses a series of writings recording Wood's memories of working life in Burslem. In the 1820s and 1830s, towards the end of his life, Wood began to collate various pieces of writing that gave an account of a 'variety of occurrences which have fallen under my notice & observation from the earliest of my own recollections'.[8] Hence although written in the 1820s and 1830s the memories Wood recorded dated back to the 1760s. While Wood wrote some memories earlier on 'sketches & scraps of paper', others were newly transcribed.[9] As the other sources also show, Wood was keen to construct a history of the local area. Consequently, the folio contains a variety of writings that depict various memories and scenes from his life as well as the recollections of other potters, such as John Fletcher, Ralph Leigh and Richard Lawton. Some of the reminiscences

[8] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 1.
[9] Ibid., p. 1.

formed the basis for Simeon Shaw's 1829 *History of the Staffordshire Potteries*.[10] Hence, a strong sense of history and, perhaps more importantly, legacy guides the writing.

Rather than a first-person linear narrative, Wood's writings are more chaotic. The scenes contained in the folio are not chronologically ordered; as Wood admitted, he wrote 'without exactly following dates'.[11] Hence, instead of embarking on the cultural practice of autobiography identified by Michael Mascuch, Wood offers a selection of his own recollections and those of others in no particular order.[12] Wood's memory was clearly failing and, therefore, the writings only offer a glimpse of his particular recollection of events. Similarly, his body was also deteriorating and so he enlisted his son, daughters and grandchildren to help write various pieces. Problems of dates, memory and the involvement of others change the accuracy of the pieces in the folio. Yet the distorted nature of the history is perhaps its most useful attribute, as through Wood's remembered past it is possible to explore his particular understanding of life in the pottery industry. As David Vincent argues regarding nineteenth-century working-class autobiographies, the element of subjectivity is of the greatest value.[13]

Second, in 1816, Wood gathered together a group of local people to construct 'A Plan of the Town of Burslem', as it was in the 1750s.[14] He paid the land surveyor Mr MacPhayl three pounds to sketch a plan of the North Staffordshire town from their reminiscences. The group created a detailed

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[10] In return Shaw gave Wood a copy of his *History*, which Wood critically annotated. See Falkner, *The Wood Family of Burslem*, p. 28.
[11] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 1.
[12] Michael Mascuch, *Origins of the Individualist Self: Autobiography and Self Identity in England, 1591-1791* (Cambridge and Oxford, 1997), p. 8.
[13]Vincent, *Bread, Knowledge and Freedom*, p. 4.
[14] Enoch Wood Papers. Manuscript Plan of Burslem. 1816. PM 1/1/7.

map and a key. The key was later published in John Ward's *The Borough of Stoke-upon-Trent* (1843) and includes various details about the different buildings and their residents.[15] Despite such detail the accuracy of the map is questionable. Previously a dairy farming area, by 1750 Burslem had grown into a small town and by 1817 William Pitt described it as 'extensive and populous'.[16] Its population increased from around 600 people before 1675 to over 2,000 by 1760. Lorna Weatherill estimated that much of that change took place between 1740 and 1760 – the period of Wood's map.[17] Yet the key accompanying the map, lists only 148 residential dwellings, suggesting either an over-estimation of numbers by Weatherill, over-crowding in a limited number of houses, or an incorrect estimation of houses by Wood. Considering that Wood omitted certain properties (such as the Big House belonging to John and Thomas Wedgwood built in 1750) from the map (perhaps due to inter-firm rivalry rather than memory) the latter reason seems most likely. More than this, however, Wood was born in 1759, thus his ability to recall from his own memory the town of Burslem as it existed in the 1750s is impossible. Despite being formed through collaboration, therefore, the accuracy of this map is entirely questionable. Hence, in making the map, Wood constructed not only his own view but also a social narrative of the lives of those around him. Rather than an accurate map, it provides an insight into the imagined and remembered world of North Staffordshire potters.

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[15] John Ward, *The Borough of Stoke-upon-Trent* [1843] (Stoke-on-Trent, 1984), pp. xxxii-xxxvii.
[16] William Pitt, *A Topographical History of Staffordshire* (London, 1817), p. 395.
[17] Lorna Weatherill, *The Pottery Trade and North Staffordshire 1660-1760* (Manchester, 1971), p. 114.

Finally, the chapter also examines a pocket-sized pamphlet. In 1827, Ambrose Cuddon of St James', London published *A Representation of the Manufacturing of Earthenware* 'for the Proprietor'.[18] The proprietor in question was Enoch Wood.[19] His authorship is confirmed by the final plate of the publication, which represents 'The exterior of a pottery' through a recognisable depiction of Wood's manufactory, Fountain Place. Twenty different plates are included in the pamphlet and represent the different stages of ceramic manufacturing, from 'mixing the materials' to the 'counting house'. Like the recollections discussed earlier, although created outside the period of this thesis, these plates represent Wood's view of earthenware manufacturing, a view created from a career spanning the later decades of the eighteenth century and the early decades of the nineteenth century. Although they do not show us Wood's own experience they do illuminate how he wanted others to understand the processes involved. This chapter examines the illustrations included in the publication to provide another means of comprehending how Wood experienced manufacturing.

Despite the range of sources left, particularly the records of other potters' testimonies, Wood's view is unrepresentative of the work experiences lived in the Potteries. More specifically, Wood, like Wedgwood, was a highly successful manufacturer rather than a worker. Hence, to right that imbalance this chapter compares the sources related to Wood with others relating to William Greatbatch (1735-1813), William Smith (1790-1858) and Charles Shaw (1832-1906).

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[18] Enoch Wood, *A Representation of the Manufacturing of Earthenware* (London, 1827).
[19] As Falkner confirms – see Falkner, *The Wood Family of Burslem*, p. 74.

Although William Greatbatch is a comparable figure to Wood, the sources concerning his work experience are limited to a series of correspondence with Josiah Wedgwood, which were examined earlier in chapter four. The correspondence series only covers the years 1762 until 1765 and there are only twenty-nine letters in total.[20] William Smith also seems a comparable figure as he worked during a similar period to Wood. Yet he worked in a very different way to Wood, as a potter and a farmer in the village of Farnborough in Hampshire.[21] Moreover, rather than recorded in his own voice, his experiences are recorded in a biography written by his grandson, George Sturt, who reconstructed the life of his grandfather after having conversations with Smith's daughter, Ann and his son, John.[22] Finally, Charles Shaw worked in the pottery industry in a much later period to Wood, when much change had occurred. Yet his autobiography titled, *When I was a Child* (written towards the end of his life and first published in 1903) records his experiences of working in North Staffordshire and provides an important contrast to Wood.[23]

Hence, whilst concentrating primarily on Wood, these other (admittedly limited) insights provide an important means of questioning and reassessing to what extent Wood's work experiences reflected those of other potters. Moreover, by examining sources from potters whose working life was firmly embedded in nineteenth-century working practices, this chapter demonstrates the difference between the eighteenth and nineteenth-century experiences of pottery work.

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[20] Wedgwood Museum Trust, Barlaston. Etruria Collection. Letters from William Greatbatch to Josiah Wedgwood. MS E81-14276-14319. MS E30-22322-22410. MS E29-25607-25610. MS E30-30104-30140.
[21] George Sturt, *William Smith Potter and Farmer 1790-1858* (Firle, 1978), p. 1.
[22] Sturt, *William Smith Potter and Farmer 1790-1858*, p. vii.
[23] Charles Shaw, *When I was a Child* (Firle, 1977).

This chapter offers only a glimpse of potters' experiences. After all, the sample of sources is small and inherently unrepresentative. For instance, it does not include any women, despite the proportion of male to female employees being around one to one in the pottery industry of the eighteenth century. As Wood's *A Representation of the Manufacturing of Earthenware* demonstrates, apart from preparing clay women worked in all the different processes of ceramic production. Yet, with the exception of *A Representation of the Manufacturing of Earthenware* they are entirely unrepresented in this chapter. Hence, the purpose of this chapter is to *begin* to comprehend how potters defined and understood their work experience.

**The Price of Workmanship**

In the pottery industry of the eighteenth century, judgments of workmanship decided piece rates and wage levels. The 'price of workmanship' calculated the cost of materials, labour, finishing and packaging needed to produce particular products. Hence piece rates were negotiated according to these calculations. During the eighteenth century, these calculations became increasingly accurate for certain manufactories.

Although manufacturers paid certain potters weekly wages, the majority of workers received payment on a piece rate basis. For instance Wedgwood's 1790 'Analysis of Hands' lists that apart from Jonathan Brownsett who received weekly wages, all the other plate makers at the useful works were paid piece rate.[24] Recent work by Leonard Schwarz shows the continued use of the piece rate system well into the nineteenth

[24] Etruria Collection. Josiah Wedgwood Commonplace Book. c. 1760-1790. MS E39-28409.

century.[25] In North Staffordshire, the practice continued, in a modified form, into the twentieth century. Under this system small groups of potters worked together, normally with the assistance of a boy or an apprentice. For instance, in 1778 Wedgwood recorded that he paid three potters named Massey, G. Massey and M. Massey one sum.[26] Whilst in 1793, Wedgwood noted that both A. Hancock and John Hancock worked under the jasper ware ornamenter William Greatbatch.[27] These groups bought materials from the manufacturer, who then deducted them from the piece rates they paid for certain products. Manufacturers paid the head potter of the group, who then distributed the wages out.

In the final quarter of the century, however, measurements of the different factors involved in creating workmanship became more accurate. In 1772, as the economy continued in a depressed state and after finding that his London clerk Ben Mather had been embezzling funds for two years, Wedgwood embarked on a process of cost accounting to reduce prices.[28] Wedgwood calculated the value of the different materials, processes and labour that went into producing each object. The breakdown of these costs of production for each object allowed for greater accuracy in the establishment of piece rate calculations.[29] Larger firms increasingly worked using these more accurate costing systems. Yet at the same time,

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[25] Leonard Schwarz, 'Custom, Wages and Workload in England during Industrialization', *Past and Present*, 197 (2007), p. 145.
[26] Etruria Collection. Wage book. 1778. MS E27-19759.
[27] Etruria Collection. Josiah Wedgwood Commonplace Book. c.1760-1790. MS E39-28409.
[28] See Robin Reilly, *Wedgwood* Vol. 1 (London, 1989), p. 73; Neil McKendrick, 'Josiah Wedgwood and Cost Accounting in the Industrial Revolution', *The Economic History Review*, 23:1 (1970), p. 49.
[29] For copy of 'Price Book of Workmanship' see Reilly, *Wedgwood* Vol. 1, pp. 694-695.

into the nineteenth century cost accounting was relatively sporadic across the pottery industry.[30]

Despite the validity of such systems, convincing workers of new piece rates was difficult. Wedgwood conveyed the repetitive nature of these negotiations in a letter to Thomas Bentley in August 1772. He wrote, 'I have had several serious Talks with our Men at the Ornamental works lately about the price of our workmanship, & the necessity of lowering it'.[31] Wedgwood's solution was to have Dan Greatbatch 'sit down in earnest, & work a day or two at each article' to show 'the Men…what they [the pieces] could be done at.'[32] Piece rates encouraged potters to work at a certain speed, using certain materials and methods. Yet, despite attempts to regulate work into certain hours, potters continued to control the speed of their work. Such autonomy led to intensive working towards the end of the week as certain number of goods had to be produced followed by a rest day on Sunday and Saint Monday before beginning again. Hence, in contrast to London working patterns, the rhythm of work in North Staffordshire remained relatively consistent throughout the eighteenth century and into the nineteenth century.[33]

As outlined in the introduction to the thesis, different definitions of workmanship existed simultaneously in the eighteenth century. In terms of wages, however, only one definition applied. In wage calculations,

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[30] Richard Whipp, '"A Time to Every Purpose": An Essay on Time and Work', in Patrick Joyce (ed.), *The Historical Meanings of Work* (Cambridge, 1987), p. 226.
[31] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 23 August 1772. MS E25-18392.
[32] Etrura Collection. Letter from Josiah Wedgwood to Thomas Bentley. 22 July 1772. MS E25-18381.
[33] For more on changing work patterns in London see Hans-Joachim Voth, 'Work and the Sirens of Consumption in Eighteenth-Century London', in Marina Bianchi (ed.), *The Active Consumer: Novelty and Surprise in Consumer Culture* (London and New York, 1998), p. 143; Hans-Joachim Voth, 'Time and Work in Eighteenth-Century London', *The Journal of Economic History*, 58:1 (1998), p. 41. For more on the continued autonomy of potters' working patterns see Whipp, '"A Time to Every Purpose"', p. 226.

'workmanship' was the labour or amount of labour performed on a particular task or piece of work.[34] Hence, in terms of piece rates 'workmanship' referred to the ability of the potter to execute pieces in a certain amount of time, using certain materials. Clearly, workmanship as a means of calculating piece rates was one, if not the most, important concept of workmanship to potters. After all, potters worked to earn money. But was this sense of 'workmanship' the only frame through which potters experienced their work?

**Acquiring Skills**

> There may be no harm in knowing what value he sets upon the secret & then we can consider what is best to be done but I apprehend it wo'd be the same thing to our selling the secret of Throwing, Turning, or handling which after all the instructions we could give the purchaser, it wo'd require several years actual practice before he could do anything to the purpose.[35]

Earning a piece rate through making ceramic objects involved the application of hard-won skills. As Wedgwood asserted in the quote above, practise was the only means of acquiring the skills of pottery. Richard Sennett argues that it takes around ten thousand hours to become highly skilled at a technique.[36] In the introduction to *The Craftsman*, he also asserts

[34] C.T. Onions (ed.), *The Shorter Oxford English Dictionary* Vol II (Oxford, 1933), p. 2450.
[35] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. March 1772. MS E25-18357.
[36] Richard Sennett, *The Craftsman* (London, 2008), p. 172.

'There is nothing inevitable about becoming skilled'.[37] Practise was and is no guarantee to becoming skilled. Nevertheless, although potters moved through time developing and enlarging their skill base, they did not necessarily understand their experience of skill in such linear terms.

Unlike Smith and Shaw, Greatbatch and Wood entered their working lives at a moment when some form of apprenticeship remained the predominant form of training. In the decades leading up to the repeal of the 1563 Statute of Artificers in 1814, apprenticeship remained a valid and vital training system.[38] Jane Humphries has demonstrated that the apprenticeship remained particularly important for those trades now understood in terms of 'craft'.[39] Similarly, Joan Lane has shown the continued predominance of the apprenticeship, particularly in customary form, even in the latter decades of the eighteenth century.[40] Certainly, in the pottery industry during those years, although formal apprenticeships were limited they existed and informal apprenticeships were common.

Of those who entered a formal apprenticeship a significant proportion became master potters. Between 1710 and 1760, for instance, the County Apprenticeship Registers for North Staffordshire mention only twenty-nine apprentices. Of the thirty-eight apprentices found in the

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[37] Sennett, *The Craftsman*, p. 9.
[38] See Jane Humphries, 'English Apprenticeship: A Neglected Factor in the First Industrial Revolution', in Paul David and Mark Thomas (eds), *The Economic Future in Historical Perspective* (Oxford, 2003), pp. 73-102; Keith Snell, 'The Apprenticeship System in British History: The Fragmentation of a Social Institution', *History of Education*, 25 (1996), pp. 303-21; Christopher Brooks, 'Apprenticeship, Social Mobility and the Middling Sort, 1550-1800', in Jonathan Barry and Christopher Brooks (eds), *The Middling Sort of People: Culture, Society and Politics in England* (Basingstoke and London, 1994), pp. 52-83; Keith McClelland, 'The Transmission of Collective Knowledge: Apprenticeships in Engineering and Shipbuilding, 1850-1914' in Penny Summerfield and Eric Evans (eds), *Technical Education and the State Since 1850* (Manchester, 1990), pp. 19-36; Joan Lane, *Apprenticeship in England, 1600-1914* (London, 1996); David Mitch, 'The Role of Education and Skill in the British Industrial Revolution', in Joel Mokyr (ed.), *The British Industrial Revolution: An Economic Perspective* (2nd edn, Boulder and Oxford, 1999), p. 260.
[39] Humphries, 'English Apprenticeship', p. 81.
[40] Lane, *Apprenticeship in England, 1600-1914*, p. 9.

Registers and other sources, nine went on to become master potters.[41] Potters had no trade guild to control and improve skills training.[42] Hence, their apprentice system was run through a prohibitively expensive lodged stamped paper system. Potential potters generally entered formal apprenticeships to become master potters, whereas informal apprenticeships trained the majority of other potters.

Yet before entering informal or formal apprenticeships, the environment of the locale exposed these potential potters to subtler forms of training in their everyday experiences of the pottery industry.[43] The close proximity of potters and pottery manufacturers in North Staffordshire, created a pre-apprenticeship framework that fulfilled many of the aspects of the apprenticeship itself, including exposure to techniques and methods and an appreciation of the social dynamic of the industry. These experiences pre-empted some aspects of the apprenticeship. As Christiane Eisenberg recognises, the apprenticeship was a period in which workers were encouraged to learn the hidden rules of the workshop.[44] These factors came together to provide the potential workforce with a strong preliminary grounding.

First, kin transmitted onto young would-be potters various aspects of the pottery industry. Enoch Wood self-consciously cited awareness of his

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[41] Weatherill, *The Pottery Trade and North Staffordshire 1660-1760*, pp. 96-97.
[42] For more on the role of guilds in improving skills training see S. R. Epstein, 'Craft, Guilds, Apprenticeship, and Technological Change in Premodern Europe', *The Journal of Economic History*, 58 (1998), pp. 684-713; S. R. Epstein and Maarten Prak (eds), *Guilds, Innovation and the European Economy, 1400-1800* (Cambridge, 2008).
[43] This process also occurs in other industrial contexts, with significant results. See Tamara K Hareven, *Family Time and Industrial Time: The Relationship Between the Family and Work in a New England Industrial Community* (Cambridge, 1982), p. 73.
[44] Christiane Eisenberg, 'Artisans' Socialization at Work: Workshop Life in Early Nineteenth-Century England and Germany', *Journal of Social History*, 24:3 (1991), p. 510.

father's work as the basis of his 'earliest recollections'.[45] Whilst recalling his experiences of being a young boy in 1760s Staffordshire, Wood remembered his father working away in 'his workshop in a small parlor [sic] of his House'.[46] One of the key rules Wood learned from his father and his exposure to potteries more generally concerned the importance of secrecy. He recalled how, when accompanying his father to manufactories to supply moulds and blocks, the manufacturers 'wanted to know how other Manufacturers were going on etc., but my father was very cautious in his answers'.[47]

Brian Moeran's study of Onta Folk Art Pottery has also shown the importance of young workers being able to watch older workers working as part of the long-term process of establishing skills.[48] Similarly, Wood's early exposure to pottery workshops allowed him try out techniques at a young age. Enoch's father, Aaron Wood was a highly skilled modeller who created prototypes for all the major manufacturers in the area. Enoch recalled how 'I recollect he made the Moulds of such Blocks as were to be sent to the Manufactories in the North of England & as soon as I was able I pounded for that purpose the Burnt Plaster'.[49] Hence, from an early age Wood viewed these techniques and in later years he attributed great importance to this process by recording them in his reminiscences.

As the dominant employer of both men, women and often children, early exposure continued to be an important part of working practices for

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[45] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 42.
[46] Ibid.
[47] Ibid., p. 54.
[48] Brian Moeran, 'Materials, Skills and Cultural Resources: Onta Folk Art Pottery Revisited', *The Journal of Modern Craft*, 1:1 (2008), p. 44.
[49] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 42.

North Staffordshire potteries.[50] Yet for those not intended for master potter status, exposure came through child labour. For those workers with little hope of progression, an increasingly common experience in the nineteenth century, the benefits of such exposure were distinctly limited. For instance, as discussed later in this chapter, Charles Shaw depicted his early experiences as a mould runner in brutal rather than beneficial terms. Unlike Wood, Shaw articulated how his early years had failed to prepare him for the pottery industry. He stated that 'I could never see in what way my poor little bit of an education could prepare me for such as came to my hand.'[51] Nevertheless, once in employment the experience of the pottery industry from a young age prepared future workers for the demands of their occupation.

The next stage of learning - the apprenticeship – provided a supposedly standardised format for transferring largely intangible tacit knowledge.[52] In the pottery industry of the second half of the eighteenth century, manufacturers indentured apprentices for a period of seven years to learn, 'the art, trade, mystery and occupation of a potter'. Or more particularly, as in the case of Aaron Wood, apprenticeship involved 'turning in the lathe, handling and turning (throwing on the wheel being out of this indenture excepted)'.[53] Potters were assigned to this standard training practice in theory, but in reality the apprenticeship provided a flexible base from which to hone a particular potter's skills.

In North Staffordshire the pottery industry employed the majority of the working population. The economic efficiency of having all the workers

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[50] Whipp, '"A Time to Every Purpose"', p. 228.
[51] Shaw, *When I Was a Child*, p. 11.
[52] Humphries, 'English Apprenticeship', p. 83.
[53] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 4.

in a locale employed in the same trade is open to question. The process certainly has the potential to ignore possible efficiency gains accrued by recognising aptitude. Yet in the pottery towns of North Staffordshire, employers attempted to assign tasks on the basis of aptitude. Writing to Bentley on 23 May 1770, Wedgwood noted that, 'Bakewell has set his mind much upon being a good enamel Painter and really improves very much both in flowers & in Copying figures.' He went on to describe how, 'I have not taken him from his painting of some time past he has set his heart so much upon it, & makes so quick a progress both in improvement, & in a dispatchful method.'[54]

Moreover, as chapter five demonstrated, unlike the nineteenth century when task specialisation was more rigid, in the eighteenth century manufacturers subjected potters to continual training and retraining throughout their working lives. As new products came onto the market, manufacturers trained potters to make them. This process of retraining was inherently difficult. In a letter to Josiah Wedgwood, explaining the next batch of products he was sending through, William Greatbatch expressed his weariness at the difficulty of creating a certain product. He wrote, 'Have sent you a sprig'd Brown China tpt & there will be about crate to come out of the next oven of the same, I won't say all sprig'd so well because it would be impossible but will I think be as good as any made in the common way & think will suit you if want any.'[55] Hence, learning to work with new and diverse materials represented a substantial challenge for the potters, changing their skills and broadening their knowledge base.

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[54] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 23 May 1770. MS E25-18302.
[55] Etruria Collection. Letter from William Greatbatch to Josiah Wedgwood. 26 May 1764. MS E30-22376.

**Experiences of Learning**

Learning was important to potters. As a result of the lengthy practice involved in acquiring such skills, potters valued them. Wood, Greatbatch, Smith and Shaw all comment on their experiences of learning. Yet a distinction can be made as to how different potters interpreted and understood their experiences.

The various processes outlined above – early exposure, apprenticeship, and retraining – present potters' working lives in the form of a linear progression from unskilled to skilled. Certainly, our two nineteenth century protagonists, Charles Shaw and William Smith present their lives (or have their lives presented for them, as in the case of William Smith) as a chronological process of change over time. Such linear progression is created in part by their use of the conventions of autobiographical writing. Yet it also reflects their experience. Charles Shaw's limited pottery career began as a mould runner and progressed to learning handling from an older mentor whom he nostalgically named 'Old Rupert'.[56] Despite his eventual removal from this position, learning handling was an apprenticeship of sorts. Moreover, despite living outside of North Staffordshire, George Sturt described how, after the death of his father, William Smith became a parish apprentice at a local pottery.[57] Sturt describes how Smith was too young when he began but 'delighted' in the trade and became a 'master' potter. By the age of nineteen Smith had purchased his own pottery business.[58] In contrast, their eighteenth century

[56] Shaw, *When I Was a Child*, p. 81.
[57] Sturt, *William Smith Potter and Farmer 1790-1858*, p. 55.
[58] Ibid.

counterpart Wood did not understand his own working life in such linear terms.

Wood presented his working life as chaotic montage of experiences and moments. For instance, while trying to record certain memories from the 'early part of [his] life' Wood becomes distracted with history of the Wedgwoods. Acknowledging his digression he noted, 'I have unaware been following my train of ideas beyond my original intention in this part of my history, but will return to the early part of days, although I feel a strong inclination to proceed no further.'[59] Wood's age and failing memory in part explains his faltering narrative, yet it also reveals the complicated nature of his working life. Wood presented his life as a jumble of recollections based on aspects of others' lives, particular objects he made and specific anecdotes he could recall. Despite his desire for a history or narrative and despite writing at a time when the conventions of autobiography were available to him, Wood presented a series of scenes.

Clearly for someone such as Wood, a master potter and manufacturer, work was not experienced as a formulaic progression. In many ways his working life involved constant change, stopping and starting. Moreover, his style of writing also demonstrates that he experienced his working life in similar terms, as a montage. The arrangement of the writing is highly reminiscent of the collection of models he gave to The Church of St John the Baptist in Burslem – it presented a tableau of his skills and life. Hence, Wood was not writing an autobiography. Rather, he recollected a life, which was punctuated by

[59] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. pp. 52-53.

periods of learning and practice. For Wood, his skills were a source of pride, worthy of presentation and remembrance.

**Bodily Knowledge**

Lengthy learning experiences resulted in the potter's tacit knowledge being embedded into their physical movements and thus their bodies. In working, potters, particularly modellers, throwers and turners created objects by employing the effort and dexterity of their bodies. The main potter roles of preparing the clay, throwing, turning and handling all required the concentration of the mind, the strength of the body, and the dexterity of the limbs. Potters learned through physical activity thus they used their corporeal experience as a means of understanding the world and verifying knowledge.[60] This chapter argues that the bodily nature of their work shaped potters' experiences of that work.

As demonstrated in chapter one, when describing ceramic production processes, contemporary commentators highlighted the corporeal nature of this work. For instance, an article in Ephraim Chambers' *Cyclopaedia* highlighted the importance of bodily interaction to pottery work. Chamber's potter is seen 'wetting his hands in the water, [before] he bores the cavity of the vessel'.[61] Similarly, in his description of his grandfather's work Sturt pointed to the relationship between the body and the ability of the potter. In describing the process of throwing he noted, 'Next, moistening it with water from the squibber, the potter "trued" the

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[60] Pamela H. Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago and London, 2004), p. 6.
[61] Ephraim Chambers, *Cyclopaedia: or, An Universal Dictionary of Arts and Sciences* Vol. 3 (London, 1781), p. 1060. <Eighteenth-Century Collections Online> (8 February 2009).

clay with his hand to the centre of the wheel; and then got his thumb into it – or his hand, and finally his arm for the larger things – to "pull it up". This was no easy job for a short man.'[62] Hence, pottery work required the exertion of physical strength. Similarly, Wood's visual representation of the earthenware manufacturing process depicted the physical nature of potters' work.

In plate three of *A Representation of the Manufacturing of Earthenware,* Wood depicted the process of beating the clay. Below a brief written description is an image of two men working the clay in a sparse room.

Fig. 6.2. Detail of Plate Three. 'Beating the clay to make it solid, smooth and pliable fit for the Potter.' Courtesy of The Winterthur Library: Printed Book and Periodical Collection.[63]

On the right a worker holds a bat above his head, ready to bring it down with full force upon the mass of clay. On the left a man holds a large wedge of clay between two hands, anticipating the moment before bringing it down upon the table. The two men lean into their work, using the weight

[62] Sturt, *William Smith Potter and Farmer 1790-1858*, p. 72.
[63] Enoch Wood, *A Representation of the Manufacturing of Earthenware* (London, 1827), pl. 3.

of their bodies to pound and pummel the clay. Their sleeves are rolled up and forearm muscles bulge to an unnatural extent. The viewer is left in no doubt that these men are engaged in physical work.

Fig. 6.3. Detail of Plate Four. 'First process of potting is "Throwing", forming round pieces of ware with the Hands and Machine.' Courtesy of The Winterthur Library: Printed Book and Periodical Collection.[64]

Similarly, in Wood's depiction of a thrower, seen above, the workers are pictured on their feet, active and physical. Working behind the thrower a baller uses her hands to shape and measure the clay. Her face shows the extent of her concentration as she looks intently at her hands. The physical nature of her work is further emphasised by her over-sized hands shown smacking and pushing the clay. In comparison to the room and the other workers, the thrower, like the baller's hands, is out of proportion. This huge man works at shaping a pot whilst a girl creates power by turning a wheel, her forearms bulging. These representations demonstrate that Wood understood potting work as a bodily activity.

In contrast, to the images discussed above, Wood's depiction of his own role as modeller is distinctly less physical. The modeller in question is

[64] Wood, *A Representation of the Manufacturing of Earthenware*, pl. 4.

seated on a stool while he works at a model situated on the bench in front. He intently works with his hands to shape the model. Yet the hands are not the focal point of the image, rather the model is.

Fig. 6.4. Detail of Plate Seven. 'The Modeller or Sculptor from whose productions are taken casts or moulds for the potter.' Courtesy of The Winterthur Library: Printed Book and Periodical Collection.[65]

This depiction of his own role as less active perhaps explains why, despite the physical nature of his work, when *writing* Wood rarely described his experience of work in bodily terms. Rather he related to his own corporeal experience in a different way.

**Writing the Body**

Unlike the plates included in *A Representation of the Manufacturing of Earthenware*, in his written reminiscences Wood did not describe potting as a physical activity. Yet Wood did reference the body. He regularly appropriated bodily metaphors and signs and used them to describe and

[65] Ibid., pl. 7.

understand the world. He did this in three key ways. First, like other potters, Wood described ceramic objects using bodily terms. Objects were regularly discussed in terms of their clay 'bodies'. Similarly, potters also named parts of the pot after the human body, for instance, the belly of a pot, the shoulder, the foot and the neck.

Second, when describing the world around him Wood regularly invoked the 'hand' as a central method of constructing meaning. For example, when describing a jasper tablet that he worked on before his marriage, he wrote of how 'I had this under my hand two or three years'.[66] Similarly, when writing about the Wilson manufactory at Hanley Green he described how 'the Manufactory fell into other hands'.[67] He also described himself working with his hands, writing that 'I have with my own hands ornamented this frame'.[68] Moreover, like the manufactory, he described how he used various models, which happened to 'fall into my hands'.[69]

Third, Wood's actions demonstrate the importance he placed on the body. In 1814, Wood spent time making a bust, 'a very good and perfect likeness' of his son Enoch for his twenty-first birthday.[70] Hence, Wood used a specific body part, the face, as a means of adding importance to a present for his son. The importance Wood infers in capturing the bodily essence of his son at this age evidences the importance he placed on the body more generally. Similarly, in 1821 Wood modelled a bust of himself, into the back of which he etched various details about his great grandfather, grandfather,

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[66] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 38.
[67] Ibid.
[68] Ibid.
[69] Ibid.
[70] Ibid., p. 34.

father, wife and children.[71] He represented the importance of his relationships by literally marking them upon his 'body'. Hence, in describing the parts of ceramic objects, in referencing the world around him, in creating something of worth, Wood turned to the body to express himself.

Moreover, Wood also regularly adopted metaphors about the physical. In his collection of reminiscences, Wood recounted the processes involved in making a particular bust. He recalled that 'I therefore set to work upon a similar subject about twice the size with a full intention to pursue the same mode, feeling my strength increasing.'[72] Here, Wood describes how he felt his artistic strength increasing. Yet what is significant for this chapter is that he chose to use the term 'strength', a highly physical descriptor, to express himself. As the philosophers, George Lakoff and Mark Johnson have argued, the construction of metaphors is highly emblematic of our view of the world.[73] Moreover, as E. P. Thompson has asserted, textual imagery was, 'the sign of how men felt and hoped, loved and hated, and of how they preserved certain values in the very texture of their language.'[74] Hence Wood viewed the world through the prism of the physical work he undertook.

Why then did Wood understand his work as physical, yet rarely described it as such in his writing? As a member of the master class, and as a modeller, Wood may not have consciously understood his work in physical terms and, therefore, did not describe it as such. Moreover, in the

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[71] Falkner, *The Wood Family of Burslem*, pp. 80-81.
[72] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 34.
[73] George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago and London, 2003), p. 118.
[74] E. P. Thompson, *The Making of the English Working Class* (Middlesex, 1970), p. 49.

second half of the eighteenth century, understandings of the working body were in a state of flux, and perhaps as a member of the master class he did not want to associate his own work with cultural constructions of the working body.[75] The automaton, for example, attracted fascination and disbelief in different quantities. As Simon Schaffer has argued, the automaton, as a machine in the form of a human, aroused interest in humans who performed like machines, an understanding that was particularly significant for those involved in the creation of standardized products.[76] As Wedgwood himself famously articulated, he desired 'to make such Machines of the Men as cannot Err.'[77] Interest in men as machines culminated in the nineteenth century in projects designed to measure human labour and tackle the science of work.[78] Moreover, as Carolyn Steedman has shown 'For eighteenth-century theorists, legislators and farmers, the horse was the immanent measure of labour-power and labour-time.'[79] Hence, in avoiding discussions of the physical power necessary for potting labour, Wood removed his work away from such calculations. Although potters such as Wood may have been able to steer a course clear of some of these discussions their presence demonstrates the contentious nature of manual work at this time. Within, or beside these competing rhetoric potters had to construct an understanding of their working lives.

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[75] Roy Porter, 'Bodies of Thought: Thoughts about the Body in Eighteenth-Century England', in Joan H. Pittock and Andrew Wear (eds), *Interpretation and Cultural History* (Houndsmill and London, 1991), p. 92.
[76] Simon Schaffer, 'Enlightened Automata', in W. Clark, J. Golinski and Simon Schaffer (eds), *The Sciences in Enlightened Europe* (Chicago and London, 1999) p. 127.
[77] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. 9 October 1769. MS E25-18265.
[78] Anson Rabinach, 'The European Science of Work', in Steven L. Kaplan and Cynthia J. Koepp (eds), *Work in France: Representations, Meaning, Organisation and Practice* (Ithaca, 1986), p. 477.
[79] Carolyn Steedman, *Labours Lost. Domestic Service and the Making of Modern England* (Cambridge, 2009), p. 167.

In contrast, in the mid nineteenth century, Charles Shaw viewed his work experience, and in fact his life experience, in particularly brutal physical terms. He vividly described the corporeal nature of his first job as a mould-runner, writing that 'A boy would be kept going for twenty minutes or half-an-hour at a time, the perspiration coursing down his face and back, making channels on both, as if some curious system of irrigation were going on upon the surface of this small piece of humanity.'[80] Similarly, the Scriven Report on Child Labour (1842) also saw Shaw's work in these terms. Scriven noted that, 'The class of children whose physical condition has the strongest claims to consideration is that of the…"mould runners", who by the very nature of their work are rendered pale, weak, diminutive and unhealthy.'[81] Hence, in the nineteenth century both workers and observers viewed pottery work as physical, mainly due to the destruction this work imposed on a growing population of pottery workers.

**Destructive Work**

Pottery manufacturing processes had the ability to destroy potters' bodies. A similar negative calculation of physicality has historically been involved in other forms of labour.[82] For instance, Dorothy Ko's study of Duan ink stone carvers, shows a similar calculation at play in the body of the workman. For these workers, the destruction of their body through physical labour took on a cosmological significance. Essentially, the more a worker sacrificed their body in carving the Duan ink stones, the more they

[80] Shaw, *When I was a Child*, p. 13.
[81] See 'Scriven Report on Child Labour'.
<http://thepotteries.org/history/scriven1.htm#children> > (24 January 2010).
[82] Carol Wolkowitz, *Bodies at Work* (London, 2006), p. 62.

might hope to gain in the after life.[83] Moreover, work by Ronnie Johnston and Arthur McIvor, on heavy industry workers in Clydeside in the middle decades of the twentieth century, also demonstrates a calculation of risk and gain.[84] Johnston and McIvor show how workers in the heavy industries risked their bodies as a means of asserting masculinity.[85] In these examples, workers recalculated the risk to their body in positive terms.

Yet for potters in the second half of the eighteenth century and into the nineteenth and twentieth century, the benefits of the destructive nature of their work were not so distinct. Potters' work was simultaneously physically demanding and physically damaging. Wood, Greatbatch, Smith and Shaw all lived long lives, yet in general a potter's life expectancy was short. Those entering the pottery industry needed strong, healthy bodies to withstand the threat of lead poisoning and silicosis. Wood observed how, when in conversation with William Greatbatch's brother, Thomas Greatbatch, he remarked how, 'I was to have been prentice to Whieldon, only for this crooked finger, so I was obliged to be a Wheelwright.'[86]

The need for a healthy starting point was necessary in an industry capable of destroying the bodies, most obviously through lead and dust. From the 1730s onwards, the widespread use of lead glaze exposed potters to lead poisoning. This led to grey, colourless skin, palsied and then paralysed hands, general lethargy and toothlessness.[87] The threat from dust

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[83] Dorothy Ko, 'The Sacrificial Body of the Artisan' [Unpublished paper]. Presented at the 'China and Materiality Workshop', Needham Research Institute, Cambridge. 30 April 2008.
[84] Ronnie Johnston and Arthur McIvor, 'Dangerous Work, Hard Men and Broken Bodies: Masculinity in the Clydeside Heavy Industries, c.1930-1970s', *Labour History Review*, 69:2 (2004), p. 149.
[85] Johnston and McIvor, 'Dangerous Work, Hard Men and Broken Bodies', p. 149.
[86] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 14.
[87] John Rule, *Labouring Classes in Early Industrial England, 1750-1850* (London and New York, 1986), p. 139.

was equally brutal and experienced by all workers, no matter what their role was.[88] Potters contracted silicosis from their daily exposure to dust containing silica. Sufferers experienced the painful thickening and scarring of their lung tissue and ultimately death. The work of applying bodily skills consolidated their own strength, and dexterity. At the same time it could rip away the last vestiges of that strength, often, in a slow and painful way. Hence potters' focus on the body was also due to the highly destructive nature of pottery work.

Yet weathering that risk over a sustained period potters gained experience, and created and perfected skills. Successful potters were part of a unique group of workers who developed the ability to think through their body as a result of a lifetime of experience.[89] As discussed in chapter five, the development of this ability allowed potters to solve problems by applying their bodily knowledge. Hence, just as embodied knowledge was important to the production process it was also important to how potters' understood their skills as physical and tacit.

Throughout the eighteenth century Burslem grew and prospered as a pottery-manufacturing centre. At the same time, the growth of the market ensured that production processes became increasingly complex. Yet despite such growth tacit knowledge remained key. Potters further ensured this by bolstering the social ties between those within Burslem.

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[88] R. G. Haggar, A. R. Mountford and J. Thomas, *The Staffordshire Pottery Industry* (Stafford, 1981), p. 64.

[89] For more on the cultural and social construction of the distinction between head and hand in understanding the natural world see Lissa Roberts, Simon Schaffer and Peter Dear (eds), *The Mindful Hand: Inquiry and Invention from the Late Renaissance to Early Industrialisation* (Amsterdam, 2007).

**Social Skills**

Fig. 6.5. 'A Plan of the Town of Burslem, about 1750'. 1816.
Image Courtesy of The Potteries Museum & Art Gallery, Stoke-on-Trent.

Enoch Wood put ink to paper in 1816 to create a map of the town of Burslem, as it stood in the 1750s (for larger image see Appendix 1).[90] Wood was fifty-seven years old, and at this point in his life he and his friends John Lovat and John Fletcher felt a compulsion to map onto the geographical space of the area they inhabited, the people whom they shared their life with. The map recorded the location of two hundred and ten buildings in total. These included residential dwellings, pot works, alehouses and miscellaneous others.

Ostensibly the map is not populated and yet people are everywhere as the map carried a key with each number marking the inhabitants of that particular building. In the bottom right hand corner of the map we can locate the potworks belonging to Thomas Steel, whilst towards the top of the map we see the potworks owned by Clark Malkin. John Adams' Brickhouse Works was included as was Thomas Harvey's house on Bournes Bank and John Taylor's house on Shoe Lane. In addition, Wood

[90] Enoch Wood Papers. Manuscript Plan of Burslem. 1816. PM 1/1/7.

recorded all the alehouses, including the 'Jolly Potters', the 'Court House' and the 'Bear'. The social aspects of North Staffordshire life are further highlighted by the inclusion of a maypole, the town pond and a description of how Burslem residents spent Shrove Tuesday throwing stones at cocks and hens.

Their explicit motivations in carrying out this act of cartography are silent to us. We do not, and will not know if it was an act of nostalgia, empowerment or whim. The record that is left, however, is a trace of the interconnected nature of the North Staffordshire pottery industry. These interconnections wrapped themselves along space, time, kinship ties, contractual ties, work and skill.

As Göran Rydén, Chris Evans and Tamara Hareven have all argued, space, time and relational ties are influential factors within the dynamics of a manufacturing environment.[91] This chapter uses their studies of working practice and culture in the eighteenth-century Swedish iron industry, the eighteenth-century Welsh iron industry and in twentieth-century American textile mills, as a framework upon which to plot and examine the experiences of the North Staffordshire potters.

Rydén argues that the Swedish iron industry negotiated its place in the competitive European market of the late eighteenth century by making a consistently high quality product.[92] Rydén asserts that Sweden managed this change in the short term by using kinship ties to consolidate and

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[91] Göran Rydén, 'Skill and Technical Change in the Swedish Iron Industry', *Technology and Culture*, 39:3 (1998), pp. 383-407; Chris Evans and Göran Rydén, 'Kinship and the Transmission of Skills: Bar Iron Production in Britain and Sweden 1500-1860', in Maxine Berg and Kristine Bruland (eds), *Technological Revolutions in Europe: Historical Perspectives* (Cheltenham and Northampton, MA, 1998), pp. 188-206; Chris Evans, *"The Labyrinth of Flames": Work and Social Conflict in Early Industrial Merthyr Tydfil* (Cardiff, 1993); Hareven, *Family Time and Industrial Time*.
[92] Rydén, 'Skill and Technical Change', p. 395.

enhance the skills of its workforce. These familial relationships between members of the workforce compelled higher expectations of skill and output, as well as providing support and mobility. Evans has found a similar dynamic at play in the Welsh iron industry of the same period. Highly mobile father and son forging teams benefited from kinship ties, albeit on a smaller scale.[93]

In Evan's study, however, the dynamics of belonging and expectation that the ironworkers subsumed resulted not from kinship ties, or a local identity, but from a sense of belonging to the iron trade, and with it a distinctive iron culture.[94] Similarly, Hareven's study of textile workers at the Amoskeag Mills, in Manchester, New Hampshire in the first three decades of the twentieth century sees the effects of a collaborative influence of kinship ties and company culture.[95] Friends and family members worked alongside, taught and managed each other. At the same time the locality and interconnectedness of the mill in the workers lives encouraged them to see the mill as a metaphorical family.[96]

As stated earlier, guilds did not organise potters and had no history of doing so. Moreover, trade unions did not emerge in North Staffordshire until the nineteenth century when potters established the Journeyman Potter's Union in 1824, followed by the more united National Union of Operative Potters in 1832. Hence, like the workers in the studies discussed above, a mixture of kinship ties, trade culture and locality connected North Staffordshire potters to their workplace. These studies demonstrate how the social nature of skill existed in different industries, in different contexts

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[93] Evans and Rydén, 'Kinship and the Transmission of Skills', p. 198.
[94] Evans, *"The Labyrinth of Flames"*, p. 205.
[95] Hareven, *Family Time and Industrial Time*, Preface.
[96] Ibid., p. 73.

and in different periods. Similarly this chapter finds that in the eighteenth-century pottery industry, the social nature of skill was key. However that social nature, like that in the Welsh metal industry studied by Evans was in the process of changing.

**Kinship Ties**

Even a brief glance at the familial and contractual interconnections of the North Staffordshire pottery industry reveals a mix of relationships at work within the locale. The kinship ties claimed by the Wedgwood, Adams, Malkin, Greatbatch and Wood families are an obvious example of this. During the eighteenth century, the families of Burslem grew in size and stature. As noted earlier, between 1675 and 1760, Burslem grew from a small village of 600 residents to a town of 2,000.[97] Despite such growth and the obvious attractions of an economically affluent area, Burslem's population increase was largely due to high birth rates rather than inward migration.[98] Consequently, the majority of the population was not only tied to the town of Burslem, they were also strongly linked to each other.

Kinship ties generated wealth, ensured employment and sustained status. For those in the master class, such as Wedgwood, Wood and Greatbatch kinship ties were an important means of creating and retaining wealth. For instance, Josiah Wedgwood married his cousin Sarah Wedgwood, whose father, Richard Wedgwood was the eldest brother of Thomas and John Wedgwood of the Big House in Burslem. Sarah brought to the marriage a substantial settlement of four thousand pounds, which

[97] Weatherill, *The Pottery Trade and North Staffordshire 1660-1760*, p. 114.
[98] Ibid., pp. 117-121.

her father required Josiah match.[99] On Josiah's death the business remained in the family with responsibility passing to his son Josiah II and his nephew and partner Thomas Byerley (1747-1810). Similarly, when Wood set up business he did so with his cousin Ralph.

In addition, just as employers tended to hire both father and son to their manufactory so they also tended to look to their own kin to fill posts of importance, as Wedgwood's employment of and subsequent partnership with his nephew Thomas Byerley demonstrates. Similarly, although William Greatbatch's views of his familial ties to other members of the North Staffordshire pottery industry remain unknown to us, his brother's do not. In his reminiscences Wood recalls a conversation that he has had with William's brother, Thomas Greatbatch, where he noted with pride the skills of his brother, and the importance of William's final employment with Wedgwood and the employment it consequently ensured for 'many of the Greatbatch relations.'[100]

Wood used his own kinship ties to the pottery business as a means of constructing and legitimating his identity as a potter. Wood's writings provide evidence of his feelings about his place in the pottery industry. Wood clearly felt himself to be part of a potting family with potting heritage. For instance, in explaining his desire to record his recollections he noted how 'Hearing so much said while I was young about the old inhabitants who were connected in & about the Pottery Trade very naturally gave me a strong desire to learn all the particulars I could'.[101] Wood also used these ties as a means of understanding and authenticating

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[99] Robin Reilly, *Josiah Wedgwood 1730-1795* (London, 1992), p. 34.
[100] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 14.
[101] Ibid., p. 9.

his ceramic skills. He used the reminiscences not only as a vehicle to highlight his link to potters, but more particularly to highlight his familial link to talented potters, such as Aaron Wood. Enoch consistently wrote about his father's talents and exclaimed that when 'White Stone Earthenware, or Salt Glazed Earthenware…arrived at its greatest perfection…every Master Potter or Master Manufacturer in Staffordshire came to him to order their Block.'[102] Yet beside such warm sentiments there was also intra-kin tension, as the absence of Thomas and John Wedgwood's Big House from Wood's map demonstrates. Wood felt himself to be part of one family and he strengthened this identity by excluding other families such as the Wedgwood's. Hence, his need for a sense of family heritage suggests the importance of kinship ties in legitimating knowledge and status within the North Staffordshire pottery industry during this period.

**Outside of Kinship Ties**

Marguerite Dupree's work demonstrates the continued importance of family groups in the employment of potters in North Staffordshire between 1840 and 1880. Manufacturers' employment of certain families occurred over generations. More particularly, certain families such as the Wedgwood's, the Greatbatch's and the Adams's remained important to potting in the area for many generations.[103] For instance, Dupree's analysis of the heads of households in Etruria in 1861 revealed that fifty six per cent shared their surname with at least one other household head in the village.

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[102] Ibid., p. 42.
[103] Marguerite W. Dupree, *Family Structure in the Staffordshire Potteries 1840-1880* (Oxford and New York, 1995), p. 196.

Similarly, Weatherill has demonstrated that names such as Adams, Steele, Cartlich and Stevenson lasted well into the twentieth century.[104] Yet Durpee's research, which focused specifically on Etruria in this instance, also showed that there was 'a considerable degree of autonomy within families and the wider village community.'[105] Hence, although kinship ties were key, other forms of socialisation outside the workplace or family group, such as loyalties formed through apprenticeship relationships, public house socialising and religious worship became increasingly important during the eighteenth century and into the nineteenth century.

Potters established important ties through the relationships acquired as a result of their apprenticeship. Naomi Tadmor has shown that eighteenth-century contemporaries understood that the boundaries of the family unit lay at the threshold of the household.[106] The family-household framework was 'both permeable and flexible' and might include servants, apprenticeships, lodgers and kin. More recent research has questioned the extent to which employers viewed servants as part of the family.[107] Yet potters did form important connections with other families during their years of apprenticeship. For instance, during their apprenticeship to Thomas Whieldon, William Greatbatch and Josiah Wedgwood formed a connection that would benefit them for the rest of their working lives.

Potters also socialised outside of the workplace, strengthening relationships and loyalties. According to the memories of Wood and his friends, in 1750, while Burslem benefited from twenty-two potworks it was also serviced by nineteen alehouses, all located on or near the circular road

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[104] Weatherill, *The Pottery Trade and North Staffordshire 1660-1760*, p. 120.
[105] Dupree, *Family Structure in the Staffordshire Potteries 1840-1880*, p. 205.
[106] Naomi Tadmor, 'The Concept of the Household-Family in Eighteenth-Century England', *Past & Present*, 151 (1996), p. 119.
[107] Steedman, *Labours Lost*, pp. 18-19.

in the middle of the town. This proportion of alehouses was longstanding. A map from 'about the year 1720' also listed nineteen alehouses.[108] Of the nineteen houses featured, the Wood map named eight – the Turks Head, the Jolly Potters, the Bear, the Court House, the Talbot, the Shoulder of Mutton, the George and Dragon, and the Red Lion. Despite the naming of these establishments, their actual size remains unknown. The names suggest that they were more than a front room, yet Weatherill's evidence demonstrates that they might not have served alcohol on the premises.[109] Nevertheless, some of these premises accommodated socialising outside of the workplace.

Some of the alehouses listed on the map are noted as 'public houses', a change which Peter Clark has argued represented a new 'orientation' for alehouses after the Civil War towards the needs of 'established society'.[110] Hence, the public houses in Burslem perhaps mirrored the trend towards more complex drinking establishments with a greater number of rooms and facilities and thus drinkers.[111] Such establishments might offer food as well as alcohol, games, sports and an alternative market space. As Lars Magnusson has argued, social drinking practices in public houses and taverns formed an important part of craft culture, cementing different relationships through regular gifting in the form of alcohol consumption.[112] By the mid nineteenth century Charles Shaw was able to recount how senior potters used the public house to give wages to their boys and

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[108] Weatherill, *The Pottery Trade and North Staffordshire 1660-1760*, p. 126 and p. 155.
[109] Ibid., p. 127.
[110] Peter Clark, *The English Alehouse: A Social History 1200-1830* (London and New York, 1983), p.195.
[111] Clark, *The English Alehouse*, p.196.
[112] Lars Magnusson, 'Markets in Context: Artisans, Putting Out and Social Drinking in Eskilstuna, Sweden 1800-50', in Maxine Berg (ed.), *Markets and Manufacture in Early Industrial Europe* (London and New York, 1991), p. 314.

workers. Hence in North Staffordshire, the alehouse increasingly acted as a liminal space between work and home, where potters experienced other activities, practices and perhaps roles.

Religious practice and worship provided another means by which potters interacted. As in other industrial districts, Methodism played an increasingly important role in the social lives of North Staffordshire residents in the latter half of the eighteenth century.[113] The emphasis on salvation and the continual need for repentance bound congregations together and tended to instigate a stronger sense of community. By the late nineteenth century Arnold Bennett's depiction of the Potteries in *Anna of the Five Towns* (first published in 1902) centred around the power of the Methodist Church and its practices.[114]

Yet during the period of this thesis, between 1760 and 1800, Methodism was in its infancy in Staffordshire. In 1738, John Wesley made his first preaching trip in the area and two years later a group of miners established the Society of Methodists. John Ward recorded that before 1760 'the parish-church of Stoke, the parochial chapel of Burslem, a small chapel of private foundation at Hanley, and another at Lane end, were then the only places of worship belonging to the Establishment'.[115] By 1766 the first Methodist chapel was built in Burslem and between 1760 and 1790 John Wesley visited the area a further fifteen times. In the 1780s, during one of his preaching tours in Staffordshire John Wesley sat for Enoch Wood who modelled his bust.[116] Despite the development of various schisms towards

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[113] For more on the role of Methodism in industrial communities see Thompson, *The Making of the English Working Class*, pp. 385-440.
[114] Arnold Bennett, *Anna of the Five Towns* [1902] (London, 2001), pp. 63-72.
[115] Ward, *The Borough of Stoke-upon-Trent*, p. 31.
[116] Falkner, *The Wood Family of Burslem*, p. 46.

the end of the century, the links between potters and the Methodist faith became ever stronger in the second half of the century and therefore so did the links between potters.

Hence, as new means of socialising and gifting developed in the North Staffordshire area during the later decades of the eighteenth century social ties increasingly existed upon multiple axes and became ever more complex.

**Effects of Ties and Sociability**

The industry benefited from potters' sociability and in the second half of the eighteenth century the social interconnectedness of the North Staffordshire pottery industry became an increasingly decisive factor in its success for three key reasons.

First, in North Staffordshire potters applied tacit knowledge collectively and continued to do so into the twentieth century. As Chandra Mukerji has shown, the codification of tacit knowledge is only important when people can no longer be relied upon as stores of knowledge.[117] In North Staffordshire, however, the collective memory remained strong. Kinship ties and social loyalties ensured that despite much labour movement, the area retained the majority of their skilled workers. Hence, tacit knowledge remained the central component of this pottery industry.

Second, from the 1730s onwards, as the industry became increasingly complicated and workers became more specialised, the

[117] Chandra Mukerji, 'Tacit Knowledge and Classical Technique in Seventeenth-Century France: Hydraulic Cement as a Living Practice among Masons and Military Engineers', *Technology and Culture*, 47:4 (2006), p. 729.

application of skill was increasingly social.[118] Workers relied on each others skills, as well as their own, to create objects. As Charles Shaw stated, 'A deft, artistic thrower could in shaping his pieces on his potter's wheel, very much lighten the labour of a turner.'[119] The turner also benefited economically. A quicker, more skilled worker produced more pieces, which under the piece rate system equated to more money. In this collective environment, the existence of multiple social ties smoothed the way for positive working relationships.

At the same time, the social nature of the work meant that workers could not merely apply their skills; they had to be seen to be doing so. Hence, one of the strongest lenses through which potters viewed their workmanship and skill was through each other's eyes. As Evans argues, 'Skill was not, then, a fixed quality of timeless validity, it was a social valuation.'[120] Similarly, John Rule argued that in the eighteenth century the 'property of skill' was 'deeply embedded in the culture and consciousness of the artisan, as was the assumption of the respect of others for it.'[121]

In his autobiography, Charles Shaw recounted a vivid example of the internal workings of this 'social valuation'. He described how when a thrower in his factory continued to consistently manufacture objects of poor quality, the other workers (working further along the line of the production process) decided to publicly humiliate him. The group of workers acted out a mock funeral for the objects he created, including a coffin, mourners and a procession. Shaw wrote, 'The procession started from the higher end of the long turners' room and wended its way in slow

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[118] Wolkowitz, *Bodies at Work*, p. 62.
[119] Shaw, *When I was a Child*, p. 76.
[120] Evans, *The Labyrinth of Flames*, p. 73.
[121] John Rule, 'The Property of Skill in the Period of Manufacture' in Patrick Joyce (ed.), *The Historical Meanings of Work* (Cambridge, 1987), p. 114.

and solemn march towards the throwing shop.'[122] This metaphorical construction of the death of workmanship serves to evidence the social nature of skill in the pottery industry. Hence, the importance of the social valuation of skill and the problems it created when voiced within the workplace demonstrate the need for other means by which social cohesion could be negotiated. With multiple ties to other workers difficulties could be diluted and redirected. Hence the increasing complexity of social ties in North Staffordshire ensured the stability of the workforce. It also created the foundations for successful working relationships and it provided multiple outlets for the social valuations of skill.

**Secrecy**

Yet despite much co-operation, the socialisation of skill was regularly endangered by the need for secrecy. As discussed in chapter five, Wedgwood used external staircases to separate processes and the people who worked them. Similarly Enoch Wood rigidly used specialised labour in his own factory to ensure levels of secrecy. Manufacturers also employed the strategy of 'locking up' to ensure that certain techniques and recipes remained secret.

As noted earlier, one of Wood's first lessons under his father's tutelage was the importance of secrecy. Manufacturers submitted Aaron Wood to these practices on various occasions. Enoch recalled how his father told him of how Thomas Whieldon suffered him to be 'lock'd up'

[122] Shaw, *When I was a Child*, p. 76.

'while he made the models & moulds' at Little Fenton.[123] In fact, Enoch recorded this twice, suggesting the significance of his father's skill and thus the need to be 'lock'd up' to prevent the 'workmen from prying into what was under hand.'[124] Similarly, Enoch also experienced being 'lock'd up in a private room' where he made clay seal moulds for a piece rate.[125] The practice of locking up aimed to ensure that other potters from the region and elsewhere could not gain information on the new designs, materials and processes being used by a particular manufacturer or worker.

As noted in chapter one, manufacturers refused visitors admittance to certain parts of their production process. Manufacturers sought to protect themselves from industrial espionage, which was common in England in the eighteenth century. As J. R. Harris has demonstrated, alongside the movement of workers across the channel, the French, amongst others, also sent industrial spies to seek out information. For instance in the 1730s and 1740s, the French state employed the academician Tiquet to travel through England and report on the development of various industries including coal-mining, dyeing, ceramics and steel manufacture.[126] While manufacturers wished to protect their production process from such industrial spies, they also sought to protect it from more local interests. When recording Josiah Wedgwood's introduction of the engine-turned lathe, Enoch Wood described how once they had got the lathe to work, other potters such as Mr John Shrigley and Thomas

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[123] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 15.
[124] Ibid., p. 44.
[125] Ibid., p. 50. Wood completed this work while he was completing his apprenticeship, so it seems likely that he carried the work out for Humphrey Palmer.
[126] J. R. Harris, *Industrial Espionage and Technology Transfer: Britain and France in the Eighteenth Century* (Aldershot and Brookfield, 1998), p. 36.

Wedgwood had ventured to see it in action.[127] Yet, having attempted to make this viewing 'without asking leave of Josiah Wedgwood to see it' they were denied access and 'he [Wedgwood] ordered Cox, to shut the door against them'. Moreover, 'next time they came so Mr Cox refused to let them see the Lathes at work'.[128] Hence, alongside social ties, a competitive air also affected both the processes and the atmosphere of working life in the North Staffordshire Potteries.

**Ceramics Culture**

Fig. 6.6. Detail of Plate Nineteen. 'The Counting House.' Courtesy of The Winterthur Library: Printed Book and Periodical Collection.[129]

Despite the importance of the social world of North Staffordshire potters also identified with their participation in a wider world of ceramics production. Plate nineteen of *A Representation of the Manufacturing of Earthenware* depicts clerks at work in a room in the counting house. On the

[127] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 53.
[128] Ibid.
[129] Wood, *Representations of the Manufacturing of Earthenware*, pl. 19.

wall at the back of the room is a map of Britain. Here, Wood demonstrated his geographical knowledge and dominance. Clearly it is important that his clerks could quickly locate different parts of the country. Yet Wood's world-view was not entirely geographically based, rather it took on an almost imaginary form.

Wood recognised this world in his reminiscences. He wrote, 'Some excellent specimens of these are preserved now in my collection which have the beauty and appearance of the finest oriental wares'.[130] Wood collected various pieces of ceramics, which he added to his 'museum'.[131] In forming the collection Wood sought to represent the development of Staffordshire pottery and wares and thus his collection included pieces made by both him and others, such as the Elers brothers. In 1816, Wood displayed the collection at a public dinner celebrating the fiftieth anniversary of the cutting of the Trent and Mersey Canal and so others began to visit and view it.[132] As Susan Stewart argues, 'the collection marks the space of nexus for all narratives, the place where history is transformed into space, into property.'[133] Hence, more than recording the geographical make up of his local community, as evidenced in the map, he used his museum to record and objectify the ceramic world to which he imagined he belonged. Hence, the arrival of porcelain objects from China and Japan in the seventeenth and eighteenth century not only pushed manufactures and potters to imitate these wares it also encouraged them to see themselves as part of a wider ceramic world.

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[130] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 12.
[131] Ibid., p. 49.
[132] Miranda F. Goodby, 'The Lost Collection of Enoch Wood', *Journal of the Northern Ceramic Society*, 9 (1992), p. 125.
[133] Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection* (Baltimore and London, 1984), p. xii.

Wood made further, more specific comparisons in his writings. He described how 'several pieces of this porcelain made by the Mr J Baddeley & Fletcher…are even now by potters of this day mistaken for Eastern China, so closely did they copy the China from the East'.[134] Similarly, Josiah Wedgwood also compared his wares and processes to the success of the Chinese. In September 1767, he asked Thomas Bentley, 'Don't you think we shall have some Chinese Missionaries come here soon to learn the art of making Creamcolour?'[135] The influx of goods from the seventeenth century onwards and the subsequent pressure on Staffordshire potters to produce innovative goods changed how they recognised their work. Rather than using Leeds, London or Liverpool as reference points, these potters compared their work to that created in China. Hence, Asian imports not only affected how consumers thought about objects, it also affected how workers and manufacturers thought about the work and the objects they made.

In the second half of the eighteenth century, manufacturers and workers in Staffordshire considered themselves to be part of, to be contributing to an imagined 'world of ceramics'. The workmanship and skill that these North Staffordshire potters possessed were always relative. Whether that comparison was made between each other, or between them and their 'Eastern' counterparts, what is significant is that it was this judgment that bound them to a pottery culture and identity.

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[134] Enoch Wood Papers. Compendium Volume of Enoch Wood's Evidence and Recollections. 1834-40. PM 1/1/2. p. 18.
[135] Etruria Collection. Letter from Josiah Wedgwood to Thomas Bentley. September 1767. MS E25-18167.

**Conclusion**

North Staffordshire is an atypical example. Pottery was the main industry in the area and thus it hardly seems surprising that work was a social as well as an economic entity. This chapter argues that although the 'price of workmanship' that manufacturers offered potters in return for their skill and labour, was the central means by which potters themselves comprehended their workmanship, they also experienced work and gathered meaning from work in other ways. They valued and understood their workmanship through the lengthy process of acquiring skills and techniques. They also understood their skills as bodily knowledge and valued their physicality as a result. Their embodied knowledge was hard-won and tacit and they strengthened and protected it through an increasingly complex set of social ties. Hence potters strongly identified with their skills and with the industry more generally through their knowledge of the ceramic world.

## Conclusion

In 1777, Wedgwood published a catalogue to promote his products.[1] It included cameos, intaglios, medals, busts, small statues, bas-reliefs, vases and other ornaments. In the introduction to the catalogue, the unknown author stressed the importance of consumers in furthering industry. The author described how the 'progress of the arts' depended on 'the Encouragement they receive from those, who by their Rank and Affluence are Legislators in Taste; and who alone are capable of bestowing Rewards upon the Labours of Industry, and the Exertions of Genius.'[2] As other scholars have shown, Josiah Wedgwood and Thomas Bentley made explicit attempts to align their goods with the arts, taste and fashion.[3] Yet what was perhaps more delicate were the various other means by which Wedgwood and Bentley encouraged customers to engage with their products and ultimately to purchase them. One of their key techniques was to stress their innovative methods of manufacturing.

In the introduction to section two of the 1777 catalogue, which related to 'Intaglios', the author stressed the improvements made to the products through new manufacturing techniques. The catalogue described how 'We have found that many of them [intaglios] take a good Polish'. It also stressed that 'this Operation must be performed with great Care, or the

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[1] *A Catalogue of Cameos, Intaglios, Medals, Busts, Small Statues, and Bas-Reliefs; With a General Account of Vases and Other Ornaments After the Antique, Made by Wedgwood and Bentley; And Sold at their Rooms in Greek-Street, Soho, London* (4th edn, London, 1777).

[2] *A Catalogue of Cameos, Intaglios, Medals, Busts, Small Statues, and Bas-Reliefs*, p. 1.

[3] Eric Robinson, 'Matthew Boulton and Josiah Wedgwood, Apostles of Fashion', *Business History*, 28:3 (1986), p. 110; Neil McKendrick, John Brewer and J. H. Plumb, *The Birth of a Consumer Society: The Commercialization of Eighteenth-Century England* (London, 1982), p. 108.

Work will essentially suffer by it'.[4] Similarly, in the 1779 edition of the catalogue, when describing bas-reliefs and medallions the author stressed that they had 'been brought to their present Degree of Perfection with much Labour and Expence [sic] to the Artists'.[5] Here Wedgwood and Bentley hint at the time and development involved in perfecting the jasper ware pieces. Likewise in the 1787 catalogue, the firm of Wedgwood and Bentley continued to emphasise the importance of the developments they had made in manufacturing intaglios. The author described how 'The correct sharpness, and superior hardness, of these intaglios, have now been sufficiently ascertained by experience.'[6]

Catalogues acted as a form of advertisement. They entered peoples' hands and homes in order to persuade consumers to purchase. Advertisements persuade by engaging with current cultural discourse. Alongside art and taste, the catalogues for Wedgwood and Bentley's business connected with the current interest in manufacturing. The catalogue entries stressed that the Wedgwood and Bentley firm produced goods using the newest, most innovative techniques. Hence, as these catalogue entries demonstrate, contemporary interest in innovative goods did not just manifest itself in the objects that consumers purchased. Rather it also manifested itself in marketing techniques. It encouraged manufacturers to sell their products by emphasising the effort, skill and innovation involved in production. Thus, in this example as in others explored in this thesis, interest in innovative production techniques was

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[4] *A Catalogue of Cameos, Intaglios, Medals, Busts, Small Statues, and Bas-Reliefs*, p. 20.

[5] *A Catalogue of Cameos, Intaglios, Medals, Busts, Small Statues, and Bas-Reliefs; With a General Account of Vases and Other Ornaments After the Antique, Made by Wedgwood and Bentley, And Sold at their Rooms in Greek-Street, Soho, London* (5th edn, London, 1779), p. 24.

[6] *Catalogue of Cameos, Intaglios, Medals, Bas-Reliefs, Busts and Small Statues; With a General Account of Tablets, Vases, Ecritoires, and Other Ornamental and Useful Articles.* (6th edn, Etruria, 1787), p. 22.

not only focused on objects. As this thesis has demonstrated, there were multiple ways of perceiving workmanship in the late eighteenth century. Hence, alongside the interest in innovative goods identified by Berg and Clifford, other ways of understanding manufacturing emerged.[7]

**Standards of Workmanship**

During the second half of the eighteenth century, contemporaries perceived and understood workmanship (the cultural manifestation of tacit knowledge and skill) in new and different ways. In the second half of the eighteenth century, increasing numbers of industrial tourists read dictionaries and manuals and ventured out into the manufacturing regions of Britain in order to try to and comprehend production processes, which they considered curious. Writers and manufacturers greeted these tourists with a range of representations of ceramic manufacturing.

Until the final quarter of the eighteenth century dictionaries used Père d'Entrecolle's letters to present porcelain manufacture in terms of the processes at work in the Chinese city of Jingdezhen. With great detail but little comprehension writers replicated d'Entrecolle's description, leaving readers to form an understanding from limited resources. In contrast, when describing domestic pottery processes, writers used references to particular physical motions in order to encourage their readers to empathise with the potter's actions. Simultaneously, however, writers ensured that readers

[7] Maxine Berg, *Luxury and Pleasure in Eighteenth-Century Britain* (Oxford, 2005), p. 26; Helen Clifford, 'A Commerce with Things: The Value of Precious Metalwork in Early Modern England', in Maxine Berg and Helen Clifford (eds), *Consumers and Luxury: Consumer Culture in Europe 1650-1850* (Manchester and New York, 1999), p. 148; Helen Clifford, 'Innovation or Emulation? Silverware and its Imitations in Britain 1750-1800. The Consumers Point of View', *History of Technology*, 23 (2001), p. 73.

were kept at a distance. Rather than doing the action, writers encouraged their audience to consider viewing the action. How readers reacted to such images is unknown. Yet their response is suggested in the accounts written by industrial tourists in the same period.

By studying such accounts, this thesis concluded that industrial tourists gained a significant comprehension of how production processes worked. Such tours became so plentiful in the second half of the eighteenth century that manufacturers began to voice complaint and made attempts at limiting numbers. Thus these visits were a significant means by which contemporaries interacted with manufacturing processes. While on these tours, however, visitors perceived the processes they viewed in different ways. For instance, when watching the throwers create multiple objects while working at the wheel, tourists tended to exclaim awe and wonder. Yet the lack of comprehension suggested at by such a response is quickly discounted by the lengthy detail with which visitors recorded the rest of their tour. Hence, despite the limited understandings offered by the descriptions included in manuals, in viewing the processes first hand on manufactory tours contemporaries were able to gain a significant comprehension of production.

After considering the depictions of manufacturing offered by manuals and tours, the second chapter of the thesis examined how retailers represented production to consumers. By examining a series of trades cards and newspaper advertisements, it found that retailers showed manufacturing to be an activity that happened at a distance from consumption. Moreover, it also found that retailers were keen to stress their role in helping consumers navigate that distant land. As English porcelain

and earthenware factories emerged producing new varieties and types of objects, the market for ceramics grew and developed. Hence as facilitators in this increasingly complex market, retailers did hold an important position as skilful navigators. Moreover, by emphasising the nature of their role in this way retailers legitimised both their presence and their dominance over ceramic distribution. Retailers further stressed their task by creating large, complicated displays, which demonstrated their numerous links to production. Yet by stressing their role so strongly they represented production to be unknowable and foreign, which for many contemporaries it was not.

Not only did industrial tours complicate this representation by allowing contemporaries access to production, shopping practices gave consumers another means of responding to the images created by retailers. Until the later years of eighteenth century, direct ordering connected shoppers to manufacturers and their production processes. Similarly, the increasingly popular practice of browsing, which involved entering different shops to handle multiple goods without necessarily making a purchase, gave consumers another means of connecting with manufacture. As discussed in chapter three, although widely satirised by some, especially with regards to textile shopping, the lack of standardisation in ceramic quality added to the value of browsing practices for purchasers of plate and tea equipage. By handling various goods in multiple shops, comparing one with another, consumers deciphered different faults and forms of quality and through this process they could conceive of workmanship in physical terms. Hence for consumers, this practice not

only taught them much about contemporary material culture and consumption, it also offered up information about production.

Similarly, in the design process manufacturers and modellers perceived workmanship as part of the finished product or model. Workmanship represented a modeller's ability to successfully execute a particular design. Yet design was changing. Foreign imports not only excited consumers they also interested domestic producers, who often looked to design to overcome such competition. The design debate of the mid-eighteenth century further ensured the importance and professionalization of design. As the design process became increasingly formalised from the mid eighteenth century onwards, it became easier for manufacturers to consult designs and decide how far a particular model differed from the intention. Yet understanding the specifics of a design intention remained difficult for modellers who relied both on designs and other communications from manufacturers. Drawing and visual skills helped these communications, but often failed. Hence, the demand for innovative goods, for 'standards of workmanship' placed a new emphasis on design, which necessarily changed ideas and perceptions of workmanship in the modelling process.

While innovative goods placed more importance on design, the need to produce novel goods at uniform standards also forced manufacturers to rethink work environments and processes. The dual demands of variety and standardisation led earthenware manufactures to produce new shapes in new materials. In this ever-changing environment, despite Adam Ferguson's assurances, greater worker specialisation was not enough to ensure good workmanship. During the 1760s particular manufacturers,

such as Wedgwood, focused on the design of the built environment and the use of tools to overcome process problems. At the same time and in the decades that followed, manufacturers also looked to changes in skill to solve production gaps. Manufacturers closely collaborated with workers to implement these changes. Workers applied their tacit knowledge in order to understand problems and test out solutions. Hence, in the ceramics industry, in spite of attempts to codify processes through the use of tools, tacit knowledge remained key.

Finally amidst all this, the development of the earthenware industry, particularly in North Staffordshire, affected how potters considered their own work. The growth of Burslem into a pottery-manufacturing centre challenged potters to see their work in different terms. Potters viewed their work as the application of hard-won, social and physical skills. Clearly, workmanship was a significant concept in the calculation of wages. Thus the effort and skill potters applied to achieve a certain piece rate remained a central means through which they understood their work experience. At the same time, however, the lengthy process of acquiring skills led potters to value their knowledge and ability. Potters perceived the world in physical terms due to the bodily nature of their skill. Moreover, potters judged each other upon their skills and used various social ties to manage processes of social valuation. Finally, as goods flowed onto the market from other geographical areas, potters increasingly saw themselves as belonging to a ceramics world.

In considering the different perceptions of workmanship entered into by tourists, consumers, retailers, designers, manufacturers and workers, this thesis concludes that meanings of 'workmanship' were

shifting in the second half of the eighteenth century. For those not employed in manufacturing, reading manuals, seeing production in action and handling objects all challenged their ideas of workmanship. These experiences made contemporaries question what an innovative product, and the manufacturing techniques used to make it, actually meant. Similarly in manufacturing, the development of the design process and the demands of novelty and standardisation forced manufacturers, designers and modellers to question how 'excellent workmanship' was achieved. At the same time, workers understood their work in different terms – as a hard-won, social and physical skill that was valued. This thesis argued that for eighteenth-century contemporaries 'workmanship' was a complex idea, under challenge from developments in production and consumption.

Hence, by examining the different perceptions and understandings of workmanship held by eighteenth-century contemporaries this thesis has found that the new focus on standards of workmanship, which developed between 1650 and 1750, did not just manifest itself in contemporaries' purchase choices. Rather this thesis has demonstrated that in the second half of the eighteenth century as the English porcelain and earthenware industries grew, the interest in standards of workmanship created new industrial tourists, shaped retail techniques, altered consumption practices, affected the design process and led to adjustments in production. Hence, rather than simply the result of change, the focus on workmanship was itself an active force in the production and consumption of porcelain and earthenware objects in the late eighteenth century.

This thesis has shown that changes in demand and supply have a cultural identity as well as an economic one. The production of innovative

goods not only induced consumers to purchase, it also indicated the importance of new manufacturing techniques, which in an age of Enlightenment duly inspired interest and curiosity. Similarly, in production the changing nature of techniques impacted upon what skills and processes meant to manufacturers and workers. By viewing those meanings and perceptions in detail we begin to see that cultures of production created other forms of cultural production, which affected how contemporaries interacted with and understood the world, and more particularly the material world, around them.

As noted in the introduction to this thesis, these understandings of workmanship open up important questions not only for economic and cultural historians but also for craft historians. Examining 'craft', or rather 'workmanship', as a process that intersects both consumption and production demonstrates the multiple meanings it attracts. In this instance, practice that has previously been understood as mindless becomes meaningful when the importance of repetition and the difficulties of standardisation are taken into account. Moreover, in design, frustrations that have previously been understood as linked to a lack of control over the entire process are comprehended as attached to problems of communication when seen in an eighteenth-century context. Hence, this reassessment of the meaning of practice in the eighteenth century allows us to begin to engage critically with some of the assumptions of craft proposed by the Arts and Crafts movement in the nineteenth century, such as the importance of worker autonomy and the importance of removing standardisation.

In the nineteenth century, the combination of perspectives covered in this thesis began to wane. Domestic tourists gradually stopped visiting industrial sites that were increasingly perceived as inhumane.[8] In addition, while the rise of the department store changed consumer skills and habits, retailers advertised their products through images of objects rather than their making. Similarly, in production the stabilisation of the product base led to the formalisation of processes and the introduction of tools such as the jolly. Hence, the multiple concepts of 'workmanship' examined in this thesis belonged to a particular and significant historical context. Eighteenth-century ideas of workmanship fail to adhere to nineteenth-century concepts of craft and thus widen current understandings of craft, skill and tacit knowledge.

[8] Esther Moir, *The Discovery of Britain: The English Tourists, 1540-1840* (London, 1964), p. 107.

**Appendix 1**

'A Plan of the Town of Burslem, about 1750'.

Enoch Wood Papers. Manuscript Plan of Burslem. 1816. PM 1/1/7.

Image Courtesy of The Potteries Museum & Art Gallery, Stoke-on-Trent.

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