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Volume 1

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**RECOVERING THE ‘INGENIOUS’ MR. GYLES (1645-1709):
GLASS PAINTER, PRINTER, VIRTUOSO, AND
ENTREPRENEUR IN THE AGE OF ENLIGHTENMENT**

Volume One
(Two volumes)

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School of Culture and Creative Arts

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ABSTRACT

The thesis seeks to re-evaluate the art and career of the late seventeenth-century York glass painter Henry Gyles (1645-1709) by situating his practice within a broad range of cultural, social, and professional contexts. While remembered principally as a ‘glass painter’, it is a designation that only hints at the diversity of Gyles’ engagement with the visual arts of the period, as well as the latest developments in natural history and scientific experiment. Living and working in York brought him into close contact with a vibrant regional network of artists and scholars, including Martin Lister, Thomas Kirke, Francis Place, and William Lodge, among others. However, his pivotal role in the history of the so-called ‘York virtuosi’ has arguably been underappreciated, with Gyles’ practical knowledge and skills helping to facilitate many of the group’s experiments. It was this close association with gentlemen antiquaries, artists and philosophers that encouraged Gyles to assert his own liberal credentials and so, by extension, raise the status of glass painting. With glass painting having suffered during the Civil War and the Commonwealth, Gyles oversaw a brief revival of the art in York with the Restoration. Commissions from a resurgent local gentry also afforded Gyles opportunities to experiment with new materials and techniques, design novel lighting effects for domestic interiors, and reinvigorate traditional armorial glass painting. Much of this thesis is concerned with situating Gyles’ life and work in a very specific time and place, amongst the culture and society of post-Restoration York, but this does not mean it was confined or ‘provincial’ as his business and contacts saw him participate in metropolitan contexts too. In re-examining the art and career of a local glass painter, this thesis sheds new light on the culture of late seventeenth-century regional society and its engagements with metropolitan developments, while also highlighting an underappreciated aspect of the period's visual arts.

Keywords: Gyles, Hooke, Lister, Place, Thoresby, Royal Society, York virtuosi, mezzotint, glass prints, miniature, telescope, transparencies, stained glass.

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AUTHOR'S DECLARATION

As the sole author, this thesis presents original work, contextualised only by referenced secondary sources. Moreover, the author can confirm that this research has not sought an award elsewhere. All views expressed are personal and do not represent the University of Glasgow.

INTRODUCTION

While studying at the University of York in 1995, I came across a treatise entitled *Some Rules for Painting upon Messo Tinto Justly Imparted*, attributed to Henry Gyles.¹ As a glass painter myself, I knew of Gyles' reputation as a local glass painter who, in the aftermath of the Reformation and Civil War, revived the art of glass painting in and around the city, so his potential authorship of a treatise on the use of mezzotint prints to make 'glass prints' came as a surprise.² Even though described by his friend and fellow virtuoso Ralph Thoresby (1658-1725) as 'the famousest painter of glass perhaps in the world', the treatise suggests that, in experimenting with the new mezzotint medium, he sought to align glass painting with Enlightenment art culture and the growing popularity of the printed image.³ Although the fragile nature of 'glass prints' means that most, if not all, are now lost, archival evidence allows us to locate Gyles and the medium within a broad set of cultural, social, and professional contexts. This thesis not only revises the perception of Gyles as merely a provincial glass painter but also highlights a little-studied aspect of late-seventeenth-century visual culture, offering a new perspective on familiar narratives. It further grounds Gyles' activities geographically and socially, locating his active participation in the culture of improvement at the local level while highlighting the role of provincial developments, particularly in glass painting and print manufacture, in making and circulating natural knowledge at the national level. This thesis is the culmination of many years of reflection on the treatise's significance and what it reveals about Gyles' ambitions to make glass painting and other forms of image creation relevant to a new audience.

¹ Henry Gyles, *Some Rules for Painting upon Messo Tinto Justly Imparted*, Add.4024, UL.

² A Mezzotint print was the first monochrome printmaking process to yield half-tones. Glass prints were made by fixing a mezzotint print onto glass before hand-painting the print to look like a wall-hung painting.

³ Joseph Hunter, *The Diary of Ralph Thoresby, F.R.S., Author of the Topography of Leeds, (1677-1724)*, 1 (London: Henry Colburn and Richard Bentley, 1830), 366.

From 1663, the Royal Society was titled 'The Royal Society of London for Improving Natural Knowledge'. <https://royalsociety.org/about-us/history/>. This impulse to improve practical knowledge within the nation is discussed in Roy Porter, "The Enlightenment in England, in *The Enlightenment in National Context*, eds., Roy Porter & Mikuláš Teich (Cambridge: Cambridge University Press, 1981), vii-viii & 7.

1.0 HOW THIS THESIS RELATES TO EXISTING SCHOLARSHIP

Although the starting point for this thesis is the treatise *Some Rules...*, Gyles' acquisition, ownership, and use of the treatise did not happen in a vacuum. As alluded to above, Gyles was part of an intellectual group of natural philosophers and artists collectively called the York virtuosi. York itself, post-Restoration, was also undergoing change, being re-invented as a place of urban leisure. Therefore, re-evaluating Gyles requires a broader conversation about how Enlightenment culture and the York virtuosi may have influenced his glass painting and facilitated his involvement in local print culture. Consequently, this thesis is expansive in its ambitions, an objective reflected in the existing scholarship cited as representative of this thesis.

Gyles first became a subject for academic study in a 1921 article entitled 'Glass-Painters of York' published in *Notes and Queries*. Penned by the prominent York-based stained-glass manufacturer and commentator on local art and music, John Knowles (1838-1931), this short notice previewed the author's more substantial collection of anecdotes and scraps of biographical information on Gyles, which later appeared in the 1922-23 volume of the *Walpole Society*.⁴ Fifty-seven years later, the York-based historian John Trevor Brighton completed his PhD on the *Enamel Glass Painters of York*, which included a significant section on Gyles. This section eventually became a published monograph, *Henry Gyles Virtuoso and Glass Painter of York 1645-1709*, which has become the standard account.⁵ Whereas Knowles' contribution was essentially biographical, Brighton's primary achievement was to contextualise Gyles' glass painting by cataloguing his oeuvre and all known correspondence. More recent scholarship by: the stained glass historian David O'Connor, who established when Gyles undertook his first glass painting commission; Christine Pearson, who extended our current understanding of

⁴Horace Walpole, *Anecdotes of Painting in England* 2 (London: Strawberry Hill Press, 1765), 18.

John Knowles, "Glass-Painters of York", *N. & Q*, Twelfth Series, 9, (London: The Times Publishing Company, 1921), 204-206.

John Knowles, "Henry Gyles, Glass-Painter of York", Vol. 11 (1922-23), 47-79.

⁵ John Trevor Brighton, "The Enamel Glass Painters of York: 1585-1795", 1, (PhD diss., University of York, 1978), 73-139. Also, John Trevor Brighton, *Henry Gyles Virtuoso and Glass painter of York 1645-1709*, *York Historian* 4 (Leeds: The Yorkshire Architectural and York Archaeological Society, 1984).

the Gyles' pedigree window in the family home in Micklegate, York; Hugh Murray who re-evaluated some of Gyles' early glass painting; David Dungworth and Susan Harrison, who documented his work at Belsay Castle, Northumberland; and Louise Ann Hampson, who identified his contribution to the glazing scheme of York Minster, conclude the current known scholarship.⁶ It is a small body of work, much of it wrapped up in issues of attribution, biography, or the documentation of an oeuvre rather than in understanding Gyles' work within a broader field of cultural practice. As there is some disagreement on matters of fact, such as whether he was self-taught, Gyles the glass painter remains a contested figure. This introduction concludes with a summary of the decline of glass painting to contextualise Gyles' revivalist status.

While academic discussion of the York virtuosi is small, there are noteworthy contributions by Helen Pierce on the artist-printmakers Francis Place (1647-1728) and William Lodge (1649-1689) as part of polite cultural recreation within an evolving York social elite (the virtuosi), and Mark Hallett on the same artists from the perspective of their graphic legacy of the city being an expression of gentlemanly antiquarianism.⁷ Here, however, Gyles is conspicuous by his absence from their discussions of the city's cultural life and art creation. Only Brighton and Anna Marie Roos discuss Gyles as an active member of the York virtuosi.⁸ More broadly, when reflecting on the virtuosi phenomenon nationally, and its courtly origins and eligibility, both Ann Birmingham and Kim Sloan make similar points that virtuosi groups were populated by gentlemen of independent means who indulged their pastime interests.⁹ This, however, was not the case with the

⁶ David O'Connor, "John Petty, glazier and Mayor of York: an early 16th –century memorial window formerly in the south transept of York Minster", *JSG* 29 (2005): 38. 41.

Christine Pearson, "A forgotten Memorial: The Family Window of Edmund and Sarah Gyles, and William Jane Kirby", *York Historian* 7 (1986): 34-38.

Hugh Murray, "Bernard Dinninckhoff, Henry Gyles and William Peckitt: enamel glasspainters of York, 1585-1795", *York Historian* 28 (2011): 7-21.

David Dungworth and Susan Harrison, "Belsay Castle, Belsay, Northumberland: Scientific analysis and historic interpretation of decorated window glass by Henry Gyles of York", *Vidimus* 80 (September 2019), vidimus.org/issues/issue-80.

⁷ Helen Pierce, "This Ingenious young Gent and excellent artist": William Lodge (1649-1689) and the York Virtuosi,' in *Court, Country, City*, eds., Mark Hallett, Nigel Llewellyn and Martin Myrone (Yale University Press, New Haven and London, 2016), 315. See also Mark Hallett, "Pictorial Improvement: York in Eighteenth-Century Graphic Art," in *Eighteenth-Century York: Culture, Space and Society*, eds., Mark Hallett, and Jane Rendall (Loughborough: Borthwick Publications, 2003), 25.

⁸ Anna Marie Roos, "A Speculum of Chymical Practice: Isaac Newton, Martin Lister (1639-1712), and the making of telescopic mirrors", *Notes Rec. Roy. Soc. Lond* 64, issue 2, (2010): 6-7.

⁹ Ann Bermingham, *Learning to Draw, Studies in the Cultural History of a Polite and Useful Art* (New Haven & London: Yale University Press, 2000), 52.

York virtuosi, where Gyles was neither born a gentleman nor was he a man of means. Although both authors acknowledge the association between amateurism and virtuosi culture, they do not address this contradiction within the York virtuosi.

Another notable instance of this neglect of regional culture is the lack of scholarship relating to prints and printmaking outside the capital. Much of the current literature on seventeenth-century print culture in Britain focuses on the growth of outlets in London, the biographies of various sellers and publishers, the development of genres and the prevalence of iconographic themes.¹⁰ Contributions such as *Printed Images in Early Modern Britain* edited by Michael Hunter and published in 2010, and the British Museum's exhibition catalogue *The Print in Stuart Britain 1603-1689* by Antony Griffiths published in 1998 have, however, done much to enhance our understanding of print culture within this period and its appeal to connoisseurs and a burgeoning "middling sort" alike.

¹¹ Although provincial artists like Place and John Lambert (1638-1701) do feature in such surveys, if only rarely, figures like Gyles do not.¹² Yet lively print markets evidently existed in provincial centres such as York, which sent locally produced items to London.¹³

Further, Martin Lister and scientific print illustration in York have attracted considerable scholarly interest over the last twenty-five years or so in the visual dimension of science in the early Stuart era, a period that saw the development of modern science through illustration as an aid to classification and interpretation. The presentations given at the Royal Society conference 'Curiously Drawn' (2012), published as a special issue of the

Kim Sloan, 'A Noble Art', *Amateur Artists and Drawing Masters c.1600-1800*, (London: The British Museum Press, 2000), 12.

¹⁰ Malcolm Jones, *The Print in Early Modern England*, (New Haven: Yale University Press, 2010). Joseph Monteyne, *The Printed Image in Early Modern London*, (Oxon: Routledge, 2016). Although neither publication discusses why or how these structural developments came about, they do focus on what was fashionable – essentially making the case that print culture was a capital city phenomenon.

¹¹ Michael Hunter, "Introduction", Helen Pierce, "The Devil's Bloodhound: L'Estrange Caricatured", Ben Thomas, "Noble and Commercial", in *Printed Images in Early Modern Britain*, ed., Michael Hunter (Cornwall: Ashgate, 2010), 1-23, 237-255, 279-296.

Further, Antony Griffiths, *The Print in Stuart Britain, 1603-1689*, (London: British Museum Press, London, 1998), which focuses on the role and influence of print publishers and sellers, as well as documenting the careers of the most significant publishers.

¹² Griffiths, *The Print in Stuart Britain*, 280. Griffiths is an exception to the body of academic publications in discussing Place's London activities.

¹³ Henry Gyles to Pierce Tempest, (12th August 1682), Ms. 3, f.61, YAS, Special Collections, University of Leeds.

Huntington Library Quarterly in 2015, attest to this interest.¹⁴ In his introduction to the HLQ special issue, Hunter outlines how the new “visual language” of mid-seventeenth-century philosophical enquiry extended back to about 1650, predating the formation of the Royal Society in 1660. In parallel, though not necessarily overlapping, is the 2016 publication on the visual arts of the late Stuart era, *Court, County, City*, which considered how natural-history illustration intersected with the wider world of pictures and picture-making, and will be discussed more fully later. The pre-Restoration period is explored by Dalston and Galison in *The Image of Objectivity*, and Janice Neri in *The Insect and the Image*. Dalston and Galison’s discussion on the presentation of imagery for a ‘new science’, the creation of atlases as ‘bibles of the observational birds, fossils, human bodies, elementary particles, and flowers certified free of human interference’, arguably maps the mid-seventeenth-century template for the creation of objective viewing before the formation of the Royal Society in 1660.¹⁵ Meanwhile, Neri explores how such imagery defined the insect as a proper subject of study in the mid-Stuart period and illustrates how, by commodifying nature, seventeenth-century painters and printmakers influenced ideas about visualising the natural world through the convergence of art, science, and commerce.¹⁶ More relevant to the early period of the Royal Society is Sachiko Kusukawa’s article on Richard Waller and Henry Hunt, which focuses on the Society’s growing obsession with objective standardisation.¹⁷ Most significant are discussions of imagery presented through and by optical instruments, such as microscopes, magic lanterns, and, in Hooke’s case, his camera obscura. Of note are John Harwood’s discussion of Robert Hooke’s *Micrographia*, and Michael A. Dennis’s work, which centres on how Hooke was instrumental in reforming philosophical interpretive practices.¹⁸ Collectively, this literature explores the mid-seventeenth-century philosophical search for a methodology to achieve objectivity in image creation. What the literature does not discuss, however, is the personnel who facilitated this new “visual language” in York, particularly what role Gyles might have had, the practicalities of virtuosi activity, and the choice of Gyles’ home as a location.

¹⁴ Michael Hunter, “Introduction”, *HLQ* 78, no. 2 (2015): 141.

¹⁵ Lorraine Daston, and Peter Galison, “The Image of Objectivity”, *Representations*, no. 40 (1992), 81.

¹⁶ Janice Neri, *The Insect and the Image: Visualizing Nature in Early Modern Europe, 1500–1700* (Minneapolis: University of Minnesota Press, 2011), 105–138.

¹⁷ Sachiko Kusukawa, “Picturing Knowledge in the Early Royal Society: The Examples of Richard Waller and Henry Hunt”, *Notes Rec. Roy. Soc. Lond* 65, (2011): 273–94. Also see: Sachiko Kusukawa, “The Historia Piscium (1686)”, *Notes Rec. Roy. Soc. Lond* 54, (2000): 179–97; Kusukawa, “Drawings of Fossils by Robert Hooke and Richard Waller”, *Notes Rec. Roy. Soc. Lond* 67, (2013): 123–38.

¹⁸ John Harwood, “Rhetoric and Graphics in *Micrographia*”, in Robert Hooke: New Studies, ed. Michael Hunter and Simon Schaffer (Woodbridge: U.K., 1989): 119–47. Also, Michael A. Dennis, “Graphic Understanding: Instruments and Interpretation in Robert Hooke’s *Micrographia*”, *Science in Context* 3 (1989): 309–64, and Hunter, “Mr. Hooke’s Reflecting Box”: 301–28.

Glass prints imitating oil painting for display on walls, referred to above, have been a subject of discussion from the early nineteenth century, with connoisseurs and collectors mainly focusing on the taste, charm and influences of the ‘glass picture’ as it was then termed.¹⁹ Only H. G. Clarke attempted to document the technical process, citing the mezzotint printer-engraver John Smith (1652-1743) as the figure most likely to have initiated the trend.²⁰ More recently, scholars on the subject such as Ted Stanley have contextualised the glass print as both a novelty and a branch of reverse-glass-painting folk art.²¹ At the same time, Ann Massing has traced the development of glass prints through various eighteenth-century treatises.²² Although these contributions document how the glass print was perceived, trivialised and circulated in the eighteenth century, they do not address its seventeenth-century origins or the reasons for its creation within an expanding and ambitious pictorial culture.

This review of the current literature points out that little of this scholarship considers the complex interaction between metropolitan and provincial culture in art and science, let alone the significant knowledge exchange between the York virtuosi and the Royal Society. With good reason, much of this recent literature exploring Restoration culture has focused on London, as the development of urban culture was deeply linked to the growth and centralisation of economic and political power in the capital, which regional centres such as York sought to mimic.²³ This focus on mapping London’s cultural landscape onto the regions, however, has arguably led scholars to lose sight of its relationship with the provinces and, moreover, what was distinctive about developments at the local level. Examples of this would be the ever-greater integration between metropolitan and regional culture and society, which was fuelled by improvements in transport infrastructure and the taking up of townhouses, among other factors, as well as the ever-greater circulation of ideas in the form of letters, publications, and the sharing of

¹⁹ Egan Mew, “Old Glass Pictures”, *The Connoisseur*, 87, (1931).

Also, H. G. Clarke, *The Story of Old English Glass Pictures: 1690-1810* (London: Courier Press, 1928).

²⁰ Clarke, *The Story of Old English Glass Pictures*, 1- 2.

²¹ Ted Stanley, “The Glass Print”, *The Book and Paper Group*, Annual 21 (2002): 49-55.

Ted Stanley, “Mezzotint Under Glass: A Historical Review of the Glass Print”, *Journal of the American Institute for Conservation*, 45, no. 2 (2006): 147-154.

²² Ann Massing, “From Print to Painting: The Technique of Glass Transfer Painting”, *Print Q.* 6, no. 4 (1989): 383-393.

²³ Peter Borsay, “The English Urban Renaissance: The Development of Provincial Urban Culture c. 1680-c. 1760”, *Social History* 2, no. 5 (1977): 582.

F.J. Fisher, “The Development of London as a Centre of Conspicuous Consumption in the Sixteenth and Seventeenth Centuries.” *TRHS* 30 (1948): 45, 46 & 49.

artistic and scientific information.²⁴ The considerable correspondence in Yorkshire alone attests to such activity.²⁵ Gyles was also an active participant in this world of letters, or the ‘Republic of Letters’ as it became known, part of the intellectual milieu that existed throughout the educated parts of Europe as an ‘informal collegial structure’ of knowledge sharing.²⁶ Not relating the contribution of the provinces more generally to national culture has consequently meant that little scholarship has focused on Gyles and the York virtuosi, let alone the virtuosi’s emergence as a significant intellectual grouping. A notable exception to this narrative, previously mentioned, is the 2016 publication *Court, County, City*, which emerged from the collaborative research project *Court, Country, City: British Art, 1660-1735*, hosted by the History of Art department at York and Tate Britain, with the support of the Arts and Humanities Research Council, which considered the development of the visual arts at both a local and national level post- Restoration.

This review shows that Gyles is still perceived one-dimensionally, as a glass painter. Yet, as we shall see, Gyles’ involvement with the York virtuosi exposed him to, and involved him in, a broad range of practical and more abstract philosophical enquiries in the form of antiquarian and natural history studies and the experimental production of prints and glass. This thesis seeks to understand Gyles’ activities within a different frame of reference, one that highlights a previously overlooked level of cultural ambition.

2.0 HOW THE DISCUSSION WILL UNFOLD AND WHAT EVIDENCE WILL BE DRAWN UPON

The thesis is divided into four chapters with distinct but interconnected themes, each building on the previous chapter. In re-evaluating Gyles’ contribution to glass painting, chapter one focuses on his acquisition of Edward Norgate’s (1581-1650) drawing and

²⁴ Francis Drake, *Eboracum: Or The History and Antiquities of the City of York*, (London: William Bowyer, 1736), 240-1.

²⁵ Roos, “A Speculum of Chymical Practice”, 6-7.

²⁶ A.C Grayling, *The Age of Genius, The Seventeenth Century & The Birth of the Modern Mind*, (London: Bloomsbury, 2016), 17.

painting treatise *Miniatura* to establish to what extent the treatise informed his practice and changed the direction of glass painting post-Restoration; its acquisition is also considered within the cultural milieu of York which produced the virtuosi and begins the discussion on Gyles' ambitions for social status. Chapter two explores the early origins of the virtuosi in York, why their activities centred around Gyles' home, what his role may have been within their structure, and how he used his new social status to access Royal Society knowledge to pursue his own business ventures. Whereas chapter two focuses on Gyles' relationship with the Natural philosophers, chapter three extends the discussion to the York virtuosi artists and, as their social equal, how he participated in local print culture. Chapter four reviews the previous chapters to lay out his posthumous reputation and legacy.

The thesis is informed by nineteen unpublished letters by Gyles found in the British Library, Thoresby's archive in the Brotherton Library in Leeds, and the Bodleian Library [appendix 7]. Although Brighton trawled these archives extensively, more letters have been found. This correspondence has been transcribed and closely examined as a body of evidence by locating it chronologically within Brighton's transcriptions and those reproduced by previous scholars. These unpublished letters provide a fresh perspective on Gyles' glass and printmaking, his relationship with his fellow York virtuosi, particularly Place, and illustrate how Gyles contributed to the Republic of Letters.

To investigate and reveal the hidden patterns of how the York virtuosi functioned, and to give a flavour of the social make-up of the ward, the social geography of the area surrounding Gyles' home is mapped. Like Steven Shapin's work on the places of experiment in Restoration London, this research draws on recent scholarship that seeks to understand culture as essentially locatable as its model.²⁷ To facilitate this, the York-based antiquarian and writer Francis Drake's highly descriptive street walk through York provides us with a first-hand account of the city's cultural life in the early eighteenth century.²⁸ Drake's vivid description of the social makeup and merchant occupation of the

²⁷ Steven Shapin, "The House of Experiment in Seventeenth Century England", *Isis* 79, no. 3 (1988).

²⁸ Rosemary Sweet, "History and Identity in Eighteenth-Century York: Francis Drake's *Eboracum* (1736)", in *Eighteenth-Century York: Culture, Space and Society*, eds., Mark Hallett, and Jane Rendall (Loughborough: Borthwick Publications, 2003), 13.

Micklegate ward where Gyles lived is used to demonstrate the unique cultural environment in such a small area, which it will be argued, facilitated virtuosi activity separate from the rest of the city. Two maps have been included to help visualise this social geography. The 1604 map of York by the cartographer John Speed (1551/2-1629) shows how the city changed over the century, and the 1694 map of York by the herald painter Benedict Horsley (c. 1627- fl. 1702) has been annotated to illustrate just how closely prominent members of the virtuosi lived to one another.²⁹ These intense virtuosi activities in and around Gyles' home and workshops, it will also be argued, enabled him to pursue other entrepreneurial ventures while fashioning an image of himself as a genteel, liberally minded man of learning.³⁰ Although these two objectives may appear contradictory, as will be shown, Gyles led a dissonant life, earning a living as a commercial glass painter while inhabiting the role of a middling gentleman among his fellow virtuosi. A graph has been compiled of his glass-painting commissions to show how he divided his time between the York virtuosi and his entrepreneurial activities, at the expense of his commercial glass painting.³¹

Evidence for the influence of the York virtuosi on Gyles is fragmentary, especially where their contribution to the Republic of Letters appears incomplete. In September 1703 Gyles makes a telling statement to Ralph Thoresby in which he admits to burning "some hundreds [of letters], which related to my own affairs"; with this frustrating level of loss, the piecing together of often fragmentary correspondence has been challenging.³² Consequently, this thesis draws on existing methodologies to support the construction of arguments around fragments. Philosophically, the debate between overdetermination and underdetermination is directly relevant as it contrasts the optimism of those who believe that the past leaves "numerous traces" for inference with the pessimism of those who

²⁹Benedict Horsley, *The Ichnography or Ground Plot of ye City of Yorke.*, (1694) (London: Pierce Tempest, 1697)

³⁰ Although the term Entrepreneurial, as described in OED, meaning - the taking of financial risks in the hope of profit, applies to Gyles, the term is used here more to emphasise the lengths he would go to financially and intellectually to realise his own creative ambitions for his craft.

³¹ The graph includes 55 works undertaken post-1676, following the death of Gyles' father, Edmund, when he was able to pursue other ventures. Brighton records seventeen undated windows that cannot be attributed to Gyles, so only 50% of these have been included in the graph. Although evaluations of this kind can never be complete, as they do not include lost windows, the graph provides sufficient indicative context to discuss how Gyles divided his time. The graph further identifies gaps in Gyles' glass painting projects to determine whether these periods correspond with evidence from his letters regarding his other entrepreneurial activities.

³² *Letters of Eminent Men, Addressed to Ralph Thoresby*, vol. 2. ed. Joseph Hunter, (London: Henry Colburn and Richard Bentley, 1832), 33-36.

worry about inaccessible pasts. This theory argues that historical understanding depends less on a single “smoking gun” than on the *convergence* of multiple partial clues or fragments- consilience - as the justification for knowledge claims.³³ Further, it argues that logic aligns with abductive reasoning, or *inference to the best explanation*, as defined by the *Stanford Encyclopaedia of Philosophy* which describes this type of inference as one in which the conclusion does not logically follow from the premises but is accepted because it best explains the available evidence. Inference, it can be argued, relates to the epistemic structure of fragmentary evidence: the partial implies the whole not deductively, but because the whole renders the fragments intelligible.³⁴ There are also literary examples or models which argue that every narrative inherently points beyond itself - that even a “complete” story is “simultaneously necessarily incomplete,” always both less and more than what it appears to contain. The fragment here doesn’t simply gesture toward a missing totality but performs incompleteness as a structural feature of meaning itself.³⁵ Finally, archaeology gives an empirical analogue: fragmentary remains as the norm rather than the exception of evidence. Wallach’s article in *Nature Humanities and Social Sciences Communications* argues that archaeologists routinely rely on circumstantial or absent traces, granting such evidence a legitimate epistemic status ‘on par with inferences from tangible evidence’.³⁶

3.0 STRUCTURE

The thesis is both thematic and chronological. This hybrid structure reflects the need to bring order to the overlapping volumes of projects, activities, and art media undertaken by Gyles over an extended period. Although not slavishly followed, each chapter is broadly divided into six significant periods, so one theme can be overlaid with another across chapters to provide a complete picture of Gyles’ collective activities in each period. The

³³ C. Malaterre, Overdetermination, underdetermination, and epistemic granularity in the historical sciences. *Euro Jnl Phil Sci* 14, 23 (2024). <https://doi.org/10.1007/s13194-024-00583-8>

³⁴ <https://plato.stanford.edu/entries/abduction/>

Igor Douven, “Abduction”, *The Stanford Encyclopedia of Philosophy* (Summer 2025 Edition), Edward N. Zalta & Uri Nodelman (eds.), URL = <<https://plato.stanford.edu/archives/sum2025/entries/abduction/>>.

³⁵ Leslie Hill, *Maurice Blanchot and Fragmentary Writing: A Change of Epoch* (Bloomsbury: London/New York, 2012):12.

³⁶ E. Wallach, Inference from absence: the case of archaeology. *Palgrave Commun* 5, 94 (2019).

periods are: 1649-1660 (the interregnum years), 1660-1670 (Post Restoration - when Gyles became a professional glass painter), 1670-1676 (from the arrival of the natural philosopher Martin Lister (1639-1712) in York to the death of Gyles' father), 1676-1682 (from when Gyles took over the family business to the point Lister left York for London), 1682-1700 (Gyles' most productive period), and 1700-1709 (from when his health began to fail to his death).

4.0 THE USE OF PROBLEMATIC TERMS

Although the term 'Enlightenment' was used in the nineteenth century to caricature earlier eighteenth-century rationalist thought in continental European culture, this thesis uses Roy Porter's "The Enlightenment in England" as its reference point. Porter argues that the English Enlightenment occurred much earlier and was about 'self-improvement and progress'.³⁷ Therefore, being 'enlightened' in post-Restoration England meant something different from what it did in other European countries. Porter's characterisation of this particularly English form, which was practical and pragmatic, was based on the Baconian pursuit of knowledge to improve man's lot. This was a form of knowledge-gathering pursued by the Royal Society in 1660, as evidenced by its title in the royal charter: *The Royal Society of London for Improving Natural Knowledge*. The three main chapters examine this impulse for national cultural 'improvement' and its local manifestation in York.

Likewise, the term 'connoisseur' has a particular context, as it describes how a person demonstrated their liberal arts education through the domestic display of art. Before the Restoration, a new, more culturally aware connoisseur patron emerged who sought to display taste and sensibility. With the encouragement of the art collector and politician Lord Arundel, publications like Peacham's *The Art of Drawing* (1606), Norgate's revised version of *Miniatura*, and Sanderson's *Graphice* (1658), drawing and art appreciation

³⁷ Porter, "The Enlightenment in England", 13.

became aligned with a gentleman's liberal arts education.³⁸ These and other publications assisted in disseminating a new ideal of gentility which 'encompassed knowledge of all art'.³⁹

Naturalism or naturalistic painting is a term with many different meanings. In the nineteenth century it was championed by the English landscape artist John Constable (1776-1837) who famously said, 'there is room enough for a natural painture'.⁴⁰ The French impressionist open-air painter and art critic Antoine Castagnary (1830-1888) advocated the term 'naturalist' over 'realist' for painting.⁴¹ The term is used here in a more post-Restoration 'English Enlightenment' way, which sought to present imagery more accurately, particularly in natural philosophy, without deliberate idealisation or stylisation - when artists/illustrators were encouraged to observe and then faithfully record a subject. This was a connection that Castagnary also noted in seeing nature best represented when 'its truth balanced with science'. This theme of blending art with science is explored in Chapter 1 when considering Gyles' use of Dutch prints to create sundials, and in Chapter 2 regarding Lister's pursuit of visual 'accuracy' in natural science illustration as part of the Royal Society's grand design to collect the universal history of nature, and then in Chapter 3 when considering the context of Gyles' use of Northern European prints to make glass prints.

³⁸ Edward Norgate, *Miniatura; or, The Art of Limning*, eds., Jeffrey M. Muller & Jim Murrell, (New Haven & London: Yale University Press, 1997), 12 & 96. Caroline Good, "A Royal Subject: William Sanderson's Guild to Painting on the Eve of the Restoration", in *Court, Country, City: British Art and Architecture, 1660-1735*, eds., Mark Hallett, Nigel Llewellyn and Martin Myrone (New Haven: Yale University Press, 2016), 462. 459.

³⁹ Malcolm R. Smuts, "Howard, Thomas, fourteenth earl of Arundel, fourth earl of Surrey, and first earl of Norfolk (1585-1646), art collector and politician", *ODNB*.

⁴⁰ Michael Kitson, "A context for Constable's naturalism", in *From Gainsborough to Constable: The emergence of naturalism in British*, ed. Hugh Belsey (Woodbridge: Boydell Press, 1991), 9.

⁴¹ J. A. Castagnary, *Salons, 1857-1870*, (Paris: Charpentier, 1892), 104-5.

5.0 PRE-RESTORATION CONTEXT FOR THIS THESIS

To fully appreciate Gyles' achievements requires that they be contextualised against the cultural and architectural landscape he inherited before and after the Restoration, namely: the changed relationship between glass painter and patron following the English Reformation (1532-59) and the English Civil War (1642-1651), the influence of Northern European glass painters and artists at the English court before the Restoration, the adoption of new baroque forms of architecture following the Royal court's return in 1660, and the re-invention of York as a centre of urban leisure in the decades that followed. Francis Drake's 1736 topographical and textural walk around the streets of York which juxtaposes the medieval with the Georgian, *Eboracum*, is used to help visualise and locate Gyles' urban and architectural environment.

With Protestant hostility towards the perceived idolatry of religious imagery during the Reformation, glass painting in England entered a predictable decline. Iconoclasm during the English Civil War and Commonwealth periods later exacerbated this decline.⁴² By the early seventeenth century, however, the fanaticism of the Puritan cause had been challenged by a Counter-Reformation doctrine which culminated in a modest return to sacramental worship and the reintroduction of some religious glass painting, notably at Hatfield House and the colleges in Oxford and Cambridge.⁴³ During this period, Northern European glass painters like Abraham van Linge (fl. 1623-1642) and his older brother Bernard van Linge (1598-c.1644) were crucial in disseminating a more continental, individual, and humanistic approach to glass painting in England.⁴⁴ These painters were part of the Anglo-Netherlandish and Flemish architectural interchange which saw an influx

⁴² Julie Spraggon, *Puritan Iconoclasm in England 1640-1660* (Chippenham: The Boydell Press, 2003), 1. 250.

⁴³ Geoffrey Lane, "A World Turned upside down: London glass Painters 1600-1660", *JSG* 29 (2005): 47. The windows were painted by Richard Bulter (act., 1609- d. 1638) and a French glass painter, Lewis Dolphin. Also see Michael Archer, "Richard Butler", Glass-Painter." *The Burlington Magazine* 132, no. 1046 (1990): 308-9.

⁴⁴ A. Faludy, (2005, May 26). Linge, Bernard van [formerly Berent van Lingen] (b. 1598, d. in or after 1644), glass painter, *ODNB*. Abraham van Linge and his older brother Bernard van Linge were natives of Emden in northern Germany. Bernard arrived in London from Paris c. 1621. His brother, Abraham, followed, arriving about 1623. He remained in England after Bernard's departure in the same year. Abraham was to remain in England until 1642, just before the outbreak of the Civil War. For a list of works, see Faludy.

of painters like Peter Paul Rubens (1577-1640), Paul van Somer (1577-1621), and Daniel Mytens (1590-1647) from the Low Countries; creative artists who were transitional in helping to move the dial away from the organisational structures of the guilds in England.⁴⁵ This brief revival, which illuminated English churches with Counter-Reformation light, ended, however, with the resurgent Puritan rejection of ‘Popish’ imagery and the execution of its most influential voice, Archbishop William Laud in 1645, a figure who will be discussed later in chapter 2 regarding Counter-Reformation influence on post-Restoration glass painting.⁴⁶ This rejection of the Laudian movement meant that London glass painters like Baptista Sutton (c. 1600-1667) were condemned either to replace their work or witness it be destroyed, while others like Richard Greenbury (b.1600? -d.1670) were forced to undertake the gilding of frames and goldsmithing. A notable exception, however, was the glass painter John Oliver (1616-1701), who became a London surveyor in 1667 to supplement his income.⁴⁷ Although religious history painting had ceased, heraldic glass painting set in ecclesiastical and domestic settings had not.⁴⁸ So, for seventeenth-century glass painters like Gyles, heraldic painting became their primary source of income.⁴⁹

In addition to heraldry and relevant to Gyles’ portfolio, were painted and yellow-stained ‘roundels’ depicting ‘Labours of the Months’ and religious subjects. Painted roundels were incorporated into domestic plain glazing schemes in manor houses, rectories, and parsonages from the middle of the fifteenth century. [Fig. 1] In Switzerland, the Lowlands and Germany, these painted roundels, often designed by well-known Renaissance artists like Albrecht Dürer (1471-1528) and Hans Holbein the Younger (1497-1543), were glazed into civic buildings like guildhalls and merchant houses.⁵⁰ Painted mainly for the upper-middle and merchant classes, they did not just illustrate religious

⁴⁵ H. J. Louw, “Anglo-Netherlandish Architectural Interchange c.1600-c.1660”, *Architectural History* 24 (1981): 1. Ellis Waterhouse, *Painting in Britain 1530-1790* (Norwich: Penguin Books, 1969), 51. Judith Hook, *The Baroque Age in England* (Plymouth: Thames and Hudson, 1976), 53.

⁴⁶ Julie Spraggon, “Puritan Iconoclasm in England 1640-1660” (PhD diss., University of London, 2000), 275.

⁴⁷ Geoffrey Lane, “Three Scenes from the Life of Christ by the London glass-painter Andrew Hall”, *Vidimus* 18, (2008): 7, (September .2019), vidimus.org/issues.

L. H. Cust and Sarah Herring. “Greenbury, Richard (b. before 1600? d. 1670), painter”, *ODNB*

L. H. Cust and Alexander Koller. “Oliver, John (1616/17-1701), glass painter and master mason”, *ODNB*.

⁴⁸ Marks, *Stained Glass in England*, 93.

⁴⁹ Lane, “A World Turned Upside Down”: 45.

⁵⁰ Timothy B. Husband and Ilja M. Veldman. *The Luminous Image, Painted Glass Roundels in the Lowlands, 1480-1560* (New York: The Metropolitan Museum of Art, 1995), 10.

Barbara Butts and Hendrix, Lee. *Painting on Light, Drawings and Stained Glass in the Age of Dürer and Holbein* (Los Angeles: The J. Paul Getty Trust, 2000): 1.

themes but also humanist subjects in heightened classical realism, such as the *Triumph of Fame* from Petrarch's *I trionfi*, which depicts the defeat of death by fame. [Fig.2] In these domestic situations, the secular roundel, therefore, reflected the influence of the 'Broad Reformation' in displaying the ideals and preoccupations of their educated purchasers.⁵¹ This European form of painted roundel had a significant impact on how Gyles made his own glass painting relevant to a new connoisseur audience.

The introduction of the sliding 'sashe' window further shaped opportunities for glass painters like Gyles, leading to a clear-glass aesthetic in domestic glazing. By the 1680s, the 'sashe' window was growing in popularity, only to be curtailed by the introduction of the window tax in 1696.⁵² This process of glazing renewal accelerated during the reign of William and Mary. From 1689, due to the insistence of their Dutch courtiers that mullioned windows be replaced with double sashes to keep out the cold, members of the House of Commons demanded the same.⁵³ When York began to adopt the new sashe window, however, is unclear, as many properties were refaced in the early 1700s.⁵⁴ The introduction of the sashe, also coincided with the import of transparent 'crown' glass from Normandy in the 1660s.⁵⁵ Although crown glass greatly enhanced room illumination, a requirement for Baroque interior spaces, its thinness also increased glare, a problem compounded by the previously mentioned window tax, which encouraged glass makers to produce ever-thinner glass.⁵⁶ This practical problem led to the increased use of painted and unpainted 'sarsnet', removable inner screens set against existing outer glazed sashe windows made from fine Italian silk, in addition to other new forms of window decoration like 'sun curtains', which were drawn and coloured to look like painted windows.⁵⁷ Collectively, these new decorative window elements further limited the domestic use of glass painting.

⁵¹ Husband, *The Luminous image*, 15.

⁵² H. J. Louw, "The Origin of the Sash-Window". *Architectural History* 26 (1983): 49-150.

⁵³ Hook, *The Baroque Age in England*, 83.

⁵⁴ "Sectional Preface: Secular Buildings", *An Inventory of the Historical Monuments in City of York*, 3, *South west* (London: Her Majesty's Stationery Office, 1972), lxi-cv. *British History Online*. No original seventeenth-century sash windows have survived in York.

⁵⁵ Hentie Louw, "Window-Glass Making in Britain c.1660-c.1860 and its Architectural Impact", *Construction History*, 7 (1991): 48.

⁵⁶ John Smith, *The Art of Painting in Oil* (London: Samuel Crouch, 1687), 97-100. Chapter - The Manner of Painting Cloth, or Sarfnet Sash Windows.

⁵⁷ "Sarcenet", accessed 24.9.2019. <https://www.collinsdictionary.com/dictionary/english/sarcenet>. Sun curtains will be discussed later.

Beyond these religious, political, and courtly factors, the Civil War also shaped glass painting locally, especially through Gyles's involvement with the York virtuosi. Yorkshire was a key battleground, with York itself being besieged from 1644 as a prelude to the Battle of Marston Moor. The Civil War, therefore, had a devastating effect on the citizens who, as a civic community, supported Parliament despite the city's occupation by Royalist forces who were maintained by the city's 'urban' elite.⁵⁸ The River Ouse divided York politically and geographically, creating a natural separation between east and west. In the east stood all the public buildings that maintained gentry and church power by connecting the city to the 'national organs of church and state', while the west contained the mercantile and residential element.⁵⁹ This Mercantile element formed a 'civic locality' within the Micklegate ward, particularly in the parishes of St. Martin-cum-Gregory (Gyles' church) and St John's.⁶⁰ The city, only four and a half kilometres in circumference, was an enclosed fortification with four gates or Bars after which the internal districts or wards were named: Bootham Bar, Monk Bar, Walmgate Bar and Micklegate Bar.⁶¹ With the silting up of the River Ouse, however, seventeenth-century York was not the prosperous trading emporium it had once been.⁶² Even so, York remained one of England's 'great and good towns' in having inherent status, as it remained a regional administrative centre.⁶³ Be this as it may, the city did not impress Celia Fiennes in c.1685:

To York; it stands high but for one of the Metropolis and See of the Archbishop it makes but a meane appearance, the streets are narrow and not of any length...the houses are very low and as indifferent as in any Country town, and the narrowness of the streets make it appear very mean.⁶⁴

In describing the decaying remnants of a once-proud medieval York, even though bolstered by an aspirational virtuosi intellectual elite, Fiennes captures a rare moment in

⁵⁸ Phil Withington, "Views from the Bridge: Revolution and Restoration in Seventeenth-Century York", *Past & Present*, no. 170 (2001): 133-4.

⁵⁹ Withington, "Views from the Bridge": 133.

⁶⁰ Withington, "Views from the Bridge": 126-7.

⁶¹ Withington, "Views from the Bridge": 131.

⁶² Francis Drake, *Eboracum: Or The History and Antiquities of the City of York* (London: William Bowyer, 1736), 261.

⁶³ Drake, *Eboracum*, 227. 234.

⁶⁴ Paul Slack, "Great and Good Towns 1540-1700", in *The Cambridge Urban History of Britain*, 2, ed. Peter Clark (Cambridge: Cambridge University Press, 2008), 349.368.370.

⁶⁵ Celia Fiennes, *The Illustrated Journeys of Celia Fiennes, c 1685- c 1712* ed. C Morris (Exeter: Webb & Bower, 1982), 90.

the decline of the local civic and architectural fabric – recording the point between faded status and reinvention.⁶⁵ With York's established political system and developed economy, the city fathers reinvented the city after the Restoration by creating a consumer-focused service economy centred on urban leisure and entertainment, which attracted both the gentry and the nobility from as far away as London.⁶⁶ As Drake pointed out in 1736, 'the chief support of this city, at present, is the resort to and residence of several country gentlemen with their families'. Gyles died in 1709, and this polite gentrification happened within his lifetime. As Hallett notes, the well-ordered city designed for a new world of polite culture began to be realised in c. 1710 with the construction of public and private buildings.⁶⁷ Like many other regional centres, it also benefited from the growing popularity of urban living among the gentry and landed classes, who had discovered that it was cheaper to live in York than in London. The 'great variety of provisions' supplied by local markets meant that a full table was achievable modestly. These gentry families were drawn to York by the city's cultural, sporting, and entertainment activities, including horse racing, balls, coffee houses, and assemblies.⁶⁸ In comparing Speed's 1604 map to Horsley's later 1694 map, it is clear how the city's self-image was improved by removing properties from Lower Petergate to create an 'urban vista' from the bottom of Stonegate up to the Minster. [Figs. 3, 4 & 5] This deliberate reinvention of the city as the cultural capital of the north also led to an influx of natural philosophers, artists, artisans and antiquarians from the surrounding Ridings and London, which greatly enhanced the intellectual status of York nationally with the formation of the York virtuosi.⁶⁹

The Gyles family lived on Micklegate or "Muchgate," the high street, about a hundred metres or so from Micklegate-bar, the west entrance and route to London from the city.⁷⁰ [Fig. 6] Even during Gyles' lifetime, the street was considered very wide and spacious, unlike many of the others in a city which preserved much of its medieval character and layout. Although the Micklegate-ward was very small (see map), it contained

⁶⁵ Hallett, "Pictorial Improvement", 24.

⁶⁶ Peter Borsay, "Politeness and Elegance: The Cultural Re-Fashioning of Eighteenth-Century York", in *Eighteenth-Century York: Culture, Space and Society*, eds., Mark Hallett, Jane Rendall (Loughborough: Borthwick Publications, 2003), 2.

⁶⁷ Hallett, "Pictorial Improvement", 24.

⁶⁸ Drake, *Eboracum*, 240-1.

⁶⁹ "The seventeenth century: Social and religious life", in *A History of the County of York: the City of York*, ed. P M Tillott (London, 1961), 198-206.

⁷⁰ A *mickle*, or as they prefer it in Scotland, a *muckle*, means 'great or large in size'.
<https://www.phrases.org.uk/meanings/many-a-little-makes-a-mickle.html>

six parish churches, of which two are relevant when discussing Gyles, Bishophill the younger and St. Martin cum Gregory's.⁷¹ [Figs. 3 & 5] Importantly, for reasons which will become apparent later, Bishophill the Younger also contained brasses in epitaph to members of the Middleton family from 1492, virtuosi family friends of Gyles, which illustrates the family's historic association within the church and ward. The parish records of St. Martin cum Gregory document the births, deaths, and marriages of the Gyles family, as well as the social makeup of the congregation. Between 1670 and 1693, three Lord Mayors and three Aldermen were buried in the churchyard.⁷² Members of St. Martin's also played significant roles in both civic life and republican activism throughout the revolutionary period. The merchant Thomas Hoyle represented the city in the Long Parliament, while his son-in-law Thomas Dickinson eventually became a Cromwellian knight.⁷³ The immediate environs around Gyles' home and workshop contained the commercial activities of the merchant class and a resident gentry community. Up against the city walls, the open site of Toft-green hosted weekly cattle markets while, on the other side, Tanner Row contained tanning pits that opened onto the back of Micklegate Lane.⁷⁴ At the bottom of what would have been Gyles' garden lay the remains of the Friars Preachers Garden, a former monastic site.⁷⁵ Micklegate also had two good Inns, the Falcon and the Minster.⁷⁶

Correspondence with Chris Pearson, a former occupant of 68 Micklegate where Gyles lived, paints a vivid picture of the interior architecture, decoration, and flow through room spaces in which guests like the virtuosi would have walked up the grand Jacobean staircase, past the 'pedigree window' on the half landing (to be discussed later), on their way to the first-floor drawing room.⁷⁷ She describes:

There is a very deep, capacious cupboard with shelves on the first floor, which could have been ideal for large pieces of glass. [...] On the ground floor there were some slate shelves in one room. In the cellar (reached by a spiral stone staircase

⁷¹ Drake, *Eboracum*, 262-3.

⁷² Drake, *Eboracum*, 273.

⁷³ Withington, "Views from the Bridge": 136.

⁷⁴ Drake, *Eboracum*, 274.

⁷⁵ Drake, *Eboracum*, 274.

⁷⁶ Drake, *Eboracum*, 280.

⁷⁷ See chapter one for discussion on the Pedigree window.

through a 17th century door) was an old kitchen with a range, a brick herringbone floor, and a brick vaulted cellar, with small alcoves in the walls perhaps for lights. On the main staircase under many layers of wallpaper there was also a small cupboard with butterfly hinges which contained a few bits of archaeology: some tiny bits of silver-stain glass, a bit of lead and a cherry stone! [...] The garden used to run right down to Tanner Row at the back, and I think there were stables at the bottom.⁷⁸

York was the northern centre for glass painting, which attracted foreign ‘ateliers’ who introduced local craftsmen to ‘foreign modes’ of painting.⁷⁹ With the Civil War, glass painting ceased in York, only to be restarted again by a small group of glazier families following the Restoration in 1660.⁸⁰ These York glazier families, who will be discussed more fully in chapter 1, were as equally affected by the nationwide demise of religious glass painting as Gyles, marginalised by the increasing use of sash windows, as evidenced by John Cossin’s *A New and Exact Plan of the City of York*, which depicts, around its perimeter edge, several compartments containing images of newly-built private houses by leading York citizens from around 1710. These images are a testament to the remarkable building programme that took place in York after many years of dormancy. Built mainly in the neo-Palladian style, these symmetrically designed brick houses emerged to represent a new collective urban elite identity that sharply contrasted with the old local vernacular.⁸¹ This backdrop formed Gyles’ new architectural and secular landscape: one in which glass painting was limited to heraldry and painted sarsnet was considered a practical and inexpensive replacement for glass painting by a gentry class now informed by a pre-Civil War liberal arts education.⁸² Many of these new clients, however, were also connoisseurs who collected humanist prints, portraits, and topographical landscapes, which, as will be shown, Gyles exploited to his advantage.⁸³ This montage of pre-Restoration York culture and society provides the context for this thesis.

⁷⁸ Christine Pearson, email correspondence with the author, May 20, 2024.

⁷⁹ Marks, *Stained Glass in England*, 225-6. For discussion on silver stain in this thesis, see 104 & 113.

⁸⁰ Louise Ann Hampson, “Casting a dim religious light”: the stained and painted glass of York Minster, c.1450-1802”, vol. 1, (PhD diss., University of York, 2016), 112.

⁸¹ Hallett, “Pictorial Improvement”, 30.

⁸² Sloan, *A Noble Art*, 11.

⁸³ Antony Griffiths, *The Print Before Photography* (Italy: The British Museum, 2016), 157-158.

CHAPTER ONE

HENRY GYLES: THE MAKING OF A GLASS PAINTER

Thoresby described Henry Gyles as ‘the famousest painter of glass perhaps in the world’.

⁸⁴ This chapter explores the significance of Gyles being known as a ‘painter of glass’ and not a ‘glazier’ and whether, as such, he was following a distinctively new path.

By the sixteenth century, religious glass painting in England had become a form of ‘istoria’, as defined by Leon Battista Alberti (1404-1472) in his treatise *Della Pittura* (1435). With the Reformation and then the Civil War, by the Restoration glass painters had been reduced to painting heraldic armorials, intended to provide genealogical validation for the aristocracy and landed gentry. Locally, in York, the craft of ‘glazier’ was controlled by the York Glaziers’ Guild and, as his father Edmund Giles (c.1620-1676) was an important figure within this, Gyles’ alternative identification as a ‘glass painter’ is pertinent.⁸⁵ In this chapter, his journey of re-invention, from ‘machanick’ to ‘liberal artist’, from trade to ‘middling class’, is mapped against the backdrop of the York Glaziers’ Guild and the kinds of knowledge that commonly shaped the practices of the city’s mid-seventeenth-century workshops.⁸⁶ The role his father, Edmund, played in setting him on this path and the importance of his social connections, particularly in London, are considered for the first time. This chapter argues that, by adopting new ideas to make glass painting relevant to a secular connoisseurial audience, Gyles not only elevated the cultural status of glass painting but also realised his asserted cultural ambitions. Central to Gyles’ re-invention was his acquisition of a copy of Edward Norgate’s *Miniatura*. This study examines his glass painting achievements in the context of post-Restoration art theory to determine whether he attained the status of ‘disengo’.⁸⁷

⁸⁴ Hunter, *The Diary of Ralph Thoresby*, 1, 366.

⁸⁵ The term glazier is discussed later.

⁸⁶ Nathan Bailey, *A Universal Etymological English Dictionary*, (London: J. Darby, 1726), unpaginated. ‘liberal arts are fit for Gentlemen and Scholars, as Mechanick Trades and Handicrafts are for meaner People’.

⁸⁷ Bermingham, *Learning to Draw*, 5. Disegno, from the Italian word for drawing or design, which involved the intellectual capacity to invent.

1.0 THE GYLES WORKSHOP, YORK GLAZIER FAMILIES AND THE MICKLEGATE WARD⁸⁸

In challenging John Knowles' opinion that Gyles was trained by his father Edmund, Brighton asserts that Gyles was a 'lone glass painter' who was 'largely self-taught' but does not explore how.⁸⁹ More recently, in citing James Torre's c. 1685 comment that the St Kathrine window in York Minster contained a date of 1658, Hampson contends that 'the answer to the long-standing question as to who trained Gyles, the glass painter employed after the Restoration, may be his father'.⁹⁰ Although not conclusive, a deeper examination of the circumstantial evidence does suggest that he could, to some degree, have been taught by his father, Edmund.

The Gyles family first came to light in the parish register of St. Martin-cum-Gregory, York, in 1550.⁹¹ Knowles and Brighton's collective analysis shows that they were initially 'trellis' makers, fabricating lattices of torn oak laths for window openings.⁹² They soon ventured out as glaziers, with Nicholas Gyles, Henry's grandfather, being made freeman 'glasier' of York in 1578.⁹³ They were, however, not the only family of glaziers operating in York. In her analysis of the pre-Civil War York Minster Fabric Rolls, Hampson notes that contracts were awarded first to the Thompson family between 1568 and 1620, and then to the Crosby family from 1623.⁹⁴ Regarding the location of the

⁸⁸ Edmund Giles, Henry Gyles' father, used a different spelling of the surname, 'Giles', as evidenced by his signature in the *Guild of Glaziers and Plumbers of the City of York. Ordinances etc.* (CMoG), no page numbers, the cast cheeks of his lead mill, and in his 1676 last will and testament. Other references to Edmund Gyles are written by others. Whereas Henry, in all his letters, used the spelling 'Gyles'. It appears that Henry only used the spelling Giles once, in signing his name on the verso of the Merchant Taylors' window in York. Therefore, for the purpose of this thesis, Edmund will be referred to as Edmund Giles, as he described himself, and as the family business passed into the hands of Henry, the business is referred to as the Gyles Workshop.

⁸⁹ Brighton, "Enamel Glass Painters", 1, 4.

⁹⁰ Hampson, "Casting a dim religious light", 85.

⁹¹ Knowles, "Glass-Painters", *Notes*, vol. 9, 205.

⁹² Brighton, "Enamel Glass Painters", 1, 74. Nicholas Gyles (1551-1622), Henry Gyles' grandfather, became a 'glasier' in 1578 and a 'master glasier' in 1598. Edmund Gyles (act. 1665-1676)

⁹³ *Guild of Glaziers and Plumbers of the City of York. Ordinances etc.* (CMoG). In the new book of ordinances for the York Guild, Nicholas is listed as one of eight master 'glasiers' who "at the(ir) onely costee and charges "paid for the new book of Guild ordinance. The term glasier is interchangeable with glasier.

⁹⁴ Hampson, "Casting a dim religious light", 60, 73.

Crosby family within the city, Hampson states that before their appointment at York Minster, ‘their original parish is unknown’.⁹⁵ The Thompson and the Crosby families, however, appear in the same parish register as the Gyles family.⁹⁶ These records show that all three glazier families operated remarkably close to one another, suggesting that the market in York, and the wider region, was large enough to support three glazier workshops.

The sudden emergence of Gyles as a ‘glass painter’ in the mid-seventeenth century requires explanation. A process of separation between the ‘craft’ of glazing and the ‘art’ of glass painting may have begun with his father. Edmund, Henry’s father, became free of the City of York and an active participant in the Guild of Glaziers in 1634, suggesting he was born in or around 1614.⁹⁷ Brighton argues that ‘there is no evidence that Edmund ever practised glass painting’ and that he was more likely ‘a lead glazier who [...] renewed the leads of the Minster windows’.⁹⁸ It is very plausible, however, that Edmund knew the gentleman glass painter Bernard Dininckhof (act. around York c.1585-1636), who gained the freedom of York in 1586 and probably settled there.⁹⁹ Dininckhof may have been a Protestant refugee from Bohemia who later spent time in either Lorraine or the Low Countries.¹⁰⁰ As far as we know, Dininckhof worked alone, so he would have required assistance from one of the York glazier families (Thompson, Crosby, and Gyles) to fabricate and install his windows. As there is no record of Dininckhof after 1636, it can be presumed that he either died or left the country.¹⁰¹ Either way, the contents of his workshop would have been sold or dispersed, but to whom? It is known that by 1665, Edmund owned his own lead mill or ‘vice’ as the lead used by his son Henry to make a sundial for Nun Appleton Hall in 1670 was impressed with the mark ‘Edmund Giles of York 1665’.¹⁰² Lead mills were in use on the Continent before 1568, and Dininckhof probably brought one with him. [Fig. 7] From 1647 to 1688, the London Goldsmiths’ Company records that William Cresswell (Master), ‘vice-maker’/supplier, was operating in

⁹⁵ Hampson, “Casting a dim religious light”, 76.

⁹⁶ Hampson, “Casting a dim religious light”, 76. Hampson has documented the burial of Marmaduke Crosby’s wife, Marabell, in 1650 and that of Marmaduke, head of the workshop, in 1666.

⁹⁷ Brighton, “Enamel Glass Painters”, 1, 74.

⁹⁸ Brighton, *Henry Gyles, Virtuoso*, 4.

⁹⁹ Brighton, “Enamel Glass-Painters”, 1, 7. For consistency, this thesis uses the spelling Dininckhof; other commentators use variants such as Dininckhof and Dininckhoff.

¹⁰⁰ Brighton, “Enamel Glass Painters”, 1, 8.

¹⁰¹ Brighton, “Enamel Glass Painters”, 1, 8. There is no record of either event.

¹⁰² Brighton, “Enamel Glass Painters”, 1, 5.

London.¹⁰³ As Gyles was looking to buy a new mill from Cresswell in 1668, John Knowles suggests that he must have been using an old mill which was now in need of replacement. The question remains: how did his father acquire one in the first place? Dininckhof's lead mill, which would have been nearly eighty years old, was possibly acquired as a technological upgrade by Edmund and eventually, some fifteen years later, fitted with new milling 'cheeks' impressed with Giles' mark.¹⁰⁴ [Fig.8] If Edmund bought a lead mill from Dininckhof, he may also have been taught basic glass painting skills and bought other materials like enamels, and even cartoons, which may have encouraged him to venture into the art of glass painting.¹⁰⁵

Although Edmund referred to himself as a 'York Glasier' in his will, there is other circumstantial evidence for him having some glass painting experience in the form of a prestigious project near Leeds.¹⁰⁶ After the English investor, landowner and politician Sir Arthur Ingram (c.1565-1642) purchased the estate of Temple Newsam in 1622, he embarked on a comprehensive programme of improvement which incorporated some painted glass armorials attributed to Dininckhof by Brian Sprakes.¹⁰⁷ The large bay window in the Hall contains eleven armorials of three different types, suggesting different phases and artists. Jane Roberts suggests that Dutch glass bought from London was for plain glazing.¹⁰⁸ Sprakes, however, has shown that this must be painted glass, firstly installed at New Lodge in Sheriff Hutton Park (also owned by Ingram) before being moved

¹⁰³ <https://www.londonroll.org/home>. The Records of London's Livery Companies Online (ROLLCO), Cresswell moved to Northumberland in 1688.

¹⁰⁴ Sylvanus Morgan to Henry Gyles (1668), Stowe Ms. 745, f. 21, BL. As transcribed by Henry M. Hake, "Some Contemporary Record Relating to Francis Place, Engraver and Draughtsman, with a Catalogue of His Work", *The Walpole Society*, 10 (1921- 1922), 60-61.

John Knowles, "Ancient Lead for windows and their method of manufacture", *JSG* 3, no. 3 (1930), 138. In 1668, Henry Gyles corresponded with Sylvanus Morgan about acquiring a new lead mill from a London manufacturer, Cresswell. Knowles comments that 'the (new) mill was evidently required to replace an older one.' Edmund Gyles marked his lead in 1665, but this could not be the date of the mill itself if he was looking to replace it only three years later. The explanation is that the lead mill may have belonged to Dininckhof and had been in use from at least 1585, the date of his earliest known window.

¹⁰⁵ Henry Gyles to Sylvanus Morgan (1668), Stowe Ms. 745, f. 29, BL. This is the earliest correspondence we have for Henry Gyles, at the age of twenty-three, enquiring about pure Chrystal as part of his own research into making enamels. Before this, the Gyles workshop must have had a supply of enamels acquired from elsewhere.

¹⁰⁶ Will and testament of Edmund Giles, (proven 11 Sept. 1676), Probate vol. 57, f. 152, BIA.

¹⁰⁷ Brian Sprakes, "The Armorial Stained Glass at Temple Newsam", *Leeds Arts Calendar*, no.92, (Leeds: W.S. Maney and Son Limited, 1983), 19.

¹⁰⁸ Roberts, 'two meane fellows grand projectors', 246. Citing West Yorkshire Archive Service, Leeds, WYASL, WYL178/5.

to Temple Newsam in 1622.¹⁰⁹ Roberts has also uncovered that Ingram glazed his house in Dean's Yard, Westminster, with heraldry, on 29 April, and that £1 was paid to "Mr Butler ye glazier & ye harrold came", then a further £9 5s was paid "to ye man for ye greate glase".¹¹⁰ Butler being accompanied by a herald is significant and will be discussed later in relation to Gyles' relationship with the herald Sylvanus Morgan. This is the same Butler who painted the east window at Hatfield House in 1610 and who Wells Cole believes painted part of the Temple Newsam scheme.¹¹¹ As Butler is also known to have painted a series of apostles for the chapel at Red House, Monkton Moor near York in 1622 for the English landowner, politician and soldier Sir Henry Slingsby of Scriven (1602-1658), the Temple Newsam project may, therefore, have continued a template for the use of glass painters from outside York who would have required local assistance.¹¹² Pertinent to this discussion is that Sprakes identifies Thomas Elwes, a York glazier, then the York Crosby glazier family working at Temple Newsam, and concludes that the glass painter who completed the 1637 and 1641 painted glass armorials must have been from York. His later conclusion is based on the account drawn up by Ingram's steward, John Mattison, on 17 May 1637, which does not identify the glass painter but states: '(carrier) for 1 box with painted glass for Temple. Eight 5 st 10 lbs. 10/'.¹¹³ The dates are too late for Dininckhof, who was not heard of after 1636, and probably for Bulter as well, who died in 1638.¹¹⁴ Hampson argues strongly for Marmaduke Crosby on the grounds of a probable collaboration with Dininckhof.¹¹⁵ As the Crosby family have no previous or subsequent history as glass painters, a stronger argument could be made for the Gyles workshop as suppliers of the glass painting. There is much more to unpack about the Temple Newsam glazing scheme which is beyond the scope of this thesis, but with the scenario just described, an argument can be made that a journeyman glass painter painted the Temple Newsam glass and brought further glass-painting knowledge into the Gyles family business, a theme that will be picked up throughout this thesis. One such journeyman candidate may have been Abraham van Diepenbeeck (1596-1675).

¹⁰⁹ Sprakes, "The Armorial Stained Glass at Temple Newsam", 18.

¹¹⁰ Roberts, 'two meane fellows grand projectors', 257-258. Citing WYASL, WYL100/EA/13/19a.

¹¹¹ Roberts, 'two meane fellows grand projectors', 258. Citing Anthony Wells-Cole, *Art and Decoration in Elizabethan and Jacobean England: The Influence of Continental Prints, 1558-1625*. (New Haven: Yale University Press, 1997), 218.

¹¹² Archer, "Richard Butler, Glass-Painter", 310-11.

¹¹³ Sprakes, "The Armorial Stained Glass at Temple Newsam", 18. Citing L.A.S Pawson MSS 14: Steward's Accounts, 2. 1634-42.

¹¹⁴ Archer, "Richard Butler, Glass-Painter", 315.

¹¹⁵ Hampson, "Casting a dim religious light", 126-127.

The prominent Flemish painter Diepenbeeck is first recorded in 1622 in the Antwerp Guild of St. Luke as a glass painter, draftsman, printmaker and tapestry designer.

¹¹⁶ The English engraver and antiquary George Vertue (1684-1756), recorded in his notebooks on British art (begun in c. 1713), that ‘Diepenbeeck was one of Ruben’s scholars...and very much in favour with the Noble William Marquis & Duke of Newcastle’, the English courtier and patron of the arts William Cavendish (c.1593-1676).

¹¹⁷ Rubens was in England for ten months, between 1629 and 1630. Diepenbeeck may have accompanied Rubens or arrived sometime later to assist his Master. ¹¹⁸ Vertue claims that before the Civil War, Cavendish employed Diepenbeeck to draw his horses from life at Welbeck in Nottinghamshire and Bolsover Castle, as well as family members. ¹¹⁹ This is a matter of debate, as when discussing seven undated and unidentified drawings of Bolsover Castle used as backdrops to Diepenbeeck's book on horses for Cavendish, the architectural historian Mark Girouard in “Early Drawings of Bolsover Castle” dismisses Diepenbeeck as the artist, saying that ‘There is no evidence that he ever went to England’. ¹²⁰ He then contradicts himself by accepting that ‘the engravings showing Bolsover in Newcastle’s *La Methode Nouvelle* undoubtedly derive from these drawings’ as ‘according to their inscriptions, the illustrations to *La Methode Nouvelle* were engraved after drawings by Abraham von Diepenbeeck’. ¹²¹ Girouard does not comment on Vertue’s assertion that Diepenbeeck was in England. He then makes a case for another Flemish-Dutch landscape painter, Alexander Keirincx, who painted a series of pictures featuring buildings for Charles I around this time. While he does not provide any tangible evidence that Keirincx

¹¹⁶ Zsuzsanna van Ruyven-zeman, *Stained Glass in the Netherlands before 1795* (Amsterdam University Press, 2011), 669.

¹¹⁷ George Vertue, “Vertue’s Note Books”, *The Walpole Society*, 5 (1937-1938): 57.

¹¹⁸ Vertue, “Vertue’s Note Books”, 5: 57.

¹¹⁹ George Vertue, “Vertue’s Note Books”, *The Walpole Society*, 4, (1786): 147 – ‘ABRAHAM DIEPENBECK, among the various scholars of Rubens, was one of the few that came to England, where he was much employed by William Cavendish, Duke of Newcastle, whose managed horses he drew from the life; from whence were engraved the cuts that adorn that peer’s book of horsemanship. Several of the original pictures still remain in the hall at Welbeck. Diepenbeck drew views of the Duke’s seats in Nottinghamshire and Derbyshire, and portraits of the duke, duchess, and his children, and gave designs for several plates prefixed to the works of both their Graces’. Also, <https://artvee.com/artist/abraham-van-diepenbeeck/> - ‘During the reign of Charles I of England, van Diepenbeeck was in England where, besides painting portraits of the first Duke of Newcastle and his family, the artist illustrated that nobleman’s book on horsemanship. He died, aged 79, in Antwerp’. For background on Cavendish see Lynn Hulse, ‘William Cavendish, first duke of Newcastle upon Tyne (1593-1676),’ *ODNB*. Although Hulse does not mention that Diepenbeck stayed in Welbeck and Bolsover Castle, she does include a drawing by Diepenbeck with Cavendish on his horse in the foreground and Bolsover Castle in the background.

¹²⁰ Mark Girouard, “Early Drawings of Bolsover Castle.” *Architectural History* 27 (1984): 511. 510–18.

Citing John Harris, *The Artist and the Country House* (1979), two showed that the seven drawings were later used to create the background to Diepenbeeck’s book *La Methode Nouvelle et Invention Extraordinaire de Dresser les Chevaux*, published for the duke (or, as he then was, Marquess) in 1658, during his exile in Antwerp.

¹²¹ Girouard, “Early Drawings of Bolsover Castle.” (1984): 511.

made the drawings, his architectural analysis does confirm the date suggested by Vertue for when Diepenbeeck may have been in England and when the drawings were created, between 1634 and 1639.¹²² Saskia van Altena's article "'Rubens's Most Truthful Follower' Abraham van Diepenbeeck as a Draftsman" makes the point that Diepenbeeck travelled to France between 1629 and 1633. So, although she does not mention Diepenbeeck being in England or comments on how the architectural drawings of Bolsover were drawn, she confirms that he did indeed travel. During the 1630s, Diepenbeeck was very busy. Between 1633-38 he designed, painted and executed a series of windows depicting scenes from the Life of St. Paul for the choir of Onze Lieve-Vrouwebroeders in Antwerp, designed numerous devotional book illustrations, and was elected an officer of the glass painters' guild in Antwerp in 1637.¹²³ It could be suggested that, in this situation, the absence of evidence is not evidence of absence (see philosophical discussion on the fragment in the introduction). Also, if Vertue is correct, his all-too-brief biography of Diepenbeeck in England makes him a potential candidate for being in Yorkshire around 1637. Little of Diepenbeeck's glass painting survives, but a rare example can be seen in North Brabant, a scene of the Blood miracle of Boxmeer, surrounded by swags and cartouches in a Mannerist style, painted between 1652 and 1675. Although the scene, style and technique cannot be compared to the work of Dinnickhof at Temple Newsam, his handling of figure drawing, enamels and complex techniques demonstrates his capacity to deliver any required glass painting.

Returning to Cavendish, his involvement in the war ended after the Royalist defeat at Marston Moor and he quickly left England for Europe, eventually retiring to Antwerp where he took up residence in the former home of Peter Paul Rubens.¹²⁴ In Antwerp, Cavendish spent much of his time training horses and in 1658 he published his treatise on horsemanship, *La méthode nouvelle et Invention extraordinaire de dresser les chevaux*, alluded to above, which contained forty plates by Clouet, de Jode, and Vorsterman after drawings by Diepenbeeck made during his probable stays at Welbeck Abbey, Bolsover Castle and Bothal Castle in Northumberland in the 1630s. After the Restoration, Cavendish returned to England and recovered his honours and lands. From this point, he

¹²² Girouard, "Early Drawings of Bolsover Castle." (1984): 512.

¹²³ Saskia van. Altena, "'Rubens's Most Truthful Follower': Abraham van Diepenbeeck as a Draftsman." *Master Drawings* 58, no. 4 (2020): 494.

¹²⁴ Hulse, 'William Cavendish,' *ODNB*, 2004.

retired from public life to Welbeck Abbey to pursue his passion for horses, including laying out a five-mile racetrack at Welbeck and holding meetings six times a year in which his neighbours competed for a silver cup.¹²⁵ Horse racing in York is recorded from 1607, taking place on the 'Calateri' commonly called The Forest of Galtres.¹²⁶ Although the distance between York and Welbeck Abbey is sixty-six miles, as horse racing was an emerging sport, it is likely that before the Civil War the duke would have visited York for the racing accompanied by Diepenbeeck, particularly as the latter was tasked with drawing horses. It is not known whether Diepenbeeck met Dininckhof or when he left England, but the presence of an artist glass painter, potentially for hire, near York between 1630-40 certainly raises the possibility of connections with the Gyles workshop and glass painting at Temple Newsam. Diepenbeeck's potential presence in York suggests that, before the Civil War, Renaissance glass-painting modes of design and execution may have further informed local glass painter knowledge, keeping York relevant as a centre for glass painting within the broader context of diminishing English religious and secular demand.

Further indications of Edmund having glass painter knowledge may be drawn from the evolving nomenclature of the term 'glasier' and the introduction of the term 'glass painter' or 'painter of glass'. Documentary evidence suggests that the York Guild was still operating a medieval system of description, separately from the more progressive London branch, which prevents clarity regarding Edmund's status. Before the Reformation the term 'glasier' (glazier) encompassed all divisions of labour in making painted glass windows.¹²⁷ By the seventeenth century, however, this was no longer the case. As early as 6 November 1638, with the Charter of Incorporation being granted to the Worshipful Company of Glaziers and Painters of Glass in London, the guild acknowledged glass painters as a distinct category. There is even some evidence to suggest that glass painters

¹²⁵ Hulse, 'William Cavendish,' *ODNB*, 2004.

¹²⁶ *A History of the County of York: The City of York* ed. P.M. Tillott (London: Victoria County History, 1961), 198.

¹²⁷ Marks, *Stained Glass in England*, 44.

Also, the 1351/2 accounts of St. Stephen's Chapel in Westminster demonstrate this division of labour. The entry records that six Master Glaziers were employed to paint onto 'white tables various designs for the glass windows', eleven glaziers were employed to 'paint said glass, while fourteen glaziers were employed for the 'breaking and fitting [of the] glass upon the painted tables.' L. F. Salzman, "The Glazing of St. Stephen's Chapel, Westminster", *JBSMGP*, 1 (April 1926): 35. Citing (Exch. K.R. Accts., Bdle. 471, No.6) for the years 1351/2 Article 14-16.

Sprakes, "The Armorial Stained Glass at Temple Newsam", 18. He cites Leeds Archives Department: TN/SH/A3/2, where Dininckhof is referred to as a 'glasier'. Also, in the *Freemen's Rolls* he signed himself as a 'glasier'.

were considered artists, separate from ‘glaziers’, as early as 1618.¹²⁸ Given this, it would be fair to say that in London at least, by the 1630s painters of glass began to be referred to as ‘painter glaziers’ or ‘glass painters’.¹²⁹ During this period (c. 1634), however, Edmund is still recorded as a ‘Glasier’ in the York Guild of Glaziers and Plumbers ordinance. [Fig. 9] Simultaneously, with the proliferation of leaded windows in religious buildings following the Reformation (termed ‘plain glazing’ which was simply unpainted clear-tinted glass held together with lead calmes), other types of ‘glaziers’ emerged like the ‘plumber glaziers’ who did not paint on glass at all but specialised in this simpler fabrication.¹³⁰ To reflect this shift, between 1699 and 1704, the York guild’s name reversed to ‘The Guild of Plumbers and Glaziers.’ [Fig. 10] Although this may appear to be a subtle change, it is an important one, probably recording the point at which the ‘plumber glaziers’ began to dominate the guild in York. What this analysis tells us is that during the seventeenth century the York Guild was content to acknowledge the shift in trade from glaziers to plumber glaziers but not to differentiate glaziers from glass painters. Given this, Brighton’s attribution of early pieces to Henry Gyles may not be secure and a critical analysis of these windows is now necessary.

Brighton states that the date of a window in the York medieval guildhall, called the Merchant Taylors’, coincides with the 1662 charter of the guild when Simon Buckton was made its first master.¹³¹ Although there is no record of Buckton gifting a window in the guild accounts, the accounts note an item for 5 shillings in 1684 ‘for wyer [wire] before the arms given by Symon Buckton’, presumably for protection.¹³² The window is signed HG underneath the motto ‘Concordia parva res crescent’. Beneath this is the inscription ‘The guift of Simon Buckton Merchant Taylor, Ano Dni, 1662’. This inscription is a replacement, most likely inserted in 1862 by Christopher Annakin to commemorate the

¹²⁸ Charles Henry Ashdown, Percy Tippetts, W. Berriman, *History of the Worshipful Company of Glaziers of the City of London, otherwise the Company of Glaziers and Painters of Glass*, (London: Blades, East & Blades, 1918), 34. 28. 1618, June 6. At this Court, the Petition preferred “by such Artizan Glaziers, Freemen of this City as use the arts of Glaziers and are not Free of the Glasyers Company touching the Repeale of an Acte of Council and made 21 October 1616 and in the mairality of Sir John Jolles was here read and considered. The Acte was ordered to remain in force and unrepealed.”

¹²⁹ Lane, “A World Turned Upside Down”: 48-49. 50. 58. In c. 1613/14 Thomas Heipoole, Robert Butler, Thornton, and Kirby are referred to in documents as glaziers. By 1622, however, Hapoole [sic] is described as a painter glasier, and in 1639 An[d]rew Hall is called a Glasspainter.

¹³⁰ Hampson, “Casting a dim religious light”, 66. Thompson workshop: 1568-1620. In 1627, Robert Thompson was referred to as a ‘plumber glazier’ in the York Minster accounts.

¹³¹ Brighton, *Henry Gyles, Virtuoso*, 27.

¹³² *The Accounts of The Merchant Taylors of York* (1665-1684), 73, MTA 12/1, BIA.

bicentenary of the original 1662 charter.¹³³ Further, the motto with Gyles' initials is not original either. During later conservation of the window, Barley Studios identified a signature on the verso, scratched into the white enamel, which reads 'henry giles of yorke glas painter', followed by 'Anno Domini'.¹³⁴ Unfortunately, the pane that would have contained the date is a later replacement without a date. Only three pieces of the original window glass remain. Technically, the drawing and shading are in black (not brown), the stain is sometimes applied in two layers, and small amounts of blue enamel and sanguine have been daubed onto the glass to create areas of colour. White enamel has also been used behind the inscriptions and arms. The Merchant Taylor's arms are clearly the work of an inexperienced practitioner.

The second window attributed to Gyles by Brighton is a single lancet set in the east wall of the north transept of St. Stephen's Church, Acomb in York. This window contains the Royal Arms of Charles II. Richardson, citing Benson, states that the east window had three lights and carried the Arms of Neville, Ryther, Fairfax, and Clifford before the east end was later modified.¹³⁵ He concluded that there was no record of the Royal Arms originating from within the church building. The faculty records and St. Stephen's Church Vestry Minutes from 1828 to 1901 do not identify the contents of the east window prior to its modification.¹³⁶ Neither Richardson nor Benson, nor for that matter, the faculty or St. Stephen's, was aware of the gardener Robert Hudson's handwritten account of the relocation event:

New Glass to east window 1890 given by Mrs. Hale [...] In 1890 the present glass, of east chancel window was put in, the gift of Mrs. Hale, and king Charles Coate of

¹³³ Above the original panel is an inscription recording the restoration, which states that 'This coat of arms was restored at the cost of Christopher Annakin, Master A.D 1862'.

¹³⁴ "Henry Gyles Window Restored for the Merchant Taylors Hall in York", Vidimus 21, <https://vidimus.org/issues/issue-21/news/>

¹³⁵ George Benson, "Notes on Acomb, Yorkshire", *Report and papers of the Architectural Societies of the County of Lincoln, York, Archdeaonries of Northampton and Oakham and of Leicester*, 38, Part 1, (1926): 8. Neither Richardson nor Benson provides a reference for there being four separate Arms in the east window.

¹³⁶ Faculty records (FAC 1889/5) relate to general renovations to the church, including the taking down of the galleries and building a new vestry. (FAC 1898/21) relates to a new stained-glass window in the north transept, the file includes a painting of the proposed window. Acomb parish records were also searched: PR AC 41 - Vestry Minutes, St. Stephen's Church 1828-1901, PR AC 77 - papers relating to the vestry, east window and brass memorial 1888-1889 and PR AC 95 - miscellaneous items and notes from the nineteenth and twentieth centuries, BIA. The minutes of the meetings from 1828 to 1832 were examined but revealed no information.

Arms was removed to window over vestry door previously. This was the only coloured glass in the church all other glass being of clear diamond shaped panes in lead.¹³⁷ [Fig.11]

By 1890, evidently all that remained of the east window was the Royal Arms. If the other four Arms cited by Richardson had survived beyond 1851, when the chancel was re-built, Hudson would have recorded this fact. Trevor Brighton attributes the window to Gyles based on style, stating that it 'is typical of the work of (Henry) and compares with a number of armorials by him'.¹³⁸ Alberic Stackpole credits Edmund with the work on the basis that 'Edmund would have been fifty-two years of age and his son, Henry, eighteen years old when the glass was painted, and that the technical certainty indicates that an experienced glass painter was responsible'.¹³⁹ The armorial is a curious mix, with the helm and crest being replaced with glass painted in a more Jacobean style. The helm contains ornamental work flanked by the initials C. R for Charles II, whilst the crest area contains a Royal insignia of CR surrounded by Royal badges. All that remains of the original window, following its relocation, is the royal arms of Charles II in Garter and the supporters, which together amount to less than one-third of the total armorial. The painting is in black/brown trace and shading, decorated with a single layer of stain, blue enamel and sanguine. The armorial was probably rearranged in c. 1889/90 during the Lavers & Barraud restoration. Stylistically, these replacement pieces appear earlier than the Royal Arms. Like the Royal Arms, these fragments also contain sanguine. It is interesting to speculate whether the additional CR initials could be from an earlier Royal Arms of Charles I.¹⁴⁰ Brighton comments that the backgrounds of the York glass painter Dininckhof were often painted with a marbling pattern, a technique which Gyles 'never captured'.¹⁴¹ Both these inserted pieces contain marbling. Given that the east window contained five sets of armorials, the work would have taken about eighteen months to two years to complete. This project therefore probably started around 1662 when Gyles was only seventeen. The remaining 1663 Royal Arms is certainly not the work of an inexperienced glass painter.

¹³⁷ Robert Hudson, *Personal notes*, Tom Parker, "St. Stephens Church, Acomb", York: privately published, 2012), 16. Robert Hudson was a local joiner and undertaker who was involved with church affairs. Hudson kept written notes of his time working at the church. These notes were owned by his son Jim (now deceased), who then gave them to the local historian Tom Parker.

¹³⁸ Brighton, *Henry Gyles, Virtuoso*, 27.

¹³⁹ Alberic Stackpole, *The Noble City of York* (York: Cerialis Press, 1972), 204-206.

¹⁴⁰ Butts, *Painting on Light*, 4.

¹⁴¹ Brighton, "Enamel Glass Painters", 1, 126.

The ‘Pedigree window’ (1665) is a six-light half-landing window made up of clear leaded glass quarries and painted sections.¹⁴² The panel on the extreme left is painted with the initials of Henry’s parents Edmund and Sarah forming a triangle between the letters G, E and S, while the central inscription which states, ‘Had issue six sonnes & 8 Daughters viz’, is painted in brown/black pigment. The upper sections contain the names of their children. Midway between lights three and five are two small armorials, one being the arms of the Wentworth family, like others Gyles painted for Wentworth Old Church and Ripon Minster, and there may have been more. Pearson identified the lower register of names and dates as belonging to the Kirby family, who lived in the house for over twenty-five years.¹⁴³ The panels now belong to the York Museums Trust, collection number unknown. Although not seen by this author, from photographic evidence published by Knowles [see Fig 12], it is evident that the handling of the paintwork and the drawing of the typography is naïve, and less skilfully accomplished than in the Royal Arms in Stephen’s Church, Acomb, York (1663).¹⁴⁴ The drawing and technical painting are closer to the Merchant Taylors’ Hall window (c. 1662). Henry most likely painted this glass.

At Ripon Minster, Brighton attributes all forty-one armorials to Gyles.¹⁴⁵ Installed between c.1662 and 1674, the scheme would have required a team of glaziers to undertake all the processes other than painting. Only five of the original arms remain: the Samson Staveley, Wentworth of Elmsall, Hutton, Wentworth and Wolstenholme, and Swale and D’arcy. The Royal arms were removed from the west window during the 1792 restoration and later incorporated into the east window by another York glass painter, William Peckitt (1731-1795).¹⁴⁶

¹⁴² The Pedigree window was originally located in the family home’s staircase window in Micklegate and contained the parental names and those of their fourteen children. Currently stored in the York Museum Trust collections.

¹⁴³ Pearson, “A Forgotten Memorial”: 34-38.

¹⁴⁴ John Knowles, “Henry Gyles, Glass-Painter of York”, Vol. 11 (1922-23), 53.

¹⁴⁵ Jean E. Mortimer, “Ripon Minster Fabric Accounts 1661-1676”, *Miscellanea 6*, YAS Record Series 118 (1951), ed. C. E. Whiting (Leeds: 1953), 93.

¹⁴⁶ Brighton, “Enamel Glass Painters”, 1, 146.

Two of the five arms are used as examples for the technical description below: ¹⁴⁷

Samson Staveley, dated 1664

Oval strapwork – single stain on white and sanguine.

Shield – diaper sgraffito from white enamel.

Ordinary charges – flat matt black paint.

Stag's heads – black/brown trace and shading backed with stain.

Darcie Arms

These quartered arms contain both Darcy and Proctor.

Oval strapwork – none.

Shield – mainly stain on white and pot metal red.

Lion passant, rose's, crosslets – black/brown trace, no shading.

Cross with five crescents - black/brown trace, matt shading in sanguine and crescents in stain.

Although painted around the same time, 1662/5, some of the Ripon Minster armorials are technically superior to the Merchant Tailors' armorial, so not painted by the same hand. In fact, of all the glass paintings discussed, the St. Stephen's armorial is far superior to all the others. The history of the Gyles family during the interregnum years will now be explored to strengthen the claim that Edmund had some knowledge of glass painting. Most crucially, it will be argued that these formative years laid the foundations for Henry to move away from the craft guild system and pursue a liberal arts path.

¹⁴⁷ Thomas Gent, *The Ancient and Modern History of the Loyal Town, of Ripon*. (York: 1733), 133-135.

2.0 THE INTERREGNUM YEARS AND GYLES' TRAINING AS A GLASS PAINTER: 1649-1660

Gyles does not discuss how he became a glass painter in any surviving correspondence with family or friends. He does, however, state in a letter to his friend, the London printmaker and print seller Pierce Tempest (1653-1717), 12 August 1682, that 'my experience is well nigh of 20 yeares standing and has cost me more than I dare speak of'.¹⁴⁸ Then, writing to Lister fourteen years later, Gyles refers to 'almost 40 years of studies'.¹⁴⁹ Together, these letters place Gyles' training between 1656 and 1662. There is no record, however, of Gyles undertaking a formal 'glazier painter' apprenticeship during this period, but if he did, the training period would have been at least eight years, similar, if perhaps longer than that of other glazier crafts.¹⁵⁰ If he was 'largely self-taught' as Brighton suggests, Gyles would have required access to information about the processes of glass painting. While nothing has been discovered about his early education, given that at the age of twenty-three he was buying editions of Homer and Virgil, which may well have been in Greek and Latin, if not in translation, suggests that he must have had access to a higher, more 'liberal', education.¹⁵¹ Presumably, this would have been exceptional within a family of tradesmen where practical knowledge and skills were passed down from father to son. As Edmund styled himself as 'esquire' after the Restoration, he appears to have been a man of some social standing within York, and Henry, therefore, may have attended one of the many grammar schools set up to prepare the gentry class for university, for example, St. Peter's which operated out of Bedern Hall during the Interregnum.¹⁵² Gyles' pursuit of classical texts is the first indication that he was on a different career path from the traditional guild structures associated with the craft of glazing. If 'largely self-taught'

¹⁴⁸ Letter from Henry Gyles to Piece Tempest, (1682), Ms 3 f. 61, YAS, Special Collections, University of Leeds. Pierce Tempest (1653–1717), English printmaker and print seller based in London, best known for the series *Cryes of the City of London*. Tempest was the sixth son of Henry Tempest of Tong by his wife, Mary Bushall, and brother of Sir John Tempest, 1st Baronet. He was a distant relative of the Tempest family living in Tong Hall near Bradford. Tempest received some instructions in the art of engraving from Hollar. <https://www.thepeerage.com/p44037.htm>. Also see, James, Granger, *A Biographical History of England*, (London: Nicholson, 1804), 335.336.

¹⁴⁹ Henry Gyles to Martin Lister, (17th June 1696), MS Lister 36. f.158, Bodl.

¹⁵⁰ *Register of Apprentices Indentures 1573-1688*, D12, f.94. b. "YCA". Cited by Brighton as f.946.

¹⁵¹ Sylvanus Morgan to Henry Gyles, (1668), Stowe MS 745, f.21. BL.

¹⁵² Brighton, "Enamel Glass Painters", 1, 74. Drake, *Eboracum*, 255. 270. See also, a history of St. Peter's School at <https://www.stpetersyork.org.uk/history>

and building upon only rudimentary training by his father, what might his so-called ‘studies’ have consisted of for him to master such glass painting challenges?

Four sources would have been available to Gyles: *On Diverse Arts* by Theophilus (c. 1125), *The Art of Drawing with the Pen, and Limning in Water Colours [...] with the True manner of Painting upon Glasse, the ordering of making Your Furnace, Annealing etc....* by Henry Peacham (1606), *A Booke of Sundry Draughtes...* by Walter Gedde, (1615), and *L’Arte Vetraria (The Art of Glass)* by Antonio Neri (1612) translated into English by Christopher Merret in 1662. As manuscript copies of Theophilus were extremely scarce, it is unlikely Gyles had a copy, but he most likely owned copies of Peacham and Gedde. As a type of courtier’s handbook, Peacham was aiming for a wider audience, beyond the court circle, to ‘all young Gentlemen’, whereas Gedde’s book was written explicitly for the craft and is mostly concerned with complex geometric patterns for leaded glazing.¹⁵³ Although both provide recipes for making enamel colours and some instructions for building a furnace, neither discusses the technical process of glass painting. Separate from Peacham and Gedde is Merret’s translation of Neri, published under the auspices of the Royal Society, which, given the fluidity between the Royal Society and the York virtuosi through Lister (to be discussed in chapter 2), suggests Gyles must have either owned or had access to a copy after 1662. Like Peacham and Gedde, however, Neri does not discuss glass painting, so none of the three publications would have been useful as a glass painter’s manual for Gyles.¹⁵⁴

With this lack of literary sources, it is necessary to return to the possible connection between Henry’s father, Edmund, and other glass painters before the Civil War. Where was Edmund during the Civil War, and what happened to his workshop, particularly during

¹⁵³ A. Wells-Cole, “Who was Walter Gedde?” *Furniture History*, 26 (1990), 183-190. Gedde may have been Flemish, as his designs for leaded windows reflect the mannerist ornament current in Antwerp from the mid-1550s.

¹⁵⁴ Both discuss six principal colours. Peacham describes how to make: two types of yellow stain, a white using ‘Christal’ to diaper upon, two types of black, sable made with ‘the scales of iron, a blue azure using coloured beads, a red using Dragon’s blood, a green ‘vertgrease’, and two types of carnation using tin glass. Peacham also discusses buying beads to make a red glass. Gedde describes how to make: a fair Black, Green, two Reds, Carnation, Blue, Yellow, Grey, and how to use ‘Christal’ to diaper upon the glass. Both books also give the briefest of information on how to apply the colours to glass. Gedde’s descriptions are almost identical and possibly derive from Peacham.

the period c.1656 and c.1662, the time Henry claims to have commenced his study of glass painting? Following the siege of York, Edmund played a significant role in the city's reconstruction. Although he never gained high civic office, the historian Phil Withington thought he embodied the principal requirements of republican ideology as described by J.G.A. Pocock, being possessed of "a civic consciousness, and an awareness of himself as a political actor in a public realm".¹⁵⁵ Edmund was a city councilman and city chamberlain in addition to being a veteran of the New Model Army and an officer in the city militia.¹⁵⁶ The siege of York had caused extensive damage to the city and Edmund was appointed to the salaried post of 'husband' (clerk of works) in 1644 to oversee repairs.¹⁵⁷ As a 'husband', he held a highly responsible position, suggesting the new administration trusted him. His duties were specific 'to look after the repairs of the City Bridges and walls'.¹⁵⁸ Between 1644 and 1664, the Commonwealth Committee issued him at least six separate orders.¹⁵⁹ Edmund was also ordered to oversee work on the Minster in 1654: '... hencefourth be employed as plumber for the fabricke of York Minster [...] and that John Hay shall be alsoe at present imployed therein, [...] and that Edmund Giles be likewise imployed as overseer of said worke'.¹⁶⁰ In recognition of his services, it seems that Edmund was given a house by the Corporation in the parish of St. Mary Bishophill Junior in 1657.¹⁶¹ Even though he was still operating as a 'husband', Edmund took on two apprentices in 1659: William Addison and Thomas Richardson. Addison was indentured for eight years and became free of the Guild and the City in 1667.¹⁶² [Fig. 13] This suggests that just before the Restoration Edmund resumed trading. Around 1659, the Gyles

¹⁵⁵ Withington, "Views from the Bridge": 136-7. Citing J. G. A. Pocock, *The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition* (Princeton, 1975), 354.

¹⁵⁶ A City Chamberlain dealt with the city's finances, receiving, and collecting taxes etc.

¹⁵⁷ Angelo Raine, ed. "Proceedings of the Commonwealth Committee for York and the Ainsty", in YAS Record Series 118 (1951) *Miscellanea* 6, ed. C. E. Whiting (Leeds: John Whitehead, 1951), 15-29.

¹⁵⁸ William Giles, *Catalogue of the Charters, House Books, Freeman's Rolls etc. of the Corporation of York*, (Printed by order of the Corporation 1908), 47.

¹⁵⁹ Raine, "Proceedings of the Commonwealth Committee for York and the Ainsty", 11-17.

1647 - ordered to 'doe fourthwith make upp the sally porte in the Minte Yard and preserve the doore, lock and hinges'.

1648 - repayre of the Minster.

1651- tasked to 'cause the passages at severall towers occasioned by the lowness of the river to be stopt'.

1651- a Lieut. Gyles is recorded twice taking part in the Cities Militia activities and later as a tax collector.

1664 - ordered Francis Cundall, one of the sequestrates of the city, to 'deliver unto Edmund Giles, the Citties husband, thre timber trees lying in the minte yard for the use of the publique'. In the same year, Edmund is called upon to assess the repairs for St. Cuthbert's church on behalf of the 'Bord'.

¹⁶⁰Raine, "Proceedings of the Commonwealth Committee for York and the Ainsty", 29. This reference to plumbers being employed by the Commonwealth Committee to undertake repairs to the Minster does not form part of the previous discussion on the term glazier, glazier/painter, and plumber/glazier as Edmund was employed in a supervisory capacity only.

¹⁶¹ Giles, *Catalogue of the Charters*, 26. Class H, No 7, entry date: 1657 11th June records the transfer from the Corporation of York to Edmond Giles and identifies the premises as a house situated in Bishophill Junior.

¹⁶² Register of Apprentices Indentures, D12, f.94.b.

family moved to another house, 68 Micklegate, with both apprentices.¹⁶³ Clearly, Edmund had profited from his paid services for the city and had the capital to invest in new, more substantial property.¹⁶⁴ He was now affluent, owning at least two properties, and his family had been elevated to the ‘middling class’. Providing Henry with a liberal arts education would have been consistent with Edmund’s newly acquired social status and his attendant aspirations for his son. Although there is no documentary evidence for this, it would explain Henry’s subsequent cultural ambitions. This précis of Edmund’s war years shows that, although he was still occupied with civic duties up to c.1664, during the time Henry claims to have commenced his study of glass painting, Edmund re-established his workshop. With two apprentices in place, Edmund would have had time to teach his son what he may have learnt about glass painting from others. If, as suggested, Edmund’s knowledge and skills were limited, where and to whom might Henry have gone for further training?

2.1 Gyles and the Smith family

Gyles was one of fourteen children born to Edmund and his wife, Sarah.¹⁶⁵ Brighton’s pedigree of the Gyles family shows that only Henry and his sister Rebecca survived up to the point of Edmund’s death in 1676. Edmund’s will records that Rebecca was not yet twenty-one and unmarried. Intriguingly, his will further mentions that he had a son-in-law called Samuel Smith and two grandchildren, but neither Samuel’s wife nor their two children are named in the will.¹⁶⁶ [Fig. 14] Brighton later identified that Samuel married Rachel Gyles and that she was baptised on 6 July 1652 and buried on 9 November 1688 but gives no further information.¹⁶⁷ Rachel is also recorded in the pedigree window,

¹⁶³ Henry Gyles to Ralf Thoresby (1707). As transcribed in *Letters of Eminent men addressed to Ralf Thoresby*, ed. Joseph Hunter, vol. 2 (London: Henry Colburn and Richard Bentley, 1832), 61-63. Gyles states that the house ‘cost him and his father £600’. In the 1980s, the then-owner of 68 Micklegate discovered blue glass fragments and remnants of a possible crucible in the rockery of the back garden. These fragments were most likely solid enamels, according to information received from the then-tenant, Christine Pearson.

¹⁶⁴ Will of Edmund Giles, (1676). [Fig. 65]

¹⁶⁵ Brighton, “Enamel Glass Painters”, 3, Illustrations, 13.

¹⁶⁶ Will of Edmund Giles, (1676).

¹⁶⁷ Brighton, *Henry Gyles, Virtuoso*, 4 - 5.

formerly overlooking the staircase of 68 Micklegate.¹⁶⁸ She was neither married nor buried at St. Martin-cum-Gregory, but the parish records for Osbaldwick in York record a ‘Rachiel Gyles’ marrying a ‘Samuel Smyth’ in 1670. So, Rachel was born in 1650 and married at twenty, while Samuel was born in 1642 and married at twenty-eight.¹⁶⁹ As Rachel was still living at the point of her father’s death in 1676, it is, therefore, curious that she is not named in his will. Edmund in fact, does leave her a small amount referring to her as the wife of Samuel, ‘Item I give to my son in law Samuell Smith twenty shillings and to his wife and their 2 children every of them twenty shillings a piece...’¹⁷⁰ Rachel and Samuel were married by licence, a practise which was ‘customary for people who wanted to display their wealth’, a point which will not be pursued in this thesis.¹⁷¹

The will and inventory of Sarah Gyles, Henry’s mother, provides further information on Gyles’ ties with the Smith family and the family’s possessions. Sarah died in 1686.¹⁷² The inventory of her goods and chattel, separate from her ownership of the ‘Messuage and Tenement’, describes many items from the house in Micklegate, like: feather beds, flock beds, blankets, bolsters, curtains and valances, printed fabrics, tables with drawers, a leather chair, fireside tools and ‘furnaces’; also kitchen utensils including silver spoons and tankards.¹⁷³ The inventory places a value on all these goods of £32.03.05 (pounds, shillings and pence) and illustrates that the Gyles’ were an affluent, middling family able to present themselves without embarrassment to the visiting virtuosi elite of society. At the end of the inventory, Henry Gyles has a legal obligation to settle his mother’s debts, amounting to some £18.00. The document then states that Sarah had debts owing to her amounting to £40.00, but that this debt had been ‘disposed off in her Will’ [see appendix 8]. This obligation is a curious mix of printed legal Latin with spaces left in the text to be filled in by either the legal executor or administrator. Towards the end, the document then refers to the ‘Exchequer office of the Archbishopric of Yorke’ and the Commission of the ‘Dean and Chapter of Yorke’. This is because from the medieval period

¹⁶⁸ Pearson, “A Forgotten Memorial”: 37.

¹⁶⁹ Church of England Baptisms, Marriages, and Burials, 1538-1812, FHL Film Number: 1068390, Reference ID: 2:3X7H6T1.

¹⁷⁰ Will of Edmund Giles, (1676).

¹⁷¹ <https://www.marriagerecords.me.uk/marriage>.

¹⁷² With thanks to Christine Pearson for bringing the Will and Inventory of Sarah Gyles to my attention.

¹⁷³ ‘Messuage or tenement with homestead and appurtenances and cottage or tenement with appurtenances, and close of pasture called the Hall Close (2ac.)’. The National Archives, <https://discovery.nationalarchives.gov.uk>.

to the mid-nineteenth century, the church and Archepiscopal courts, particularly the Exchequer Court, had wide jurisdiction, including administrative oversight in the granting of probate and the proving of wills.¹⁷⁴ The previously mentioned £40.00 of debt owing to Sarah, however, also provides important information about the close family and business interactions between the Gyles and Smith families, connected through the marriage of Rachel Gyles and Samuel Smith. The debt belonged to the London-based antimonial cup maker James Smith, Samuel's uncle, who owed Sarah Gyles £50.00. With Samuel bonded to cover the debt in York and having paid £10.00, Sarah waived the remaining £40.00 and ordered that James' debt be distributed to Samuel's children.

Further evidence of the bond between the Gyles and the Smith families is to be found in Gyles' will, which discusses his two nephews, Samuel and James Smith.¹⁷⁵ [Fig. 15] The Register for Holy Trinity church in York records the births of a 'Samuell Smith' in 1672 and a 'James Smith' in 1678.¹⁷⁶ A letter from James Smith of London to Gyles, dated July 15, 1682, however, informs us that there was another James Smith, who appears to be the infant's uncle and namesake, baptised in 1678.¹⁷⁷ This letter was annotated by Thoresby, a friend and fellow York virtuosi, who acquired many of Gyles' letters after his death in 1709. He identifies the writer as: 'Mr James Smith elder brother of the Bell Founder a chymist & maker of the Antimonial Cups &c. Thesse For[m] Mr Henry Gyles in Micklegate York'.¹⁷⁸ A later entry in Thoresby's 1702 diary tells of how he spent an evening with Gyles: 'Evening sat up too late with a parcel of artists I had got on my hands, Mr. Gyles, [...] and his nephew, Mr. Smith, the bell-founder [...].'¹⁷⁹ Thoresby, therefore, indicates that James Smith (senior and elder brother of Samuel, Gyles' brother-in-law) was a 'chymist & maker of the Antimonial Cups' while Gyles' nephews were both bell

¹⁷⁴ Archiepiscopal Courts, Reference: GB 193 YDA/5, BIA.

¹⁷⁵ Will and Testament of Henry Gyles, (proven March 1721/2), Probate 76, f. 55, BIA. Also see, Edward Bulmer, *The Parish Registers of St. Martin-cum-Gregory: in the City of York 1539-1734*, vols. 1 and 2, (York: De Little & Sons, 1897), 126. Confirmation of Samuel and James as nephews is to be found in Henry Gyles own will, in which Samuel Smith & James Smith were appointed, 'to be y^c Overseers.' Henry Gyles Will was not proved until 1721.

¹⁷⁶ "Samuell Smith baptised in 1672", 1538-1975 FHL Film Number: 942.74 Y1 V26BA, in *England, Select Births and Christenings*, Ancestry.com.

"James Smith baptised in 1678", 1538-1975 FHL Film Number: 942.74 Y1 V26BA, in *England, Select Births and Christenings*, Ancestry.com.

¹⁷⁷ James Smith to Henry Gyles, (1682), Stowe Ms. 746, f. 57. BL. As transcribed in Knowles, "Henry Gyles", 66-68.

¹⁷⁸ Smith to Gyles, (1682), Stowe Ms. 746, f. 57. Knowles, "Henry Gyles", 66-68.

¹⁷⁹ Hunter, *The Diary of Ralph Thoresby*, 1, 366.

founders in York.¹⁸⁰ [Fig.16] During the seventeenth century, there were two families of bellfounders working in York, the Smiths and the Sellers. Abraham Smith, in partnership with William Cureton, operated a bell foundry at Toft Green before James Smith (Abraham's son) took sole control of the business. James Smith senior had two sons, James, who eventually became a chemist and maker of Anatomical cups in London, as recorded by Thoresby, and Samuel (I), who married Rachel Gyles. Samuel (I) died in 1709, the same year as Gyles, and was buried at Holy Trinity, Micklegate. One presumes Rachel is buried there. The bell-house on Toft Green was bequeathed to his two sons, Samuel (II) and James, and Samuel succeeded his father in the business.¹⁸¹

Samuel's marriage to Rachel in 1670 may have been commercially motivated, bringing together two important York dynastic families specialising in related trades and thereby consolidating their interests. Gyles' correspondence with James Smith (senior) makes clear that the latter lived in London as an anatomical cupmaker for elite clients and was estranged from his brother Samuel (I). This biographical analysis confirms that Gyles had family connections in London through his brother-in-law, but how might this connection have advantaged him?

2.2 Gyles and London glass painters

If Gyles was looking to rise above the craft guild system and pursue a liberal arts approach to glass painting, where might he have encountered opportunities to gain such experiences?

¹⁸⁰ Philippa Glanville and Sophie Lee, eds., *The Art of Drinking*, (London: V&A Publications, 2007): 14. Anatomical cups were made from pure antimony and used to drink wine from which, physicians thought, rid the body of bad 'humors' through inducing bleeding, diarrhoea, and vomiting. Cast in moulds and made in separate pieces before being joined, these cups were expensive objects.

¹⁸¹ George Benson, "York Bellfounder", *Annual Report of the Council of the Yorkshire Philosophical Society*, (York: Coultas & Volans, Printers, 1898): 28 -31. 17- 34.

Although Brighton asserts that ‘there is no evidence to prove Henry Gyles was either educated or employed in London’, as will be shown, Gyles’ correspondence with James Smith in 1682 suggests otherwise.¹⁸² As does his contact with the London-based herald Sylvanus Morgan (c.1620/27- c. 1693). Smith and Gyles also exchanged news about a mutual acquaintance who might also have moved from York to London to gain experience: ‘As to yr bro: Andrew he takes very well to his new master’..., like James Smith himself, who relocated to London from York.¹⁸³ As ‘Andrew’ is not recorded in Brighton’s pedigree of the Gyles family, ‘bro’ must refer to a close friend. Smith’s letter demonstrates how common it was for people from York to travel to London to acquire a trade.

The most likely organisation for Gyles to approach for additional glass-painting training in London would have been the Worshipful Company of Glaziers, but as their Apprentice Register was lost due to water damage in 1870, it is not possible to know whether Gyles enrolled.¹⁸⁴ Approaching glass painters more directly, however, would have been in keeping with Gyles’ ambition to rise above the guild system.¹⁸⁵ Among the likely candidates would have been Greenbury, Oliver and Sutton. Regarding Oliver, Alexander Koller points to similarities between his enamelled armorials for the Grocers’ Company at Northill, in Bedfordshire and Gyles’ armorials.¹⁸⁶ Between all three, however, the London glass painter, goldsmith, and portrait miniaturist Greenbury would have been known to Gyles.¹⁸⁷ Greenbury was arguably the most successful native-born painter of the seventeenth century before William Dobson.¹⁸⁸ In 1598, Greenbury had been indentured to the painter and goldsmith Rowland Lockey (c. 1566-1616).¹⁸⁹ Assuming he began his apprenticeship at around the age of twelve, he would have been about fifty-nine when Gyles was born. Lockey was apprenticed to none other than Nicholas Hilliard (1547-1619), the lauded court miniaturist.¹⁹⁰ Greenbury’s training, therefore, was of the highest order. He was made Free of the Goldsmiths’ Company on 9 October 1607, became a member of

¹⁸² Brighton, *Henry Gyles, Virtuoso*, 7.

¹⁸³ Smith to Gyles, (c.1682), Stowe Ms. 746, f. 60. Knowles, “Henry Gyles”, 65-66.

¹⁸⁴ Ashdown, *History of the Worshipful Company*, 37.

¹⁸⁵ Cust, and Koller. “Oliver, John.” *ODNB*. Also see Lane, “A World Turned Upside Down”: 59. 65. 72.

¹⁸⁶ Cust, and Koller. “Oliver, John.” *ODNB*.

¹⁸⁷ Cust, and Koller. “Oliver, John.” *ODNB*. When Sylvanus Morgan wrote to Gyles in 1668 about acquiring a lead mill in London, he referred to one of Oliver’s men.

¹⁸⁸ Edward Town, “A Biographical Dictionary of London Painters, 1547–1625”, Vol. 76 (2014), 95- 97.

¹⁸⁹ Town, “A Biographical Dictionary”, 95. Greenbury’s apprenticeship lasted nine years.

¹⁹⁰ Arianne Burnette, “Lockey, Rowland (c. 1566–1616), painter and goldsmith”, *ODNB*.

the Company of Painter-Stainers, being recorded as a 2a professor ‘of that part of our art which they call the Life’, was employed by the crown from 1623 and called painter to the queen (Anne of Denmark) in 1631.¹⁹¹ After his father’s death in 1604, Greenbury’s widowed mother, Catherine, moved to York from Leven near Hull to live with Elizabeth Dalby, a ‘wedow of good estate’ within St Lawrence’s parish, close to where the Gyles family lived in Micklegate.¹⁹² [Fig. 3] Greenbury’s uncle, William Greenbury (d. 1635), an Alderman of York, was head of a prosperous family of drapers, so it appears Greenbury’s mother moved close to family. With his mother now in York, Greenbury must have visited. Gyles would have been seventeen when Greenbury died in c. 1662. Although there is no evidence that Gyles trained with either Greenbury or his son Edward, who his father also trained as a glass painter, the York connection with the Greenbury family appears to be the most likely way Gyles might have gained further training as a glass painter in London.

As an apprentice goldsmith, Greenbury would have learned to make glass enamels, a skill significant to his success as a glass painter, which may have been the reason Gyles sought out glass painters like Greenbury. Although examples of enamels on vessel glass exist from the Roman period, the transfer of enamel knowledge from metal to glass most likely originated with French goldsmiths, such as Pierre Reymond (1513-1584) of Limoges, who initially used vitreous pastes to decorate metalwork. In the sixteenth century, however, they developed a new technique, painting with enamels on copper: ‘Instead of being engraved or channelled to take the enamel, the whole copper surface was carefully treated and painted like an artist’s canvas’. This technique was transferred from copper to glass, thus advancing the use of enamel colours in glass painting.¹⁹³ Enamel colours in English architectural glass painting, however, were not widely seen until the Laudian period, when enamelling was introduced into the painting of heraldic armorials, after c. 1636, when pot metal glass became less available (discussed in chapter 2).¹⁹⁴ The

¹⁹¹ Town, “A Biographical Dictionary”, 95- 96. Citing GL CLC/L/PA/B/001/MS05667/001 fol. 153. Also, Cust and Herring, “Greenbury, Richard”, *ODNB*.

¹⁹² Town, “A Biographical Dictionary”, 95.

¹⁹³ Susan La Niece, Stefan Röhre, Dora Thornton, and Antony Simpson, “Limoges painted enamels: evidence for specialist copper-smithing workshops”, *The British Museum Technical Research Bulletin*, 3 (2009): 1-14. Reymond and other families are repeatedly found in the Limoges archives, recording their activities as illuminators and designers of stained glass and liturgical silver.

¹⁹⁴ Marks, *Stained Glass in England*, 235. Pot-metal refers to coloured glass made by adding metal oxides to molten glass. See chapter 2, 18, for a discussion of an early use of enamels in English glass painting.

importance of goldsmith enamels to glass painters in the first half of the seventeenth century is illustrated by Walter Gedde's *A Booke of Sundry Draughtes*, which includes 'Goldsmithes red' among the recipes for enamel paints.¹⁹⁵ Therefore, from Gyles' perspective, learning to make glass enamels was crucial to a glass painter's education, which helps explain why he probably went to London for further training. But from whom did Gyles learn his drawing and draughtsmanship?

2.3 Gyles, London, and Sylvanus Morgan

To become a proficient draughtsman, Gyles would have needed a tutor and access to technical literature. His notebook, which he called *Henry Gyles Booke*, makes a tantalising reference to his assumed tutor, which Brighton sights as evidence of his early training as a draughtsman:

for I remember when I did learne to draw, before I did draw well, I desired to learne to paint; but my Master Mr. Martins (ye Elder) answer'd me wisely, that I must not run before I could go.¹⁹⁶

Brighton, therefore, assumed that the unidentified Mr Martins was Gyles' tutor. As has been shown by Muller and Murrell, however, the first section of *Henry Gyles Booke* begins with a c. 1641 transcription by John Hoskins (c.1590-1665) of Edward Norgate's first version of his treatise *Miniatura*, written in 1627-8.¹⁹⁷ Murdoch also supports Murrell's analysis of Hoskins' transcription of *Miniatura*, and Hoskins as part-author of this part of the manuscript, concluding that 'Mr Martins the elder' was most likely the Dutch artist Daniel Mytens (c.1590-1647) who arrived in England around 1618.¹⁹⁸

¹⁹⁵ Gedde, *A Booke of Sundry Draughtes*, unpaginated.

¹⁹⁶ Henry Gyles, *Henry Gyles Booke*, "The Art of Limning, either by the Life, Landscape, or Histories", (1664), Harley MS 6376. f.5. BL. Brighton, "Enamel Glass Painters", 1, 82.

¹⁹⁷ Norgate, *Miniatura*, 221. Edward Norgate (1581-1650) was a courtier, miniaturist, and herald painter.

¹⁹⁸ John Murdoch, "Hoskins, John [known as John Hoskins the elder, Old Hoskins] (c. 1590-1665), miniature painter", *ODNB*.

More promising is Gyles' correspondence and close friendship with Robert Addinall (no dates).¹⁹⁹ Knowles assumed that 'Mr. Addinall was 'evidently a London glass dealer'.²⁰⁰ In 1650-51, however, he was registered in the York Freeman Rolls as a painter and later as a painter-stainer.²⁰¹ Gyles' correspondence also reveals another close friendship between his own family and that of the London-based herald, author and painter-stainer, Sylvanus Morgan, which lasted late into Gyles' life. It can be speculated that Addinall may have introduced them. Painting coats of arms came to dominate Gyles' work as a glass painter but, arguably, to become so successful, he must have studied heraldry. Like Norgate, Morgan was a gentleman herald. With reference to the importance of heralds as teachers within medieval visual culture, Richard Marks notes that 'Clergy and knights were instructed in family lineage and taught how to identify shields of arms in monumental art; [and in] heraldic glass...' ²⁰² Morgan, who was Master of the London Painter-Stainers' Company in 1644, had such a teaching role.²⁰³ Born in London, he was a 'descendant of one of the illustrious families of Wales—Morgan of Arxton' who had connections to the Royal Court.²⁰⁴ The Painter-Stainers' Company categorised their members' activities as either 'Face Painters, History Painters, Arms Painters (responsible for heraldry) and House Painters'.²⁰⁵ As Gyles' name does not appear in either the apprentice binding books from 1666 -70 or the guild's court minutes from 1649-1793, any instruction he may have received from Morgan must have been informal.²⁰⁶ Morgan seems to have sent the young Gyles drawings. In a batch of letters written from London just after the Restoration, Morgan writes, 'Mr. Gyles I and (m) T wife son and daughter doe remember us [to] your father and mother hoping of your good healthe'. Morgan then confirms that his son Pickering has received the book Gyles had sent and then offers to place his own money, on Gyles' behalf, for a lottery of books 'fittest for your use'.²⁰⁷ As discussed by Frances Rothwell Hughes, and as demonstrated by the extent of his own library, Morgan 'clearly kept an eye on the book trade and continued to collect new volumes', so he was not buying

¹⁹⁹ Thomas Kirk to Henry Gyles, (1674), Stowe Ms. 745, f. 78. BL. As transcribed in Hake, "Some Contemporary Records", 61-63.

²⁰⁰ Dr John Place to Henry Gyles (27th January 1693), Stowe Ms. 747, f. 26, BL. As transcribed in Knowles, "Henry Gyles", 68-69.

²⁰¹ *Register of the Freeman of the City of York 1559-1759*, ed. Francis Collins, 2, The Surtees Society (Durham: 1900), 110. 166.

²⁰² Marks, *Stained Glass in England*, 10.

²⁰³ L. H. Cust, and Colin Lee. "Morgan, Sylvanus (1620–1693), arms painter and author", *ODNB*.

²⁰⁴ Robert Colley, "Sylvanus Morgan", *N. & Q* 63, Issue 4, (2016): 566–567.

²⁰⁵ Joe Kirby, "The Painter's Trade in the Seventeenth Century: Theory and Practice", *National Gallery Technical Bulletin*, 20, (1999): 9.

²⁰⁶ *Apprentice Binding Book* (MS 5669/1) and *Court Minutes of 1649-1793* (M.S 5667/2), Painters and Stainers Company Archive, Guildhall, London.

²⁰⁷ Morgan to Gyles, (1668), Stowe MS 745, f.21.

Also, see Hake, "Some Contemporary Records", 60-161.

books for Gyles alone.²⁰⁸ In the same year (1668), Morgan further writes asking Gyles if he has received the designs he has sent and informs him that his ‘son pickering is very ill’.²⁰⁹ By December, Morgan updates Gyles that ‘truly my son continues very ill still which hardly gives me time (the days being so short) to write to you’.²¹⁰ Gyles was still in correspondence with Morgan in 1682 and, in 1690 through his friend Roger Geldart (1637-c.1701), still seeking assistance with the correct design for coats of arms: ‘please to give my service to Mr. Sylvanus Morgan Arms painter at the Camdens head in Thredneedle Street and desire him to looke in his bookes for a Coate by the name of Boham [...] I cannot find it in none of o^r bookes at Yorke so I hope Mr. Morgan will get it for me wth out a fee...’.²¹¹ It is, however, Morgan’s earliest known letter to Gyles, which confirms that the young Gyles was seeking to make contact with London glass painters, with Morgan acting as his mentor and advocate. In 1663/4 Morgan writes to Gyles, who had just completed his first professional commissions in York:

this is to let you understand that I received you peec of work in glass as with my thanks for it so I am very glad to see you are grown so good a(nd) proficient in your work that it hath the aprobation of workmen heare though it be with somkind [sic] of backward acknowledgement from Mr Hall which is a usual disease [sic] amongst artists. However to give you your due tis possible they could not mend it in the colouring but I shall make much of it for your sak[e].²¹²

Morgan’s letter clearly demonstrates that he was not only following Gyles’ progress and receiving examples of his glass painting but also showing them to London glass painters in the plural, the ‘workmen heare’, including Andrew Hall, who worked in London from

²⁰⁸ Frances Rothwell Hughes, “Sylvanus Morgan’s Library: Books for an Aspirational Heraldic Painter”, *The Library*, 22, Issue 1, (2021), 76.

²⁰⁹ Sylvanus Morgan to Henry Gyles, (1668), Stowe Ms. 745, f. 28, BL. The designs referred to by Morgan may well have been for Ripon Minster. Also, given the period, which included commissions for Stephen’s Church, Acomb, York (1663), and the Merchant Taylor window (pre-1665), Morgan probably supplied the designs for these projects as well. Also see Hake, “Some Contemporary Record”, 61.

²¹⁰ Sylvanus Morgan to Henry Gyles, (1668), Stowe 745, f.29, BL. Also, see Hake, “Some Contemporary Records”, 61.

²¹¹ Smith to Gyles, (1682), Stowe Ms. 764, f. 59. Henry Gyles to Roger Geldart, (24th September 1690), add. 78684, 15r-v f.3. BL. Also see, Knowles, “Henry Gyles”, 64-65, Michael Powell, “Andrew Marvell, Sir Thomas Widdrington, and Appleton House”, *N. & Q* 43, Issue 3, (England: Oxford Publishing Limited, September 1996), 281-283, and D. M Horgan, *Wiganthorpe Hall, nr. Terrington, n. Yorks’s descent of ownership*, (accessed September 200), <https://www.terringtonarchive.net/wiganthorpe-horgan.php>. Roger Geldart was part of a dynasty of Geldarts who emerged from and around John Geldart (1596 - 1658/9), alderman and Lord Mayor of the City of York between 1645 and 1654. Roger was part of the landed gentry.

²¹² Sylvanus Morgan to Henry Gyles, (London, 17 March 1663/4), Stowe MS 744 f. 71, v. 2. (ff. 172), BL.

1639.²¹³ The correspondence also implies that Gyles' colouring [handling of stains and enamels] was good enough to challenge the London glass painters and elicited backhanded compliments that Morgan had to defend. Morgan's letter then goes on to discuss other purchases he and his son Pickering had made on Gyles' behalf, including 'Red lead and pensills... half a pound of copper wyer' and glass from a Mr. Canton, all sent by sea' (see reference below).²¹⁴ Morgan, therefore, seems to be supporting Gyles' early studies back in York materially, and as will be shown, professionally by collaborating with the Gyles family in a similar way to that of the glass painter Butler and his herald when visiting Ingram at his Westminster home in the Dean's Yard, previously mentioned.

In discussing the 'vernacular' craft pictures of early Stuart painter-stainers, Robert Tittler notes that these heralds also painted portraits. He also demonstrates that these 'local workmen' came from a different tradition to that of the Netherlandish portrait painters who were sought out by aristocratic clients in London.²¹⁵ Before the merging of the guilds, Stainers painted flags, decorative banners, and imitation tapestry, while Painters, with their links to the Royal Court, painted portraits.²¹⁶ After merging, however, some painter-stainers became both heraldic and portrait painters, like William Segar (c. 1564-1633) and Edward Norgate. By the mid-seventeenth century, these native English painter-stainers were incorporating some of the Netherlandish portrait painters' working practices, but not to the point of abandoning the primary graphic requirement of genealogical heraldic painting, namely, to be read from a distance.²¹⁷ As demand for portraits more broadly was centred around the court, it is not surprising that the court painter, glass painter, and goldsmith Greenbury painted portraits on glass.²¹⁸ He may not have been the first, however, as evidenced by a pair of portraits depicting King James I of England (VI Scotland) and George Villiers, Marquis of Buckingham (James' favourite), painted in

²¹³ Lane, "A World Turned Upside Down": 58. Lane has documented that in 1639 An[d]rew Hall was termed a Glasspainter, and this correspondence shows that he was also acquainted with Morgan, presumably for heraldic designs as Gyles was.

²¹⁴ Gyles would have used the red lead to make glass paint and the copper wire to make painting brushes (pencils).

²¹⁵ Robert Tittler, "Regional Portraiture and the Heraldic Connection in Tudor and Early Stuart England", *The British Art Journal* 10, no. 1 (2009): 3. Also see, Robert Tittler *Portraits, Painters, and Publics in Provincial England, 1540-1640* (Oxford: University Press, 2012), 2.

²¹⁶ William Englefield, *The History of the Painter-Stainers Company of London* (London: Chapman and Dodd, Ltd., 1923), unpaginated. The first recorded King's Painter, Gilbert Prynce painted Richard II in 1394, which is the earliest surviving life portrait of a British monarch.

²¹⁷ Tittler, "Regional Portraiture": 5. 9.

²¹⁸ Town, "A Biographical Dictionary of London Painters": 96.

c.1619.²¹⁹ Greenbury painted more than twenty for display in the Oxford Colleges, including portraits of Charles I and Henrietta for the Great Hall at Magdalen College in 1633.²²⁰ [Fig. 17] Oliver then followed Greenbury in 1664, painting portraits of the Grocers' Company along with the royal arms in Northill, another glass painter with possible courtly goldsmithing connections through the glass painters Isaac and Peter Oliver.²²¹ Gyles contributed to the portrait/armorial window genre with his 1702 portrait of Queen Anne after Godfrey Kneller (1647-1723), set above the Merchant Taylors' arms in the Merchant Taylors' Hall, York. [Fig. 18] All three are examples of 'heraldic portraits' which merged two forms of courtly expression, the portrait, and the armorial. They were intended to support genealogical lineage and underline political and guild allegiance.²²² The Greenbury family connection with York and the connection between the Gyles and Morgan families have been noted and may explain this new departure for Gyles.

Collectively, this mapping of Gyles' family history and connections suggests that, although it appears Edmund had little time during the interregnum to train his son, the Gyles workshop could have contained the necessary equipment and materials for Henry to begin a study of glass painting from as early as c.1656, before Edmund restarted the workshop in 1659. The close connections with James Smith and Sylvanus Morgan in London, and Greenbury, a glass painter based in London but with family connections in York, point to Henry undertaking some training as a glass painter, goldsmith, heraldic painter, and portrait painter there. But how does Gyles' study of glass painting fit in with his father's workshop in York, particularly its first major commission after the Restoration, Ripon Minster?

²¹⁹ Geoffrey Lane, "The Scottish King and his English Favourite – two portrait panels at the Museum of Scotland Edinburgh", *JSG* 30 (Dorchester: The Dorset Press, 2006): 29-32. There is clearly much uncertainty about the painter of these two panels, their date, and where they were first located. They, along with all seventeenth-century portrait heads, may be written up separately as a standalone post-doctoral research piece.

²²⁰ Reginald Poole, "Early Seventeenth Century Portraits in Stained Glass at Oxford", *Journal of British Society of Master Glass Painters* 3, no. 1, (April 1929): 13-15. Magdalen College has three portrait heads: William de Waynflete, Charles I and his Queen, Henrietta Maria of France. The Charles I and Henrietta glass paintings are copied from prints by W. J. Delff, engraved in 1628 and 1630, after oil paintings by Daniel Mytens (c.1590-1647), which now hang in the Throne Room of the Palace of Holyroodhouse. Also, in "Enamel Glass Painters", vol. 1, 23. Brighton records that Greenbury probably painted further portraits on glass of Sir Thomas Bodley and Thomas Allen at Oriel College, and Queen Brasenose at St. John's Wadham and Christ Church colleges. Other portrait heads, particularly of Dutch adventurers painted in c. 1622, can be seen at St Michael's and All Angels Church, Teffont Evias, Wiltshire. These heads are not original to the church but were assembled and introduced in the 1950s.

²²¹ Daniel Lysons, Samuel Lysons, *Magna Britannia: Bedfordshire, Berkshire, and Buckinghamshire* (London: Cadell and Davis, 1813), 120.

²²² Marks, *Stained Glass in England*, 97. Tittler, 5.

3.0 THE GYLES WORKSHOP POST-RESTORATION: GLASS PAINTER STATUS AND THE RESTORATION OF RIPON MINSTER

Puritan iconoclasm and Civil War damage left the stained glass at Ripon Minster in such a precarious state that, in January 1661, Charles II authorised the collection of money for its repair.²²³ The new armorial scheme documenting Yorkshire gentry and noblemen from the Restoration period comprised about forty-one separate panels.²²⁴ As the Fabric Rolls do not contain payments for the main works, it is fair to assume that the scheme was subscriber-driven and paid for directly by patrons.²²⁵ Although the scheme follows a pre-Civil War pattern for church heraldry, it differs in its representation and scale, being more literal with bold nameplates, and could not be further from pre-Reformation schemes, which incorporated donors and patrons concerned with the salvation of their souls through ‘doing good work’.²²⁶ Local gentry families had always been patrons, but their apparent altruism now represented something else, an overt reaffirmation of the pre-Civil War political and social order through the monumental display of heraldry. Even in its lack of enamel painting, the scheme represents a conscious return to a traditional working practice that parallels the genealogical documentation of old families in later county histories like Ralph Thoresby’s *Ducatus Leodiensis* (1715) and Francis Drake’s *Eboracum: Or The History and Antiquities of the City of York* (1736), as both used the unpublished notes of the antiquarian and genealogist James Torre (1649-1699). Torre was a friend of Thoresby, while Drake, ‘who was particularly beholden to his predecessor’s work’, stated in his preface that his own history of York was ‘but a key to some part of Torre’s collections’.²²⁷

On this scale, the heraldic glass painting at Ripon can be associated more with domestic glazing, set into large oriel windows of ‘great halls’, which displayed the wealth,

²²³ Brighton, “Enamel Glass Painters”, 1, 23.

²²⁴ Gent, *The Ancient & Modern History of the Loyal Town of Ripon*, 133-135.

²²⁵ The use of subscribers for the Ripon Minster project parallels that of print culture in the way that county history publications, which proliferated after the Restoration, also made use of subscribers to underwrite the illustrations. Given that county history publications also contained a large amount of heraldry, like the Ripon Minster scheme, there may have been a mutual subscriber connection.

²²⁶ Marks, *Stained Glass in England*, 8.10. 97.

²²⁷ Jan Broadway, “Torre, James (1649–1699), antiquary”, *ODNB*.

lineage, and political connections of their commissioners.²²⁸ The scheme at Ripon, however, extends this domestic approach by blurring the lines between the secular and the ecclesiastic. Instead of being a contributory element, heraldry is now the main element. In this, Nigel Llewellyn's thesis concerning the function of funeral monuments between the Reformation and the Civil War can equally be applied to the heraldic glass at Ripon, in that the post-Restoration scheme 'filled the space left by the absence of devotional art' and reflected the ideological concerns of its patrons.²²⁹ The new scheme at Ripon reinforced the state's preoccupations and the sovereign's values by projecting and personifying the self-image of the ruling class through the display of heraldry.²³⁰ It also suggests a reassertion of landed power to counter the unease the gentry and aristocratic classes must have felt in coming to terms with the political and social changes that followed the Civil War.

The Ripon Minster Fabric Accounts record four payments for work done by 'Mr. Gyles' in 1664, 1666, 1669 and 1674.²³¹ Brighton contends that of the new windows made as part of the restoration of Ripon Minster, most, if not all, of them were the work of Gyles, but Gent makes no mention of the Gyles workshop in his description of the windows.²³² To review Brighton's claim, we need to pay closer attention to the appointment of the Gyles workshop at Ripon Minster and what it might reveal about Henry's glass-painting abilities. As discussed previously, Gyles' earliest known work is a signed armorial window for the Merchant Taylors' Hall in York, c.1662, and a cartouche for the John Petty window in York Minster, painted in 1662 (now lost).²³³ Together, these show that Gyles was painting professionally from the age of sixteen. Regarding the Petty restoration, O'Connor has identified a drawing of 1669/70 by the York antiquarian Henry Johnston (c.1640-1723), which shows that the restoration included the addition of a Renaissance-style cartouche enclosing a kneeling figure of Petty. Importantly, an inscription proudly names both Edmund and his son Henry, aged only 16, as the "re-newers": "This window was made Glaised by sir John/Petty knight, glasier, sometime Lord

²²⁸ Marks, *Stained Glass in England*, 97.

²²⁹ Nigel Llewellyn, *Funeral Monuments in Post-Reformation England* (New York: Cambridge University Press, 2000), 377.

²³⁰ Llewellyn, *Funeral Monuments*, 362.

²³¹ Mortimer, "Ripon Minster Fabric Accounts", 112- 141.

²³² Brighton, "Enamel Glass Painters", 1, 142 - 3.

²³³ John Petty (d. 1508) was a fifteenth-century glass painter whose window in the south transept was restored by the Gyles workshop.

Maior /of the Citty of Yorke, who died the XV day of November, A^{nno} dom 1508/ And renewed by Edmund Gyles of the same citty, glasier A^{nno} dom 1662. HG aet 16.” [Fig. 19] The draft Chapter Act book for 1663 also confirms the involvement of Gyles junior at Ripon.²³⁴ As with the Petty Window, this text suggests the young Gyles worked under his more experienced father.

More broadly, however, when considering Gyles’ work at York Minster, it is helpful to look at the appointment of the rival Crosby workshop. Hampson states that ‘while the Crosby workshop was enjoying once again the benefits of regular work and contracts from the Dean and Chapter of York post-Restoration, Gyles was not’. She then suggests that ‘the answer may lie in part in the strength retained by the Guild of Glaziers, of which the Crosbys were still prominent members’.²³⁵ Although Gyles was not registered with the guild, his father Edmund was.²³⁶ [Fig. 20] So, given that Edmund had an overseer role for Minster glazing repairs during the interregnum, why was he not contracted instead of the Crosby workshop?²³⁷ The answer lies in York Minster being safeguarded as one of the articles of surrender signed by Sir Thomas Fairfax (1612-1671), the Parliamentary commander-in-chief, following the city's surrender on 16 July 1644. As no stained glass in York Minster was damaged during the Civil War, there was no need to employ a glass painter workshop like Edmund’s.²³⁸ There was, however, the need for ongoing maintenance and re-leading of existing windows.²³⁹

²³⁴ O’Connor, “John Petty”, 30-38. Hampson, “Casting a dim religious light”, 86.

²³⁵ Hampson, “Casting a dim religious light”, 140.

²³⁶ In 1662, Edmund’s name appeared in a list subscribing to a new book of ordinances for the York Guild with his indentured apprentice William Addison. *Guild of Glaziers and Plumbers of the City of York. Ordinances etc...* (41), CMOG Record Number 67361, Index Duncan 15491 Call Number NK5344.Y6. G95 Addison’s signature spelling is different from that written by others in the Register of Apprentices Indentures 1573-1688, which records a Willus Addinson.

²³⁷ Raine, “Proceedings of the Commonwealth Committee for York and the Ainsty”, 29.

²³⁸ John Rushworth, “Historical Collections: Proceedings in the North, 1644”, in *Historical Collections of Private Passages of State*: 5, 1642-45 (London: D Browne, 1721), 603-653.

²³⁹ Fairfax was to become a significant patron for Gyles after the Restoration, probably because Gyles, like his father, was a protestant who had supported the Parliamentary cause. Gyles to Thoresby (9th August 1707) in Hunter, *Letters of Eminent Men*, 61. Writing to Thorseby concerning his poor health, Gyles states that, ‘Mr. C. Townely has often come to sit by me in my troubles; I showed him Montroes Arms which he smiled at, and said; you protestants are very inclined to Popery in loving such reliques’,...

In 1660, Accepted Frewen (1588-1664) became Archbishop of York, and John Wilkins (1614-1672) became Dean of Ripon Minster and a prebend of York.²⁴⁰ [Fig. 21] Both were Crown appointments.²⁴¹ Further, John Drake was made Sub Dean of Ripon Minster, having been first appointed prebend in 1661 before being approved by Accepted Frewen in 1662.²⁴² Hampson notes that almost all prebendal appointments were ‘in the hands of the archbishop or the crown’ and Ripon was no exception.²⁴³ Both Frewen and Wilkins were at Magdalen College, Oxford, during the Laudian embellishment of the chapel, but held differing views as to the merits of the Laudian doctrinal approach to display. The dominance of state-appointed senior officeholders like Frewen, who held the same doctrinal position as Laud, and Wilkins, who was a ‘moderate’ Puritan, must have had significant impacts upon the liturgical enhancement of both York and Ripon following the Restoration.²⁴⁴ As Ripon Minster is a collegiate church under York diocesan patronage, Frewen, however, had broader responsibilities for the care of other places of worship, such as Ripon. Both Frewen and Wilkins would have been aware of Edmund’s overseer role at York during the Commonwealth period. It can be argued that Frewen awarded the York Minster contract to the Crosby workshop because they were plumber-glaziers (not glass painters) capable of undertaking leadwork repairs. In contrast, the Ripon Minster contract was awarded to the Gyles workshop because it was a glass painting workshop. It would be inconceivable that such an onerous and prestigious contract would be awarded to the young Gyles, and it must, therefore, have been awarded to his father as head of the family workshop, suggesting Edmund had some experience of glass painting. As mentioned, the Ripon Fabric Accounts record four payments for work done by ‘Mr. Gyles’ in 1664, 1666, 1669 and 1674. The first 1664 account, for ‘an additional coat in ye king’s arms’, indicates that the programme possibly started earlier around 1662 and that the going rate for a painted coat of arms was £3.00.²⁴⁵ Curiously, Hampson mentions that

²⁴⁰ John Henry, “Wilkins, John (1614–1672), theologian and natural philosopher”, *ODNB*.

²⁴¹ Henry, “Wilkins, John”, *ODNB*.

²⁴² Clergy of the Church of England Database.

<https://theclergydatabase.org.uk/jsp/DisplayAppointment.jsp?CDBAppRedID=240844>

²⁴³ Hampson, “Casting a dim religious light”, 129.

²⁴⁴ William Joseph Sheils, “Frewen, Accepted (bap. 1588, d. 1664), archbishop of York”, *ODNB*. In 1626, Frewen was elected president of Magdalen College, and in 1628 to 1629, he became vice-chancellor of Oxford. He subsequently supported his friend, William Laud, in becoming chancellor of the university in 1630. Frewen’s association with Laud was close in that they both held the same doctrinal positions. Under Frewen’s presidency, Magdalen College chapel was at the forefront of the Laudian reordering of churches in Oxford. Frewen was more of an Episcopalian than a Puritan, seeing himself as ‘protestant yet catholic.’ Henry, “Wilkins, John”, *ODNB*. Wilkins, a theologian and natural philosopher, was educated at Magdalen Hall in 1631 and from 1634 became a tutor there. John Henry, Wilkins biographer, comments that ‘His moderate puritan background may have influenced his move to Magdalen Hall, where Laudian Arminianism was resisted longer than at other colleges. Even there, however, Laudianism prevailed, and this may have precipitated Wilkins’s decision to leave Oxford in 1637’.

²⁴⁵ Mortimer, “Ripon Minster Fabric Accounts”, 112- 141.

the 1671 Minster Fabric Rolls record a verbal note stating that '*Mr. Edward Gyles*' received a payment of £3.²⁴⁶ Although probably a misspelling of Edmund, the note seems to imply that the Gyles family painted another armorial for York Minster whilst working at Ripon Cathedral, as the cost for the works is the same - £3. Although Edmund restarted his glazier business with two apprentices in 1659, he was, however, still working for the city corporation as a husband at least until 1664. So, how was it possible for the Gyles workshop to undertake such a sizable project at Ripon Minster from about 1662?²⁴⁷

During the early 1660s, when the Ripon Minster project began, running concurrently with the four armorials for St. Stephen's Acomb, Edmund employed two apprentices, Richardson and Addison, who would not become 'free of the Guild and the City' until 1665, and his son Henry, who was coming to the end of his training as a glass painter. Notwithstanding his ambition at Ripon, Edmund was working with what amounted to three apprentices. Therefore, he was probably painting himself, perhaps employing journeyman glass painters, and having some armorials painted in London. There is some evidence to support the latter. In an undated letter (c. 1664) to the Sub-Dean of Ripon Minster, John Drake, Gyles writes: 'My lord Darcies Arms which were done in London: contains only 28 feete of Glasses which after ye rat of 9 shill p foot...amounts to thirteen pounds besides ye charge of there Carriage from London and of setting up'.²⁴⁸ [Fig. 22] The arms were either commissioned from a London glass painter or painted by Gyles while in London himself, perhaps undergoing further glass painter training. It is also likely that, during this period, Morgan supplied the armorial drawings from London for the Gyles workshop to paint from.²⁴⁹ By 1674, probably the last year of the Ripon Minster contract, Edmund was sixty years old and in semi-retirement, which would account for Henry apparently seeking glass painter assistance from London through his virtuosi friend Kirke, who writes back:

²⁴⁶ Hampson, "Casting a dim religious light", 94.

²⁴⁷ Raine, "Proceedings of the Commonwealth Committee for York and the Ainsty", 11-17.

1664 - ordered Francis Cundall, one of the sequestrates of the city, to 'deliver unto Edmund Giles, the Citties husband, thre timber trees lying in the minte yard for the use of the publique'. In the same year, Edmund is called upon to assess the repairs for St. Cuthbert's church on behalf of the 'Bord'.

²⁴⁸ Henry Gyles to Sub Dean Drake, (c.1664), shelf mark MS Dep. 1980/1/86, Special Collections, University of Leeds.

²⁴⁹ Morgan also probably supplied the designs for Stephen's Church, Acomb, York, (1663), and the Merchant Taylor window (pre-1665).

I have been with Mr Addinall & wee together went to Mr Will: Sawers & enquired concerning Shuten ye glasse painter his reply was he thought he was in Yorkshire for Mr Melbourne writt to him to yt purpose & about 6 weeks or 2 months agoe hee lett, him have money for his journey & hee never saw him since; but now hee supposes he is gone into Holland with A companion yt he had with him; soe yt you can expect to heare noe more concerning him; ... ²⁵⁰

Mr Will: Sawers seems to have been an unidentified London glazier and Shuten's previous employer. It has not been possible to identify Mr Melbourne with any certainty.

Shuten is a Dutch name, with variations being Schouten, Schooten, Schoten, and Verschoten. The 'Shuten', working as a glass painter in London and Yorkshire in the 1670s, may have been from the same family as the decorative painter Arent/Ary van Schoten (? -1662), who lived and worked in Leiden near Delft. His father was the painter Joris van Schooten (1587-1652), who was trained by Evert van der Maes (1577-1656), son of Quirijn Coensz. van der Maes, glass painter in The Hague. Evert made one hundred and eight designs for 'glass paintings with scenes from the Old Testament for the windows in the royal bedroom in the church of Frederiksborg castle' (Denmark). ²⁵¹ What is important about 'Shuten' is that his name links him to a community of artists who also trained in glass painting, and that he may have been one of a small group of Dutch glass painters to work in England post the Restoration.

Kirke's letter also indicates that Shuten was working elsewhere in Yorkshire, near the completion of the Ripon Minster project. He may therefore have previously worked for Edmund at Ripon Minister and Henry was seeking to reemploy him. Kirke further writes that 'Mr. Addinall promised mee to enquire of an acquaintance of his yt he did beleieve could enforme him whatt Mr. Brace gives his journeymen'. ²⁵² Geoffrey Lane, however,

²⁵⁰ Kirke to Gyles, (20th June 1674), Stowe Ms. 745, f. 78, Hake, "Some Contemporary Records", 61-63.

²⁵¹ RKD Research, Netherlands Institute for Art History, <https://research.rkd.nl/en>; also, <https://ecartico.org/persons/12054>. Other painters with the same name in Holland are the fine art painter Johannes Florisz van Schooten (c.1626-1690), son of the well-known still life painter Floris van Schooten (1588-1656), who lived and worked out of Haarlem; the decorative painter Pouwels Jansz van der Schooten/Jacob Pouwelsz. van der Schooten (1609-1674 or 1640-1685), who was born in Leiden and worked out of Delft; and the Amsterdam-born painter Abraham van Schooten (1651-act.1693). It is unknown whether Joris was related to his contemporary with the same last name, the Amsterdam-born still life painter Floris van Schooten mentioned above.

²⁵² Kirke to Gyles, (20th June 1674), Stowe Ms. 745, f. 78. Hake, "Some Contemporary Records", 61-63.

notes that John Brace died in 1674, so Kirke's correspondence must have been before Brace's death, before 20 June.²⁵³ Further analysis of the Ripon Minster Fabric Accounts for 1674 also tells us that the Gyles workshop was not responsible for the installation of the windows, the record stating that:

W. Carnabies man pro setting up sDinnome pieces of the painted glasse &c. in Sr J. Lewis armes.' This inventory account immediately precedes the inventory account for 'Mr. Gyles pro renewing ym & Mr. Hutton's armes & Veepon pro carriage 6d.

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The Carnabies were 'plumber glaisers', perhaps local to the area.²⁵⁵ So, the Gyles workshop supplied the painted glass, Mr Veepon transported the glass to the site, and Carnabie's men fitted it; a supply chain that illustrates the separation of the trades during this period.

This review of the early works attributed to Gyles by Brighton examines their context and shows that either he is unlikely to have undertaken some of them unsupervised or that he was indeed the author. Edmund is presented as a glazier who may have learned some glass-painting knowledge from Dininckhof and, therefore, encouraged his son to study it. Moreover, Edmund's rise within York society allowed him to associate with those who could further support and mentor his son, with Henry possibly even staying with them in London. The issue of Henry's exposure to glass painting in London re-emerges with the Ripon Minster armorials attributed to him, in that some of them were evidently painted in London or by journeymen in York. When we consider all commissions undertaken during the early 1660s, and the human resources available to the Gyles workshops at this time (Edmund, Henry, and two glazier apprentices), the need for outside assistance is clear. How Gyles sought to make glass painting relatable to a new audience is now explored.

²⁵³ Lane, "Adding 'Beauty to Light'": 53.

²⁵⁴ Mortimer, "Ripon Minster Fabric Accounts", 141.

²⁵⁵ The name does not appear in the *Register of the Freeman of the City of York*, or the *Guild of Glaziers and Plumbers of the City of York*.

Mortimer, "Ripon Minster Fabric Accounts", 133.

4.0 GYLES, ARTISTIC GLASS PAINTER: 1661-1675

As an emerging glass painter, Gyles worked more independently, courting genteel patrons who were now more interested in art, science and print culture than heraldic glass painting. This section considers how Gyles sought to make glass painting relevant to a client base seeking to demonstrate their learning and taste by referencing classical art, new painting techniques, and sundial-making. This saw him combine courtly modes of miniature painting with technical knowledge of the complexities of gnomonics, using a variant copy of Norgate's *Miniatura*.²⁵⁶ Although etymologically, the Latin term *miniare*, relates to painting with red lead with clear connections to manuscript painting, when Gyles acquired his copy of *Miniatura*, the English term limning was used in the same context as the Italian term for a manuscript illumination, 'miniatura'.²⁵⁷ At the same time, the term miniature ('minute') became associated with very small paintings. For Gyles, therefore, the term 'miniatura' was doubly associated with light, as in 'illumination' and smallness as in 'miniature'. It denoted a small, illuminated painting. Brighton notes that only his work at Grays Court, his sundial at Nun Appleton and the scenes at Womersley give any indication of how Gyles painted miniatures.²⁵⁸ As will be shown, however, Gyles was informed, both theoretically and practically, in the art of miniature painting through his ownership of *Miniatura*.

Norgate's courtier's handbook is one of the most important sources for the study of early seventeenth-century miniature painting in England.²⁵⁹ He wrote two versions, the first in 1627-8 and the second in 1648-9, both of which are now lost.²⁶⁰ Until the publication of Sanderson's *Graphice* in 1658, which contained an inaccurate variant of Norgate's first treatise, all other copies were in manuscript form and available only to a highly select group of individuals. In total, there are only eighteen known variant copies of

²⁵⁶ Nigel Tubbs, *Philosophy and modern liberal arts education: freedom is to learn* (Houndmills, Basingstoke: Palgrave Macmillan UK, 2014), 71.

²⁵⁷ Katherine Coombs, *The Portrait Miniature in England* (London: V&A Publications, 1998), 7.

²⁵⁸ Brighton, "Enamel Glass Painters", 1, 120.

²⁵⁹ Norgate, *Miniatura*, 1 & 14. Liming was used in the Tudor and Stuart courts for portable miniature paintings, mainly portraits, which could be held in the hand.

²⁶⁰ Norgate, *Miniatura*, 10.

Norgate's *Miniatura*. Their order in the following discussion is not chronological but reflects their relevance to the broader Yorkshire region. The earliest owners of these manuscripts were artists and virtuosi linked to the courtly circle of Thomas Howard, Earl of Arundel (1585-1646). The intended audience and supporter for Norgate's first version of *Miniatura* was the court physician Sir Theodore Turquet de Mayerne (1573-1655), who undertook 'chemical and mineral experiments [...] in the technology of the arts'. The second version, meanwhile, was written at Arundel's request for his son, as Norgate was Arundel's herald in his capacity as Earl Marshal.²⁶¹ This revised and extended version was intended for a far wider audience, 'the Gentry of this Kingdomme, who delight in their improvement and the applause of connoisseurs'.²⁶² Arundel was an art collector and politician whose courtly circle (together with that of the 1st Duke of Buckingham, 1592-1628) set the template for seventeenth-century taste and connoisseurship before the Civil War.²⁶³ In commissioning the second version of *Miniatura*, and in encouraging the writing of other earlier 'courtier handbooks' such as Peacham's *The Art of Drawing* (published in 1606 before he became part of the earl's circle), and later Peacham's *The Complete Gentleman* (1622), Arundel helped disseminate a new ideal of gentility, one which 'encompassed knowledge of all art' as a wider extension of cultural and intellectual pursuits through the study of liberal arts.²⁶⁴ Gyles' ownership of one of the most important pre-Restoration courtly handbooks is significant, as it indicates that he had access to knowledge previously available only to a select group of elite individuals. Within this group, it is unclear how manuscripts circulated. So, how did an unknown glass painter from York acquire this secret technical manuscript from one of England's leading court miniaturists?

Now prosaically referred to as Harley MS 6376 under the Norgate title of *The Art of Limning, either by the Life, Landscape, or Historie*, Gyles titled his variant manuscript *Henry Gyles Booke*. Although Joe Kirby suggests that Gyles owned his variant copy from 1679, other textual evidence suggests 1664 as the date of acquisition.²⁶⁵ The manuscript is in two sections: the first is Norgate's *Miniatura*, with additions from Hilliard transcribed

²⁶¹ Hugh Trevor-Roper, "Mayerne, Sir Theodore Turquet de (1573–1655), physician", *ODNB*.

²⁶² Norgate, *Miniatura*, 12. 96.

²⁶³ Smuts, "Howard, Thomas", *ODNB*.

²⁶⁴ Smuts, "Howard, Thomas", *ODNB*.

²⁶⁵ Kirby, "The Painter's Trade in the Seventeenth Century": 9.

by Hoskins; the second section, all in Gyles' hand, contains recipes and technical information. Murdoch's *ODNB* for Hoskins, citing Buckeridge's additions to de Piles, confirms that Hoskins was probably taught by Nicholas Hilliard and excelled as a miniature face painter.²⁶⁶ Hoskins was held in such high regard by Norgate that in his revised second edition of *Miniatura*, he is referred to as one of the 'doctors' of miniature painting.²⁶⁷ This first section concludes on page 109 with the date 1664 written in Gyles' own hand, suggesting a possible date of acquisition.²⁶⁸ This date, however, coincides with Hoskins' death, so it may simply refer to that event. The second section by Gyles on page 111 details how to burnish gold and silver leaf, provided by Gyles Vermulen of London in 1679.²⁶⁹ Gyles, therefore, may have owned the manuscript from 1664 but did not begin writing in the spare pages until 1679. After reviewing all the likely ways Gyles may have obtained his copy and considering the content of other variants, two possibilities emerge, both based on the probability that Gyles acquired his variant in York.²⁷⁰

The first, now in the British Library (Add.12461), was copied by Daniel King, who dedicated the manuscript to Mary Fairfax (1638-1704), daughter of Sir Thomas Fairfax, the English Civil War commander (1612-1671). King was Mary's drawing tutor, so he would have lived for a period in Yorkshire. His variant copy of Norgate was likely written between 1653 and 1657. Gyles knew the Fairfax family well through patronage, as discussed previously, making a sundial for Nun Appleton Hall in 1670 and a religious history window for Denton Hall in 1700.²⁷¹ The only earlier evidence for Gyles knowing the Fairfax family before 1670 is a window for St. Stephen's Church, Acomb, which currently depicts the Royal Arms of Charles II, dated 1663, but previously, when in its earlier east window location, carried the Arms of Neville, Ryther, Fairfax, and Clifford.²⁷² What further complicates the story of King's manuscript is that the Leeds-based

²⁶⁶ Murdoch, "Hoskins, John", *ODNB*.

²⁶⁷ Norgate, *Miniatura*, 70.

²⁶⁸ Kirby, "The Painter's Trade in the Seventeenth Century": 9.

²⁶⁹ Gyles Vermulen, not to be confused with Henry Gyles, will be discussed later regarding japanning.

²⁷⁰ Manuscripts examined to establish if Gyles' own variant was a copy of another: (Add.12461) BL, NAL, L.14VI-1865, 1-42v V&A National Art Library - L.995-1906, Beinecke Library -Osborn fb36, (MS 33) YAS.

²⁷¹ Letter from Henry Gyles to Roger Geldart, (24th September 1690), British Library add. 78684, 15r-v f.1

²⁷² George Benson, "Notes on Acomb, Yorkshire," Report and papers of the Architectural Societies of the County of Lincoln, York, Archdeaonries of Northampton and Oakham and of Leicester, vol. 38, Part 1, (1926): 8. Neither Richardson nor Benson provides a reference for there being four separate Arms in the east window.

antiquarian Ralph Thoresby acquired it for his *Museum Thoresbyanum*.²⁷³ Although Thoresby does not record in his diaries when he gained the manuscript, we know that he became a close York virtuosi friend of Gyles after c. 1674. Therefore, Gyles most likely had access to King's variant before acquiring his own, if King was versed in the arts locally and open to sharing information. It is to be noted, however, as pointed out by Muller and Murrell, that King's variant does not compare with Gyles' in that it is more closely aligned to two others: V&A NAL, L.14VI-1865, 1-42v, and the copy to be found in the Beinecke Library Osborn fb36; therefore, one is not a copy of the other.²⁷⁴

Although Gyles probably knew of King's copy, the most likely source of his own may have been the nephews of John Hoskins. In his biography of Hoskins, Murdoch suggests that he was the uncle and one-time guardian of two significant miniaturists working in London, Samuel and Alexander Cooper (1609-1672 and 1609-1660). His sister Barbara married Richard Cooper in 1607 and became the mother of Samuel and Alexander. For some unknown reason, John Hoskins took charge of both his nephews and brought them up in London. Hoskins had a son of his own by his first wife, John Hoskins the younger (b.c.1617), who also became a miniaturist, and a daughter by his second wife, Christiana (b. Jan 24, 1654), who married her cousin, Samuel Cooper. Of interest is that John Hoskins the younger is first named as a witness to Samuel Cooper's will and secondly is named legatee for 'the residue of Samuel Cooper's studio, within the will of Christiana, Cooper's widow, dated 16 May 1693'.²⁷⁵ This thesis argues that there was significant cultural exchange between York and London, and, in this regard, Mary Edmond makes an important connection between York and the London miniaturists currently under discussion. A 1658 deposition for a probate case held at the York Assizes was signed by Samuel Cooper and Alexander Cooper, their cousin John Hoskins the younger, Samuel's wife Christiana, and her brother and sister, William and Thomasin Turner. Samuel and Alexander Cooper are described as 'limners' living in Covent Garden, and John Hoskins the younger is described as a 'limner and picture drawer' living in Dalham Yard [a misspelling of Durham Yard] near the New Exchange in the Strand'. Edmond demonstrates that John Hoskins the younger visited York at least twice in 1657 and 1658,

²⁷³ Ralph Thoresby, *Ducatus Leodiensis*, (London: 1715): 525.

²⁷⁴ Edward Norgate, *Miniatura; or, The Art of Limning*, ed., Jeffrey M. Muller & Jim Murrell, (New Haven & London: Yale University Press, 1997): 217.

²⁷⁵ Murdoch, "Hoskins, John", *ODNB*.

when Henry would have been thirteen and still training.²⁷⁶ At the time of the deposition, Christiana's family, the Turners, lived in St. Olave, Marygate, York, which was only a ten-minute walk from Micklegate, where the Gyles family lived. Within such a close artistic and craft community, it is inconceivable that the families did not know each other. As John Hoskins the elder did not die until 1664/5, it is unlikely that Gyles acquired the manuscript before then. More likely, Gyles acquired his copy from either John Hoskins the younger, who would have inherited the manuscript upon his father's death, or from Christiana's family, the Turners. Although speculative, this possibility raises two questions: why did Gyles want a copy, and, as his copy, unlike later variants, contained instructions for limning in both water and oil, with the latter being added by Hoskins, might both these techniques have informed his glass painting? Gyles would have been familiar with some techniques, such as gummed water for limning, which is very similar to the method Gedde described in 1615 for glass painting.²⁷⁷ But he would not have been familiar with others, such as using smalt as a connective pigment between media, sugar candy as an alternative to gum, and making fat oil, which would have allowed his painting to remain open longer.

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By 1665, only one year after acquiring *Miniatura*, Gyles painted miniatures of birds and animals for the family's genealogical window (the Pedigree Window) at his home in Micklegate.²⁷⁹ He then painted an eagle and a parrot in enamels for Bolling Hall, six Virtues in Grays Court, York, and a sundial for Nun Appleton Hall, to cite but a few.²⁸⁰ [Figs. 23 & 24] Some of these works can be described as 'large miniatures' executed in a combined watergum/oil limning technique. Interestingly, the likely author of Gyles' version of *Miniatura*, the court miniaturist Hoskins, was an innovator of the large miniature landskip. As Murdoch notes, Hoskins 'showed great ambition, enlarging both the size of his miniatures and their scope, by pioneering the use of landscape or sky

²⁷⁶ Mary Edmond, "Samuel Cooper, Yorkshireman - and Recusant?" *The Burlington Magazine* 127, no. 983 (1985), 83-4.

²⁷⁷ Norgate, *Miniatura*, 238.

Gedde, *Booke of Sundry Draughtes*, unpaginated.

²⁷⁸ Norgate, *Miniatura*, 129. Sugar candy was refined cane sugar cultivated in the south of France and Spain, but imported into England through Venice, where refining was carried out, from 1544. Refining was later carried out in London. The term 'staying open for longer' refers to the process of preventing the pigment/medium from drying out too quickly.

²⁷⁹ Although not catalogued, Gyles' pedigree window is believed to be in the York Museum's Trust.

²⁸⁰ Brighton, "Enamel Glass Painters", 1, 121. Print sources identified by this author.

backgrounds'.²⁸¹ Gyles' painting, in works such as his sundial for Nun Appleton Hall, points to him following Hoskins' c.1640 additions and techniques in Norgate's *Miniatura*.²⁸² As Gyles was working with a synthesis of both, it is not necessary to separate Norgate's contribution from Hoskins to understand Gyles' response to Norgate's treatise.

Gyles' education through *Miniatura*, however, extended beyond the technical to the application of current art theory. In discussing the various comments expressed among contemporary European painters regarding the use of black and white work, Gyles' variant states that:

some Authors say that there are but 2 colours, which are white and blacke as appraseth in the well graven prints of divers masters, & indeed all painting is performed by lighting and shadowing which may be termed white & blacke (for light and dark) in what colour so over it be therefore we will speake of white and blacke 1st whether they be the only colours or not (colours at all as some say) For my part I think them worthiest to be 1st placed.'²⁸³

It is curious that Norgate's thoughts on the merits of this technique are not recorded in Hoskins' variant, whereas they are clearly articulated in later variants of his second version, such as Bodl. Tan.326 and RS 136. Both make clear that he is unsure as to the merits of this illusionary technique, calling it a 'deceitfull juggling and [a] witchcraft of lights and shadows into a mode of factual reportage', so he was certainly aware of the limits of pictorial representation, and in no doubt, of the ability of black and white work to render nature more powerfully.²⁸⁴ This distrust of visual images from the early seventeenth century will be considered further in chapter 2, particularly in relation to the rendering of scientific illustrations for the Royal Society. Further, and building on the technique of

²⁸¹ Murdoch, "Hoskins, John", *ODNB*.

²⁸² Norgate, *Miniatura*, 15. As Muller and Murrell, like Hardy, primarily discuss Norgate's second manuscript written in 1648 (Tanner 326 Bodl.) not his first, their research does not help in answering the question raised. Therefore, to prove this point, which is something this author would very much like to do, would involve comparing the first known variant of Norgate's 1627/8 *Miniatura* manuscript (MS Harl. 6000) with Gyles' c.1640 variant (Harl. MS 6376) - copied and added to by John Hoskins. Unfortunately, the work and time required to make this comparison are beyond the scope of this thesis. It will, however, form part of further post-doctoral research on Gyles.

²⁸³ *Henry Gyles Booke*, Harley MS 6376 f. 23.

²⁸⁴ Norgate, *Miniatura*, 105-6.

black and white work, Norgate later discusses *Mezzo tinto*, again in his second version - the term does not appear in the first version treatise.²⁸⁵ This is significant, as at the time of writing, between c.1627 and c. 1640, the term had nothing to do with mezzotint printmaking, which did not emerge in England until the 1660s; the term simply meant overpainting a mid-tone with light or dark to create *Chairo oscuro*.²⁸⁶ With the courtly adoption of black-and-white work and the growing popularity of landscape as a subject, Gyles' 1670 sundial for Nun Appleton Hall makes more sense.²⁸⁷ Only four of Gyles' sundials are known to have survived: at Tong Hall (undated), Nun Appleton Hall (1670), University College Oxford (1687), where the dial incorporates a figure of Christ, and at Grays Court, York (c. 1690).²⁸⁸ Painted for the former Commander-in-Chief of the Parliamentary armed forces, Sir Thomas Fairfax, 3rd Lord Fairfax of Cameron, Gyles' sundial for Nun Appleton Hall may be the first allegorical miniature landscape in British glass painting.²⁸⁹

Following a long and successful campaign, by 1649, Fairfax was physically drained and politically frustrated by his Presbyterian opponents in Parliament.²⁹⁰ Significantly, and probably influenced by his wife Anne, Fairfax also chose not to attend the King's trial as both were opposed to regicide, whereas Cromwell was 'committed to bringing the king to justice'.²⁹¹ By 1650, however, while Cromwell was suppressing the Irish uprising, and while requests were made that he should travel north to deter any possible threat of Charles

²⁸⁵ Norgate, *Miniatura*, 146.

²⁸⁶ Norgate, *Miniatura*, 93.

²⁸⁷ Stained glass sundial, object number: YORAG: 1420.a, York Museums Trust, York.

²⁸⁸ Brighton, "Enamel Glass Painters", 1, 117.

²⁸⁹ Brighton, *Henry Gyles, Virtuoso*, 216-18. To be mentioned, in relation to the Nun Appleton Hall sundial is another dial made by Gyles for Tong Hall near Bradford for Sir George Tempest, 2nd Baronet (1672-1745), which is still surviving in its original fanlight position above the main entrance door. Although not signed or dated, both Knowles and Brighton concur that the dial was painted by Gyles in c.1702. The Tong Hall dial is similar to the Nun Appleton Hall dial in that it follows the same format for the seasons with the same quotations from Ovid's *Remediorum Amoris*. The main difference between the two, however, is in the print source used for the four seasons (probably supplied by Pierce Tempest) - here at Tong Hall, although not exact copies, these personifications of the four seasons are taken from the right-hand side of Joan Blaeu's "World Map" of 1648. After Knowles restored it, he donated the original leadwork, with the Giles milling marks, to the Victoria and Albert Museum, which proves it was made by Gyles. Further, Brighton has shown that the dial is contemporary with Sir George Tempest's embellishment of the house in 1702.

²⁹⁰ Andrew Hopper, "Images of Fairfax in Modern Literature and Film", in *England's Fortress: New Perspectives on Thomas, 3rd Lord Fairfax*, eds., Andrew Hopper, and Philip Major (London and New York: Routledge, 2016), 139.

²⁹¹ Jacqueline Eales, "Anne and Thomas Fairfax, and the Vere Connection", eds., Andrew Hopper, and Philip Major. *England's Fortress: New Perspectives on Thomas, 3rd Lord Fairfax*, (London and New York: Routledge, 2016): 163.

II invading England with the help of a Scottish army, Fairfax resigned and retired to Nun Appleton Hall in Yorkshire.²⁹² The built history of the hall can be traced back to the unpublished manuscript of Thomas Widdrington (kt. 1639, d. 1664), Recorder of York, entitled *Analecta Eboracensia, a history of the city* (1638).²⁹³ Although frequently copied, Widdrington's manuscript was eventually published by the Revd. Caesar Caine in 1897. Many of the entries cited by Caine, like that for Nun Appleton Hall, were published earlier in Francis Drake's '*Eboracum*' of 1736 with additions.²⁹⁴ As noted by Widdrington, the Fairfaxes obtained the land following the Reformation: 'Lord Thomas Fairfax, whose ancestors had a grant of the site and estate of this nunnery from the dissolution, or near it, built a handsome house here ...'²⁹⁵ Caine, quoting Markham, states that "the rebuilding of the house was begun in c. 1638 and was completed shortly before Fairfax retired in 1650".²⁹⁶ It is, however, inaccurate to presume that Nun Appleton was built in one phase and that Fairfax did not make alterations, which he did in the remaining twenty years following his retirement.²⁹⁷ The inclusion of Gyles' sundial in 1670 (height 79.0 cm, width 48.5 cm) formed part of Fairfax's interventions which made the house more baroque in appearance, 'close to the form depicted in the Daniel King engraving (Harley MS 2073, fo. 126) c. 1655/60, with perhaps further additions having been carried out by George Villiers, the 2nd Duke of Buckingham (1628-1687) after 1671'.²⁹⁸ Although Brighton assumes that, following its purchase by William Milner in c. 1711, the house was demolished, with Gyles' dial being retained, Milner simply undertook many alterations himself, as did Buckingham, with the dial remaining in its rear position.²⁹⁹ Regarding location, Gyles' sundial was positioned over a door in a vestibule overlooking the rear garden, with its gnomon (the part of a sundial that casts a shadow) facing outward so the dial could be read from within.³⁰⁰ John L. Carmichael, a renowned specialist and recorder of stained-glass sundials, has shown that Gyles' dial was painted to decline south and remained in its

²⁹² Clements Markham, *A Life of the Great Thomas Fairfax, Commander-in-Chief of the Army of the Parliament of England*, (London: Macmillan and Co. 1870): preface V. Fairfax resigned in 1650.

²⁹³ Powell, "Andrew Marvell, 281.

²⁹⁴ Powell, "Andrew Marvell, 281.

²⁹⁵ Drake, *Eboracum*, 385.

²⁹⁶ Sir Thomas Widdrington, *Analecta Eboracensia: Some Remaynes of the Ancient City of York*, ed., Caesar Caine, (London: C J Clark, 1897): 282-3.

²⁹⁷ Richard Nash, "Gentlemen's Recreation and Georgic Improvement: Lord Fairfax on Horse Breeding", eds., Andrew Hopper, and Philip Major. *England's Fortress: New Perspectives on Thomas, 3rd Lord Fairfax*, (London and New York: Routledge, 2016): 283.

Powell, "Andrew Marvell, 283.

²⁹⁸ Powell, "Andrew Marvell, 283.

²⁹⁹ Brighton, *Henry Gyles, Virtuoso*, 157.

³⁰⁰ Hans Behrendt, "Alte Englischen Fenstersonnenhrehn (II)", ed., Hans Behrendt, *Schriften der Freunde alter Uhre in der deutschen Gesellschaft für Chronometrie*. Band 29, (1990): Preface.

original south-facing location until the York Glaziers Trust removed it in 1990 for conservation and relocation.³⁰¹

Although thought by Brighton to be a copy of *Putto* by Pieter van Liesebetten (1630-1678), after Titian, the central painting is, in fact, an adaptation of Liesebetten's *The Little Tambourine Player*, after David Teniers the Younger (1610–1690), where the tambourine has been replaced with a sundial.³⁰² The four-season landscapes are from prints by Cornelis van Dalen II (c.1638-1664) after Diepenbeeck.³⁰³ These landscapes, set within beaded ovals like Isaac Oliver's framed miniatures, suggest familiarity with Oliver's work. As with most seventeenth-century glass-painted sundials, the numerals on the yellow-stained ring, reminiscent of present-day clock faces, are painted in black.³⁰⁴ Painted as large miniatures on single panes of glass, these allegories in their mono form are unlike any of Gyles' other miniature glass paintings such as the Virtues in Gray's Court in York which are painted in coloured enamels.³⁰⁵ The sundial contains two text plates describing the four seasons and the inscription *Qui Non Est Hodie* (Who is not today), from Ovid's *Nasonis Remedia Amoris* (*On the remedies of love*) first published in 1664.³⁰⁶ Although Ovid, from the classical 'Golden Age' of Latin literature, played an important role in Renaissance humanist discourse, by the Early Modern period, the focus of philosophical investigation shifted slightly from the study of classical letters to natural philosophy and the beginnings of the sciences.³⁰⁷ This combining of classical letters with Enlightenment science in Fairfax's sundial, however, perhaps reveals more, as Ovid may not be the only classical reference. Two of Fairfax's private pursuits following retirement were the education of his daughter and his patronage of literature. By employing the metaphysical poet and translator of psalters, psalms and biblical verse, Andrew Marvell

³⁰¹ https://www.advanceassociates.com/Sundials/Stained_Glass/sundials_SGS1.html.

³⁰² Knowles, "Henry Gyles", *Walpole Society*, 11, 54. For image comparison, https://commons.wikimedia.org/wiki/File:Peter_van_Lisebetten_-_Little_Tambourine_Player_SVK-SNG.G_11965-81.jpg

³⁰³ The fact that Gyles used a print after Diepenbeeck may suggest knowledge of his work, perhaps as a journeyman glass painter between 1630 and 1640, as previously discussed.

³⁰⁴ Geoffrey Lane, "The Tyttenhanger Sundial", *Vidimus* 59 (September 2019) <https://vidimus.org/issues/issue-59/feature/>

³⁰⁵ Dungworth and Harrison, "Belsay Castle", *Vidimus* 80.

³⁰⁶ P. Ovid, *Ars amatoria*, (Frankfurt: 1664), 187 - 188. Poma dat autumnus, Formosa est messibus aestas – (Autumn gives it apples/ [Sumer], The beautiful harvest). Ver praebet fores, igne levatur hiems – (The Springtime/Winter relief and fire). The shortened text probably recalls the passage in Ovid more generally, & specifically the full line 'He who is not prepared today will be less so tomorrow'.

³⁰⁷ Nastassja Pugliese, "The Reception of Classical Latin Literature in Early Modern Philosophy: the case of Ovid and Spinoza." *Revista Archai*, (25), 2.

(1621-1678), to tutor his daughter he satisfied both. While Marvell's 1651 country house/topographical poem *Upon Appleton House* describes the estate and reflects Fairfax's political and religious unease, its poetic imagery was feasibly the reference point for Gyles' sundial.³⁰⁸ Although much of the imagery is pastoral, key sections allude to the four seasons, like xliii Winter Quarters, xii Summer Suns, xciv, Springs Bushes, and Autumn xxxiv *when th' Inchantment ends*.³⁰⁹ Marvell's poetry, characterised by its blurred boundaries, has often been compared to the visual arts because of its 'pictorial qualities'. In fact, the linking of his poems to the visual arts is not a 'radical concept' as academics 'have long noted his talent to combine the intangible with the pictorial'.³¹⁰ It is not this author's intention to provide a literary commentary on the poem but to make a structural point only; that if as some academics suggest, *Upon Appleton House* can be considered a form of Georgic poetry, then the Roman poet Virgil (70-20BC), the author of the *Georgics*, becomes an additional classic reference for Gyles' sundial, and the sundial's meaning becomes more complex. In discussing Marvell's *Two Songs At the Marriage Of The Lord Fauconberg And The Lady Mary Cromwell*, Joan Faust argues that Marvell's works are not just pastoral, but 'Georgic pastoral' because the language implies 'work rather than contemplative shepherds piping songs'.³¹¹ Also, Anthony Low's short section on Marvell and the Civil War in *The Georgic Revolution* draws our attention to the garden flowers and the actions of the bees, commenting, 'It is a pleasant conceit to turn guns into flowers and soldiers into bees, yet, ominously, another grimmer transformation is taking place in the outer world', alluding to Marvell's use of military metaphors to satirise the New Model Army to amuse his patron.³¹² Marvell's bees mimic Virgil's anthropomorphising of bees in Book 4. His use of the Georgic mode, therefore, allows us to read *Upon Appleton House* as a Georgic poem and to apply the mode to Gyles' sundial. *Georgics* was written between 37 B.C.E. and 30 B.C.E. as the civil wars in Italy were ending, and its themes of agriculture, land ownership and management can be seen as a rejection of war, particularly the Civil War, and a return to the land.³¹³ Now, a didactic literary genre about agricultural themes,

³⁰⁸ Andrew Hopper, Philip Major, "Introduction", in *England's Fortress: New Perspectives on Thomas, 3rd Lord Fairfax*, (Oxon: Routledge, 2016), 17.

Ruth F. Glancy. *Thematic Guide to British Poetry*. Greenwood, 2002. 170. A 'Country House poem' is one that complements the patron-owner. The theme was popular in the seventeenth century.

³⁰⁹ Andrew Marvell, "Upon Appleton House", in *Luminarium: Anthology of English Literature*, unpaginated, <https://www.luminarium.org/sevenlit/marvell/appleton.htm>

³¹⁰ Joan Faust, "'Upon Appleton House': Marvell's creation of a liminal realm", in *Explorations in Renaissance Culture* 35, no. 1 (2009): 54 -55.

³¹¹ Joan Faust, "'Sounding to Present Occasions': Andrew Marvell's 'Two Songs at the Marriage of the Lord Fauconberg and the Lady Mary Cromwell'", *Marvell Studies* 3 (2): 14 (2018): 1-28.

³¹² Anthony Low, *The Georgic Revolution* (Princeton, NJ: Princeton UP, 1985), 282.

³¹³ Weeda, Leendert. *Vergil's Political Commentary* (Warsaw, Poland: De Gruyter Open Poland, 2015), 82-84.

‘*Georgics*’, is also a rational reflection on humanity’s bond with the natural world, the ruinous effects of time, and the socio-political aspects of the day.³¹⁴ By drawing on aspects of Marvell’s poem, such as the Four Seasons, Gyles’ sundial can be read as a pictorial poem and a visual addendum to *Upon Appleton House*. Returning to the sundial’s inscription ‘Who is not today’ clearly announces Fairfax’s relevance to the politics of the day and to his retirement, preparing to make the most of his time left, whilst at Cupid’s feet is an hourglass- a symbol of life’s transience- and a chaplet for personal devotion and prayer, acknowledging Fairfax as a literary scholar who translated the psalms. The scene is also prophetic, as Fairfax died only one year after the sundial’s installation. To what extent Fairfax directed the theme of the sundial is unknown, but given his own literary and antiquarian interests, in addition to his extensive personal library, it is likely that he instructed the theme and may have provided the print sources which Gyles adapted.³¹⁵

Even though Gyles would have known of Dininckoff’s 1585 dial at Gilling Castle in Yorkshire, he must have become aware of the commercial potential of painted dials when visiting London or from his London friends and family. [Fig. 25] From the first half of the seventeenth century, London had become the centre for glass-painted dial manufacture, which unsurprisingly coincided with the founding of the London Clockmakers in 1631. During this period, three dial makers dominated the painted sundial market: Sutton, Oliver and Richard Dutton (before 1640-1686).³¹⁶ Lane has traced the presentation and arrangement of mid- to late-seventeenth-century glass dials back to Sutton’s (now lost) 1641 dial and suggests that collectively these dials formed a generic type which he terms ‘London dials’. With their outside-facing gnomons (the part of a sundial that casts a shadow), time could be read internally, from inside the building. These dials, marrying art and gnomonics, were valued not just because they demonstrated a patron’s liberal arts leanings, but also because they let the owner adjust the ‘Unequality of Natural Time’ to correct clocks and keep local time.³¹⁷ Referring to Gyles’ dials in his analysis of London dials, Lane writes that they ‘are quite distinct from their London

³¹⁴ Leendert, *Vergil’s Political Commentary*, 93-94.

³¹⁵ William J. Connor, THE FAIRFAX ARCHIVES: A CONTINUING PAPER CHASE, *J Archives: The Journal of the British Records Association*, 58,1: (2023): 51.

³¹⁶ Geoffrey Lane, “Glass Sundial Makers of 17th Century London”, *The British Sundial Society Bulletin*, 18i, (March 2006): 40-44.

³¹⁷ John Smith, *Of the Unequality of Natural Time* (London: Joseph Watts, 1686), 1.

counterparts'.³¹⁸ But this author would suggest that sufficient similarities exist to show that Gyles must have seen these London dials, and perhaps even been introduced to them by a London glass painter. Gyles' dials do differ from the London dials in one respect, however, in that the London dials are incorporated into either family or guild arms, which in appearance resemble the work of Painter-Stainers, whereas Gyles' dials are set within classical genre scenes taken from prints. So, although Gyles worked for similar patrons, his response was that of an artist in reflecting his patron's scientific and humanist interests.

In the broader York virtuosi context, to be discussed in chapter 2, Gyles' Nun Appleton Hall dial connects his practice with the Royal Society in London as its making was rooted in gnomonics, horology and opticks, favoured subjects within the Society.³¹⁹ In its elevated position above the exterior doorway, the dial would have required optical assistance for connoisseurial and scientific appreciation. By the mid-seventeenth century, optical instruments had become a significant part of natural philosophical research, as seen in publications such as Hooke's *Micrographia*, which revealed the unseen in nature. In Gyles' lifetime, connoisseurs, or as Alexander Pope described them later, 'blind old Scholiasts', also used quizzing glasses to examine everything 'bit by bit'.³²⁰ Also called pocket microscopes, or 'flea glasses', these compound instruments were widely available and would have been used by Lister and his virtuosi colleagues 'to explore smaller realms'.³²¹ Gyles' Nun Appleton Hall dial would have required similar optical instruments to be viewed in detail. Horology, the study of how nature changes through time, portrayed as part of the mechanical 'clockwork universe', was studied by Wren, Flamsteed, and Newton while at Oxford.³²² Newton later published his theories of 'universal gravitation' in *Principia* (1687).³²³ The study of how nature changes through time was also a theme

³¹⁸ Lane, "Glass Sundial Makers": 45-6. In reference to Gyles' dials, Lanes states that 'the half-hour lines are drawn on the chapter-ring and terminate in decorative finials, as on clocks of the period; [also that Gyles] adopted the cross pattée only very late in his career, marking midday numerically at least until 1687'.

³¹⁹ The Royal Society was formed in 1660 for Improving Natural Knowledge.

³²⁰ Harry Mount, "The Monkey with the Magnifying Glass: Constructions of the Connoisseur in Eighteenth-Century Britain", *Oxford Art Journal* 29, no. 2 (2006):173.

Also, Alexander Pope, *The Dunciad*, book 4 (London, M. Cooper, 1743), 233-4.

³²¹ Edward G. Ruestow, *The microscope in the Dutch Republic: the shaping of discovery* (Cambridge: University Press, 1996), 15.

³²² Kerry Downes, "Wren, Sir Christopher (1632–1723), architect, mathematician, and astronomer", *ODNB*. Roy Porter, *Enlightenment, Britain, and the Creation of the Modern World* (Bath: The Penguin Press, 2000), 138. Discusses Newton's 1687 *Philosophiae Naturalis Principia Mathematica*.

³²³ Sophie la Roche, *Sophie in London 1786*, (Jonathan Cape, London:1933) 195.

Roy Porter, *Enlightenment, Britain and the Creation of the Modern World*, (Bath: The Penguin Press, 2000) 138. Discusses Newton's 1687 *Philosophiae Naturalis Principia Mathematica*,

explored in the contemporary creative arts, as in English experimental theatre which presented illusionistic scenes to depict changes in the weather, and in still life vanitas paintings like Edward Collier's *Volume of Wither's 'Emblemes'* (1696) which reminded the viewer of the passing of time and the transitory nature of life.³²⁴ These early studies in science and art helped establish horology as a suitable subject for artists to explore pictorially. So, in setting the dial within the four seasons, Gyles was also referencing 'the changing state of nature in time' as presented in painting, theatre, and science.

The Nun Appleton sundial illustrates Gyles' adoption of courtly modes of miniature painting and black and white work, as described in *Miniatura*, an approach to glass painting in which works by Greenbury provided a tangible model. Between 1637 and 1640 Greenbury was commissioned by Magdalen College, Oxford, to paint the west window and smaller lower windows in the antechapel in black and white work.³²⁵ This new scheme formed part of President Accepted Frewen's Laudian re-aggrandising of the chapel, which also included the laying of a black and white marble pavement in 1635.³²⁶ Greenbury's glazing programme for the eight three-light transomed windows contains forty-eight saints from Dürer's *The Austrian Saints* (1515-1517), his *Virgin and Child on a Crescent*, and other figures from Israhel van Meckenem's *St Quirinus and three other saints*.³²⁷ [Fig. 26] Although the print sources were one hundred and twenty years old when selected for use, in choosing the works of Dürer (1471-1528), the foremost artist of the Northern Renaissance in the creation of religious history woodcuts, the College's and Greenbury's choices amounted to an affirmation of Catholic themes which also acknowledged the tensions between humanist ideology and the cult of saintly hagiography.³²⁸ Given the mechanised manufacture of Dürer and Meckenem prints at this time, copies of *The Austrian Saints* would have been readily accessible on the open market; like Gyles' use of prints previously discussed, Greenbury would have been a collector of significant print sources. The west window follows the same Catholic affirmation as the transomed

³²⁴ Hook, *The Baroque Age in England*, 36.

³²⁵ Greenbury contract, FA5/1/1F/3 Magdalen College Records, Oxford.

³²⁶ Sheils, "Frewen, Accepted", *ODNB*. Also, MC: FA5/1, Magdalen College Archives, Oxford.

³²⁷ Albrecht Dürer, "Austrian Saints, 1515 – 1517", accession Number: 1975.653.90, © Metropolitan Museum of Art, New York.

³²⁸ David Collins, "Conclusion", *Reforming Saints: Saints' Lives and Their Authors in Germany, 1470-1530*, in *Oxford Studies in Historical Theology* (New York, 2008; online edn, Oxford Academic, 1 Jan. 2008), 1. 6. 7.

windows in the antechapel, containing a Last Judgement based on Michelangelo's design for the Sistine Chapel, as sketched by Casper or Christopher Schwarz in c. 1590.³²⁹

Greenbury's scheme, however, owes more to Arundel and the courtly aesthetic than first appears. Arundel had a passion for antiquity and had amassed a considerable collection of antique sculptures, which he displayed in his sculpture gallery built by the English architect Inigo Jones (1573-1652).³³⁰ [Fig.27] Unlike the Dürer print sources, Greenbury set his saints for the antechapel on plinths with 'egg and dart' detailing (like cornices) in a similar presentation to Arundel's sculpture display in his long gallery. Gyles' use of black and white work in his glass painting was, therefore, deliberate, not just mimicking antique sculpture but also claiming the same permanence and value for glass painting as carved stone through the illusion of heightened relief, an idea promoted by John Evelyn (1620-1706) in *Sculptura* in 1662.³³¹ Gyles' sundial, therefore, connects him to courtly knowledge and the Royal Society, as *Sculptura* was written within its orbit, and points to his desire to make glass painting relevant to a new audience.

Miniatura was Gyles' practical and theoretical liberal-arts tutorial, which enabled him, through self-learning, to separate his practice from traditional guild structures. His pursuit of courtly modes of knowledge, and his increasing involvement in virtuosi activities, however, clearly strained his relationship with his father, Edmund and the viability of the family business; a situation alluded to by his friend Kirke in 1674:

I am glad to heare yt you have routed ye 2d; I hope you have so much courage guarded with truth on your side yt you will be able to withstand your enemies; it hath pleased God, to take away your great opposer and I hope ye rest are easily

³²⁹ Janie Cottis, *The Great West Window in Magdalen's Ante-Chapel*, Magdalen College Records (Oxford: 1993), 59.

³³⁰ Hook, *The Baroque Age in England*, 15.

³³¹ Martin Myrone, "Engraving's Third Dimension", in *Court, Country, City: British Art and Architecture, 1660-1735*, eds., Mark Hallett, Nigel Llewellyn, Martin Myrone, *Studies in British Art*, 24 (New Haven: Yale University Press, 2016), 483.

subdued. I have now some hopes yt your father will bee more tender over you since his main stay and encourager is gone.³³²

Who this ‘great opposer’ was is not known. But Kirke suggests he had recently died and had influenced Gyles’ father. How Gyles took control of the family business after his father’s death is now explored.

5.0 A NEW BEGINNING: 1676-17004

In 1676, Edmund died. Given how little Henry received in his will, one must conclude that he was not on the best of terms with his father.³³³ Brighton attributes this to Gyles’ other interests, concluding he was ‘something of a dilettante’ with no ‘head for business’.³³⁴ It may, however, have had something to do with Gyles’ re-invention of himself as a liberal artist and his making of sundials, such as the one he made for Nun Appleton Hall, which was unlike any other, a hybrid between art and science. A letter from Kirke, written shortly before Edmund Gyles’ death in 1676, suggests that his father thought his son was spending too much time on this novel venture:

I am very sorry yt you are forbid in makeing of ye Dials, & I am, more troubled yt I finde myselfe unfitted to serve you therein answerable to my desires and former inventions. I have sometimes told you yt I never perfected myselfe in any Art, but as soone as I had learnt so much of it as I saw enabled mee to compasse it my selfe, I then left ye finishing it as an employment for my future retirement att home. About 5 or 6 years agoe I lookt soe farre into Dialing yt I understood (as I flattered myselfe) most of ye Rules yt I read concerning it, but I never put them into practise.

³³⁵

³³² Kirke to Gyles, (20th June 1674), Stowe Ms. 745, f. 78, Hake, “Some Contemporary Records”, 61-63.

³³³ Will of Edmund Giles, (1676).

³³⁴ Brighton, “Enamel Glass Painters”, 1, 83.

³³⁵ Thomas Kirke to Henry Gyles (1676), Thoresby. Ms. 3/81, YAS.

As Kirke's letter also contained an offer to teach Gyles the art of gnomonics at his home in Cookridge, Edmund's imminent death may have emboldened Gyles to reconnect with his passion for making sundials. Kirke's letter clearly explains why Edmund stopped his son from pursuing manufacturing; Henry could not calculate the geometry. Although Gyles probably had access to practical guides like Fale's *Horologiographia* (1652), it seems he was struggling to apply the theory.³³⁶ Gentlemen like Kirke were expected to have more than a passing interest in the mathematical art and science of gnomonics and 'dialling', especially as 'Arithmetic' was one of the seven subjects comprising a gentleman's liberal arts education.³³⁷ Not only was Kirke an obvious person for Gyles to seek help from, but his amateur interest in sundials also points to the emerging connoisseur market Gyles was targeting. By 1682, however, Gyles was once again seeking out glass painters in London through Smith, who replies: '... here is about halfe a dos: Glasse painters in towne I have not time to discourse them as yet ...'³³⁸ The date here is crucial and will be discussed in connection with his glass making in chapter 2.

It was also around this time that Gyles married, possibly for family-or trade-protective reasons, as with his sister's marriage into the Smith family. Although a 1682/3 letter from Lodge names Gyles' wife Anne, Gyles' 1709 will refers to his wife as Hannah, so it appears Mrs. Gyles went by both.³³⁹ Brighton does not identify Mrs Gyles' surname in his pedigree of the Gyles family. Henry and his wife had six children, but only their first child, Rebecca, survived into adulthood, with the others dying not long after birth.³⁴⁰ Rebecca (Rabeckay Gilles) was born on 26 September 1682.³⁴¹ Gyles' wife was almost certainly local. As previously noted, for generations the Gyles family worshipped at St. Martin-cum-Gregory in Micklegate, York, where the parish records document their births, deaths, and marriages. Although not the only place to find a spouse, the local parish church was the most likely point of contact between the sexes to facilitate matchmaking. Unfortunately, there is no record of Henry marrying a Hannah or an Anne in the St. Martin-cum-Gregory records. While trawling the same records before 1682, an Anne

³³⁶ Thomas Fale, *Horologiographia, The art of dialling* (London: Felix Kingstone, 1652), 2.

³³⁷ Tubbs, *Philosophy and modern liberal arts education*, 71.

³³⁸ Smith to Gyles, (1682), Stowe Ms. 746, f. 59. Knowles, "Henry Gyles", 64-65.

³³⁹ William Lodge to Henry Gyles, (Leeds, 19th Feb 1682/3), Ms. 3, f.98, YAS. 'My services to thy feare Anne and they mother...'

Will of Henry Gyles, (1721/2).

³⁴⁰ Brighton, "Enamel Glass Painters", 1, 373.

³⁴¹ Bulmer, *The Parish Registers of St. Martin-cum-Gregory*, 103.

Peckett, born on 29 July 1659 was found, but she died in June 1664.³⁴² Four Hannahs were also found, but only one would have been the right age to marry before 1682 – Hannah Peckett (Bap. 28 Sept. 1668), who would have been fourteen years old, two years older than the legal age for marriage.³⁴³ Marriage at such a young age was rare, and it would mean that Henry's first child, Rebecca, would have been baptised only two days before Hannah's fourteenth birthday. Henry would have been thirty-seven. John Peckett (Peckett), Hannah's father, married Elizabeth Hoofe on 27 July 1655 at All Saints Pavement and had seven children.³⁴⁴ By 1659, the Peckett family had moved to St. Martin-cum-Gregory in Micklegate, Gyles' parish, as John is recorded as a Church warden from that date. In this role, John Peckett would have known Edmund Gyles, Henry's father, as he too became a Church Warden in 1670. John died 3 Nov. 1677, leaving behind four children, as three had died. This loss of the primary breadwinner may have led Hannah to marry for financial security. The St. Martin-cum-Gregory records detail many occasions around births and deaths involving both the Peckett and Gyles families, some within the same paragraph, so they clearly knew each other well. If Hannah Gyles was indeed nee Peckett, this raises the possibility that she was distantly related to William Peckett (1731-1795), the later famous York glass painter. This scenario suggests a possible transfer of glass-painting materials, equipment and knowledge via Hannah to the Peckett family after Gyles' death.³⁴⁵ Another possible connection between Hannah Gyles and the Peckett family is that Sprakes mentions a Richard Peckett in relation to the supply of 50 feet of new plain glass to Temple Newsam in 1742.³⁴⁶ Hannah had an elder brother named Richard, born in 1666, so he would have been seventy-six when the receipt was issued.³⁴⁷

³⁴² Bulmer, *The Parish Registers of St. Martin-cum-Gregory*, 86 and 90.

³⁴³ Bulmer, *The Parish Registers of St. Martin-cum-Gregory*, 93. 'BIRTHS 1668 ... Hannah Peckett d. of Mr. John Peckett bapt. 28 September'.

³⁴⁴ Borthwick Institute for Archives, archive reference PR-Y-ASP-2.

³⁴⁵ Cust, L. H., and Trevor Brighton, "Peckett, William (bap. 1731, d. 1795), glass-painter", *ODNB*. The same conundrum surrounding Gyles, however, also applies to William Peckett's sudden appearance as a glass painter in 1751 at the age of only twenty, with no apparent training. Although Brighton asserts that Gyles and Peckett were self-taught, this author finds the argument implausible. They are especially implausible in the case of Peckett as his father was a glovemaking, while Gyles' father Edmund was a glazier and, as argued, possibly even a glass painter of sorts. Even though the connection is tentative, Gyles marrying a Peckett would be a remarkable coincidence. A family relationship through marriage, even if distant, might explain the conundrum of Peckett's training.

Brighton records that William Peckett was born in Husthwaite, near Easingwold, some twenty miles from York, in 1731 to a 'fellmonger' or dealer in animal skins. Also, the family moved to York sometime before 1752, where his father set up a glove-making business.

³⁴⁶ Sprakes, "The Armorial Stained Glass at Temple Newsam", 22. No reference cited.

³⁴⁷ Bulmer, *The Parish Registers of St. Martin-cum-Gregory: in the City of York*, 92. The parish record has not been checked beyond 1734.

Between 1676 and 1682, Gyles had about three years' work, including commissions for York Minster, even though he was not under contract.³⁴⁸ This period coincides with his increased virtuoso activity, which helped him secure more significant commissions later, even within an adverse ideological climate. Following works for St. John the Baptist, Adel in Leeds (1681), Gyles gained three other major commissions between 1682-4: University College, Oxford (1682-7); the Guildhall, York (1684); and Wentworth Old Church (1684).³⁴⁹ Of these, the University College, Oxford commission was the most significant and clearly stretched his resources, as in 1683 it appears he is seeking help again from London, Place replies to him: '... according to your desire I made Inquiry at Mr Price's about glass painters he tells me there is 4 In Towne but not worke enough to Employ one'.³⁵⁰ [Fig. 28] Whether Gyles received the help he was seeking is unknown, but journeymen glass painters were certainly available.

Gyles' monumental east window for the chapel at University College, Oxford, his first commission outside of Yorkshire that we know of (completed in 1687), continued a glazing scheme which had been left unfinished by Abraham van Linge.³⁵¹ Dr Obadiah Walker, Master of University College, Oxford, oversaw the commissioning of this new window. Brighton identifies Lister, John Drake, former Dean of Ripon, and Thomas Kirke as recommending Gyles for the work.³⁵² With Tempest being an alumnus, he was tasked with the negotiations on Gyles' behalf. Close reading of Gyles' letters also shows that initial discussions had begun four years previously, but now, as Gyles was too busy to make the long journey to Oxford, he was looking to Tempest to persuade Walker and the 'gentlemen' fellows of University College that he was 'no Beginner' and more than qualified, as a liberal artist, for such a 'very great worke'. He had prepared sketches for Tempest to present to Walker and enclosed these with the letter: 'so by this inclosed the Gentlemen of ye College will be able to conclude a Desine to their own minds'. Clearly, Gyles was aware that his work would be compared to van Linge's: 'I shall be mighty Carefull to doe, both after praesidence of the Best Masters and in the Noblest manner'. By 'the noblest manner' he meant history painting conforming to Renaissance theories of

³⁴⁸ See Analysis of Gyles' stained-glass commissions, based on Brighton's attributions.

³⁴⁹ Brighton, "Enamel Glass Painters", 1, 160-184.

³⁵⁰ Francis Place to Henry Gyles, (London, 17th Jul 1683), Stowe Ms. 746, f.70, BL. Also see Hake, "Some Contemporary Records", 64-65.

³⁵¹ Brighton, *Henry Gyles, Virtuoso*, 34-36.

³⁵² Brighton, *Henry Gyles, Virtuoso*, 34.

composition. Among the models he was going to turn to for assistance, without slavishly copying them, were works of the northern Renaissance artist Albrecht Dürer: ‘Please Tell Mr. Walker The Patterns I made most of this Scetch by are from the prints, of the famous Albert Dürer who is very worthy of Imetating in works of this kind, though in the Great Draughts [cartoons] I will have no Confinement either to one or other masters’. Like Greenbury, Gyles used Dürer prints not just because of his preeminent status as a religious history printmaker, but also because of their commercial abundance and graphic qualities, which made them readily accessible and straightforward to copy. Due to quality differences, Dürer priced his woodcuts much lower than his engravings, which he sold from the 1510s.³⁵³ As discussed earlier, Morgan or his son Pickering bought prints and books for Gyles in London. Gyles, however, may also have chosen Dürer prints for social status reasons, to promote himself as a liberal artist. In discussing humanistic thought related to the visual arts, specifically their ‘standing as liberal arts’, Luigi Salerno noted that in seventeenth-century England the use of humanist imagery to imply status was ‘important as a reaction against the lingering mediaeval point of which considered the arts as trades’.³⁵⁴

From his letter to Tempest, we learn that Gyles favoured the *Transfiguration* for the apex of the window for reasons of legibility, as this would: ‘not be over Busy in Multiplicity of Figure, which is the great Fault in History Painting at distance from the Eye’.³⁵⁵ Although Norgate’s later variants discuss history painting, Gyles’ earlier variant does not; therefore, this comment on the proportion or balance of figures required to achieve the greatest legibility suggests knowledge of creating illusion through the theory that beauty lies in proportion. As Dürer was ‘considered as the most important theorists in this field’, Gyles’ choice again suggests acquired status by association.³⁵⁶ His promise to Tempest, to imitate the ‘Best Masters [...] in the ‘Noblest manner’, also relates to proportion. When used as an adjective, according to the Oxford English Dictionary, ‘Noble’ means ‘lofty character or ideals’, performing to high standards of rightness, virtue, and morality. As a noun, however, it means a person of rank and title belonging to the

³⁵³ Griffiths, *The Print Before Photography*, 21.

³⁵⁴ Luigi Salerno, “Seventeenth-Century English Literature on Painting”, *Journal of the Warburg and Courtauld Institutes* 14, no. 3/4 (1951): 234.

³⁵⁵ Gyles to Tempest, (1682), Ms. 3, f.61.

³⁵⁶ Salerno, “Seventeenth-Century English Literature on Painting”: 248.

nobility.³⁵⁷ In using the term, Gyles is attempting two things: to align himself with the gentlemen of the college in suggesting that they are all participating in a ‘Noble’ cause, in their different ways, and in the creation of a work of art itself, in which its beauty can only be appreciated by connoisseur gentlemen of taste. In addressing this ‘gentleman’ audience, he both flatters them by speaking their language and acknowledges their status as commissioners and creators of the project. Secondly, although Gyles admits to imitating ‘Best Master’ prints, he also asserts that he can imitate Dürer, invent, look critically, and improve on the model. In this context, his direction of Tempest in how to engage with Mr Walker, and his comments on legibility and proportion, noble qualities in Renaissance composition - he is saying that I am good enough to have my own invention.³⁵⁸ Gyles’ liberal artist status or otherwise is conclusively discussed at the end of this chapter through the lens of Franciscus Junius’ *The Painting of the Ancients*.

As the original window is lost, the final design is uncertain, but a sketch now in the York Museum Trust is presumably one of those sent to Tempest.³⁵⁹ The subject, according to the nineteenth-century stained-glass historian Charles Winston who apparently saw the window, was the *Birth of Christ - The Nativity*. Winston claims that Gyles’ work was the first religious picture window to be commissioned following the suppression of hagiography after the Laudian period.³⁶⁰ Unfortunately, Winston does not suggest which Dürer *Nativity* Gyles may have ‘imitated’. The sketch in the York City Art Gallery shows a pyramidal composition under an arch, with the kneeling Virgin Mary and Christ child in the centre and shepherds on either side, in which Dürer’s Gothic setting has been translated into a classical one. Dürer’s original print has not been identified, and, therefore, Gyles’ design is probably an amalgam. In using Dürer prints to complete a scheme begun by Abraham van Linge, one of the most accomplished foreign glass painters to work in England during the Counter-Reformation, Gyles was making a statement that he was a liberal artist of comparable ability. This important letter to Tempest clearly demonstrates

³⁵⁷ “Noble”, Definition & Meaning - Merriam-Webster.

³⁵⁸ Leon Battista Alberti, *Della Pittura - On Painting 1435*, trans. Cecil Grayson, (London: Penguin, 1991), 100. First published in 1435, ‘On Painting’ is a seminal Renaissance technical and theoretical text.

³⁵⁹ Brighton, *Henry Gyles, Virtuoso*, xi. Three pencil and wash drawings on paper of stained-glass window designs: YORAG: R447.a, YORAG: R447.b, YORAG: R448. York Museum Trust, York.

³⁶⁰ Charles Winston, *An Inquiry into the Different of Style Observable in Ancient Glass Painting, Especially in England, with Hints on Glass Painting*, by an Amateur (Oxford: John Henry Parker 1867), 206. The York Museums Trust holds three items, one of which may well be the design for the window discussed by Winston, YORAG: R447a, R447b and R448. This author has not been able to see these items and cannot get digital copies.

that Gyles was participating in the return to figurative religious glass painting. Moreover, he was not afraid to engage with religiously controversial subjects. Gyles' social ambition was fully realised with this significant commission, gained not as a craftsman through membership of the guild system, but as a liberal artist recommended to 'gentlemen' patrons by his virtuosi friends.

Sometime after fulfilling the University College window contract, Gyles completed an armorial of Archbishop Lamplugh (1615-1691), now located in the south choir aisle of York Minster, a similar commission probably gained through gentlemanly patronage. [Fig. 29] The oval armorial, painted in an Italianate style, is described by Hampson as being set 'into a cartouche with furling scrolls, which in turn is set on a device of crossed crosiers with ropes and tassels'.³⁶¹ This background treatment is reminiscent of a panel by Gyles now in the Victoria & Albert Museum, in which the Royal insignia and coronets of the degrees of nobility are suspended by ribbons with a cherub above (H 34 ½ x W 8 in.).³⁶² Gyles' Lamplugh armorial is in the centre of a three-light window to the right of the Lamplugh wall monument. Hampson notes the awkward relationship between Gyles' armorial and the monument, suggesting that they were not commissioned together, and that Gyles' armorial was 'perhaps paid for by a grateful Chapter ahead of the neighbouring monument by Grinling Gibbons' (1648-1721).³⁶³ Gibbons' monument itself was commissioned by Lamplugh's son, Thomas, who paid £100.00 to have it carved.³⁶⁴

Hampson's comment that no new windows were commissioned through private patronage from the late sixteenth century until the installation of the Lamplugh memorial raises questions about a change in ideology at York, and the potential role of Arminian elements within the collegiate body.³⁶⁵ In this regard, Lamplugh's appointment in 1688

³⁶¹ Hampson, "Casting a dim religious light", 144.

³⁶² Royal insignia, catalogue number M.2648, accession number C.89:1-1926, Victoria & Albert Museum.

³⁶³ Hampson, "Casting a dim religious light", 144.

³⁶⁴ Hampson, "Casting a dim religious light", 144.

³⁶⁵ Hampson, "Casting a dim religious light", 128.

Arminianism was a seventeenth-century Protestant movement that followed the theology of two important figures: the Dutch reformer Jacobus Arminius (from whom the movement is named) and the English reformer John Wesley (Wesleyan Arminianism). The movement aimed to influence and change Calvinist doctrine.

has relevance because, although sworn to uphold the principles of the Long Parliament's Puritan commissioners in upholding the Solemn League and Covenant in the late 1640's while still a young don at Oxford, come the Restoration, Lamplugh renounced and 'took part in the Anglican counter-purge of the University'. There followed a careerist path of twelve years as bishop of Exeter (1676-88), before he reluctantly pledged allegiance to the fated James II, upon which he was immediately appointed the archbishopric of York. Only five months later, however, he officiated at the coronation of James' successors, King William III, and his daughter Queen Mary II.³⁶⁶ Clearly, Lamplugh was a survivor and prepared to change his clothes when required for political and personal advantage. It is no coincidence, therefore, that Lamplugh's brief tenure coincided with a significant enhancement and embellishment of the Minster's internal arrangements, furnishings and fittings, including the installation of a new organ, and tapestries and railings for the high altar, among many other additions, which perhaps announces his true colours as someone with Laudian high church leanings.³⁶⁷ In this context, the monument could be an arrangement of Counter-Reformation elements intended to gain Arminian approval.³⁶⁸

When Gyles' Lamplugh armorial was installed in its current location, and Gibbons' monument was completed, is uncertain. It is, however, interesting to speculate if there was a deliberate intention for both monument and painted glass to be presented together, and whether Gibbons gained the commission because he was a loose York Virtuosi member through someone like Gyles or the York architect, builder and master carpenter John Etty (c. 1634-1708), whom he worked for between 1667 and 1670.³⁶⁹ Although Hampson is of the opinion that the 'solid border of yellow glass set into a ladder of lead' is original, it clearly disrupts the delicacy of the composition in which all the stained elements are finely painted.³⁷⁰ Also, the presence of a large horizontal saddle [support] bar breaking up the armorial is generally not how Gyles' armorials are presented. It is this author's opinion that Gyles' armorial was not designed to fit its current opening and was extended to fill the

³⁶⁶ G.E Aylmer, "Funeral Monuments and other Post-Medieval Sculpture", in *A History of York Minster*, eds., G.E Aylmer, Reginald Cant (Oxford: Clarendon Press, 1977), 445.

³⁶⁷ Dorothy M. Owen, "From the Restoration until 1822", in *A History of York Minster*, eds., G.E Aylmer, Reginald Cant (Oxford: Clarendon Press, 1977), 255-257.

³⁶⁸ Peter Lake, "The Laudian Style: Order, Uniformity and the Pursuit of the Beauty of Holiness in the 1630s", in *The Early Stuart Church, 1603-1642*, ed. Kenneth Fincham (Basingstoke and London: Macmillan Press, 1993), 166.

³⁶⁹ Hunter, *The Diary of Ralph Thoresby*, 1, 366.

³⁷⁰ Hampson, "Casting a dim religious light", 145.

space, with the addition of ribbon and tassel border decoration and a new inscription recording Lamplugh's death in 1691. Due to the narrowness of the central armorial, it can be postulated that the Gyles armorial was originally located in the dining room of Bishopthorpe Palace, in a scheme that currently contains nineteen shields of successive Archbishops of York from 1558 to 1928.³⁷¹ The scheme, which more broadly encompasses windows from other rooms, probably began with Bernard Dininckhof's painting of Edmund Grindal's arms when he was Archbishop of York between 1570 and 1575, after which Gyles and Peckitt later contributed to it.³⁷² One of these armorials in the large bay window contains the arms of Lamplugh, which Brighton notes is typical of Gyles' cartouche work at Staveley, and it appears that Peckitt copied the cartouche for his painting of Archbishop Thomas Herring's (1743-7) arms for the same window.³⁷³ If the Lamplugh arms in the Minster were originally in Bishopthorpe Palace, it raises the question of why they were removed and later replaced with a new version – this new version could be later work by Peckitt replacing the missing Gyles armorial. This author has not seen the armorials in Bishopthorpe Palace, so cannot comment further on this postulation. Returning to York Minster, on either side of Gyles' Lamplugh armorial are two others. One on the left dated 1613, for the daughter of James I, Elizabeth, who married Frederick V Elector Palatine of the Rhine and Duke of Bavaria in 1612, and on the right dated 1624, an armorial bearing the arms of John Williams, Dean of Westminster (1620-44) and Bishop of Lincoln (1621-41), believed by both Brighton and Hugh Murray to have been painted by Dininckhof.³⁷⁴ Above the three armorials is a c.1530 French Crucifixion window from the church of Saint Jean, Rouen.³⁷⁵ All armorials and crucifixion windows are set against a modern, clear-glass geometric background. The purchase of this stained-glass for the south choir aisle window by the Dean and Chapter was instigated by Dean Milner-White in 1953.³⁷⁶ This purchasing history, however, begs the question: if Gyles' Lamplugh armorial was in place from c.1691, what existed around it? Importantly, as recorded by Peter Gibson, former Superintendent of the York Glazier Trust, who worked on the window, it consisted of an assortment of medieval glass up until 1950 when it was all removed and re-used in other windows throughout the cathedral, but particularly in the reconstruction of the Martyrdom Window in the same aisle. Of significance, he states that,

³⁷¹ Peter Gibson, "The Stained and Painted Glass of York", Alberic Stacpoole, ed., *The Noble City of York*, (York: Cerialis Press, 1972), 206-207.

³⁷² Murray, "Bernard Dinninckhoff, Henry Gyles": 11.

³⁷³ Brighton, "Enamel Glass Painters", 1, 197.

³⁷⁴ Murray, "Bernard Dinninckhoff, Henry Gyles": 11.

³⁷⁵ Gibson, "The Stained and Painted Glass of York", *Noble City of York*, 147.

³⁷⁶ Gibson, "The Stained and Painted Glass of York", *Noble City of York*, 147.
The Friends of York Minster Twenty-fifth Annual Report (1953), 5.

‘afterwards this window had no stained glass’.³⁷⁷ So, might Gyles’ Lamplugh armorial not have been installed in 1691 but relocated to its current position in 1953? This probable scenario tells us more about post-war attitudes to stained glass restoration than about why Gyles’ Lamplugh armorial may not have been installed until the 1950s, as modern conservation philosophies were not applied to stained glass until the mid-1970s.³⁷⁸ During the war, much of York Minster’s stained glass was removed and reinstalled later. According to Gibson’s recollections, reordering and adding new pieces to the scheme were not considered problematic but were necessary to fill vacant window spaces. This point is highly relevant, as it challenges the observer to reinterpret preconceived notions about historical arrangements.

The securing of the commission by Gyles, at the time when the Crosby workshop was under contract to York Minster, also suggests that the Crosbys were not glass painters, as a further York Minster Fabric Rolls entry records that Gyles supplied coloured glass to the Dean and Chapter in 1696: “Mr. Gyles for coloured Glass £4 16s 3d”.³⁷⁹ While this entry may seem innocuous, it is of material and technical significance. This glass was likely the product of his 1682 venture into glassmaking, left over from the University College, Oxford window. The final Fabric Rolls entry for Gyles records that he was paid another £3.00 for works in 1700, presumably again, for an unidentified or lost armorial.³⁸⁰

Gyles’ second, and only surviving religious history painting, was for the chapel at Denton Hall, another Yorkshire Fairfax seat, on the river Wharfe. At the base of the window, it states ‘Henry Giles Eborac. Pinxit 1700’.³⁸¹ In his diary entry of the 1st June

³⁷⁷ Gibson, “The Stained and Painted Glass of York”, *Noble City of York*, 147.

³⁷⁸ The principles of modern conservation, as distinct from restoration, were solidified in the mid-20th century. Cesare Brandi’s influential *Theory of Restoration* (1963) provided a coherent rationale for the modern approach, which influenced conservation across all areas, including stained glass.

³⁷⁹ Hampson, “Casting a dim religious light”, 143.

³⁸⁰ Hampson, “Casting a dim religious light”, 102.

³⁸¹ Kerstin Maria Pahl, “Autographing the self: Self-portrayal through lettering in eighteenth-century England”, in *Journal 18: A Journal of Eighteenth-Century Art and Culture* 8 (2019): 4. 18. In the late seventeenth century, the signing of one’s work was not just an act of authentication or a claim of artistic status but a deliberate merging of personal artistic expression with artistic self-marketing – a form of self-branding within a burgeoning domestic and national art market. Although Gyles was not the first glass painter to sign his work, the art market context and the changing status of glass painting among artists during this period make Gyles’ signature distinct from that of previous generations.

1702, Thoresby again confirms Gyles' rise in status as a liberal artist working for discerning patrons: 'Visited by the famous artist, Mr. Henry Gyles, of York, who has been setting up for my Lord Fairfax, at Denton Chapel, the noblest painted glass window in the north of England', again note the use of the word 'noble' as previously discussed.³⁸²

Writing to Geldart in 1690, however, about buying glass for the project, Gyles alludes to constraints, stating that 'my Lord – hopes this window will not be called Popery by any PresG (pressgang): spectator (there being ringing of Psalms in it) but of this pray M^r. Geld^t say nothing to any one till you heare I have don it'.³⁸³ Here, Gyles is referring to either the 'Popish Plot' of 1678 to 1688, a false anti-Catholic conspiracy largely discredited by 1681, instigated by a church of England priest, Titus Oates (1649-1705), or the fallout of the Toleration Act of 1689, which granted religious freedoms to Protestant dissenters but not Catholics.³⁸⁴ Further, with the removal of James II by the Protestant William of Orange in 1688, which brought about the Glorious Revolution, war with Catholic France resumed, and by the 1690s Catholics became victims of the hatred and suspicion harboured by their fellow countrymen.³⁸⁵

This anti-Catholic hysteria impacted not just religious glass painting, but also the commissioning of foreign Catholic art for private chapels like Denton Hall. Against this backdrop, English patrons like Fairfax were safer commissioning work from an English artist like Gyles, who, as previously suggested, also employed jobbing foreign glass painters.³⁸⁶ Unlike the University College window in Oxford, the Denton Hall window came from a single print source by the renowned Netherlandish printmaker Jan Sadeler (1550-1600) after Peter Candid (Pieter de Witte, Pietro Candido) 1548-1628, except for the

³⁸² Hunter, *The Diary of Ralph Thoresby*, 1, 435. The Fairfax referred to in the letter is Thomas Fairfax, 5th Lord Fairfax of Cameron MP (1657-1710), an English nobleman and politician. FAIRFAX, Thomas, 5th Ld. Fairfax of Cameron [S] (1657-1710), of Denton and Cookbridge Hall, Yorks. History of Parliament Online - <https://historyofparliamentonline.org/volume/1690-1715/member/fairfax-thomas-1657-1710>

³⁸³ Gyles to Geldart, (24th September 1690), add. 78684, 15r-v f.1, BL.

³⁸⁴ Clare Haynes, *Pictures and Popery: Art and Religion in England, 1660-1760* (Cornwell: Ashgate, 2006), 69.

³⁸⁵ <https://www.parliament.uk/about/living-heritage/transformingsociety/private-lives/religion/overview/catholicsnonconformists-/#:~:text=Toleration>

³⁸⁶ Haynes, *Pictures and Popery*, 5.

cherubs above the head of St Cecilia.³⁸⁷ Although described by Thoresby as ‘noble’, in its fine execution and moral Catholic cause, fit for the status of a noble connoisseur like Fairfax, the Old Testament subject of King David Singing God’s Praise is cautious as a theme.³⁸⁸ The painting, as described by Lane, contains:

King David playing his harp, surrounded by angels, two of whom hold musical scores. The upper part shows cherubim in the heavens around the sacred name, in Hebrew. Beneath that is St Cecilia playing an organ with angels accompanying her on variety of musical instruments, while others hold up music books for the players.³⁸⁹

Irrespective of these two private commissions, slightly shielded from public discourse, Gyles’ 1690 letter to Geldart is prophetic: ‘alas I cannot see anything will be done till God sends up a better settlement in ye publick’, as it predicts future anti-Catholic sentiment, particularly at an institutional level, for many decades to come.³⁹⁰ Gyles’ communication with Geldart throws into relief how the demand for religious glass painting continued within the more discrete and private environment of the provinces, which raises a question about the state of religious art in Britain at this time, and more specifically, whether there was a regional dimension to it - was it more acceptable in some parts of the country than others?

As mentioned, increasing anti-Catholic sentiment in the 1680s discouraged English patrons from engaging English painters to create religious history paintings; instead, they commissioned portraiture. While arguing that seventeenth-century history painting, when commissioned, was a vehicle for moral improvement by demonstrating and advocating

³⁸⁷ Geoffrey Lane and Gordon Plumb, “David Singing God’s Praise: A Musical Window by Henry Gyles”, *Vidimus* 41. (June 2010), <https://www.vidimus.org/issues/issue-41/feature/> Also see, Johann Sadeler, after Peter Candid (Pieter de Witte, Pietro Candido), *King David Playing the Harp with Angels Dancing and Playing Music*, c. 1590-1600, Engraving, Accession Number: 53.601.17(1), The Metropolitan Museum of Art (metmuseum.org).

³⁸⁸ Relevant to Gyles’ choice of subject could be the creation in York, c.1668-70, of a panel sculptured in high relief by Grinling Gibbons of the same subject. Possibly commissioned by the Fairfax family, the *King David Panel* is Gibbons’ earliest known surviving piece made during his time as a journeyman in York. It is now at Fairfax House, York, following a 2017 public fundraising campaign.

³⁸⁹ Lane and Plumb, “David Singing God’s Praise”, 2010.

³⁹⁰ Gyles to Geldart, (24th September 1690), add. 78684, 15r-v f.1.

public virtue, Clare Haynes also compares the medium to portraiture, as both are private forms of art concerned with remembrance.³⁹¹ Even before the Civil War, portraiture was a dominant form of painting in England, with artists like Peter Paul Rubens (1577-1640) and Sir Anthony Van Dyck (1599-1641), and then after the Restoration, with Sir Peter Lely (1618-1680) and Godfrey Kneller (1646-1723).³⁹² This lack of encouragement for history painting was due broadly to: ‘the lack of court patronage, the impracticality of large pictures in contemporary interiors, and the antipathy of the Church of England to Religious art’.³⁹³ That this was the predominant situation is confirmed by Gyles’ own writings, which refer to the making of coloured glass for history painting in 1698/9.³⁹⁴ This lack of encouragement, however, was not universal, as noted by R. A. Beddard, who points out that the making of art in Oxford occupied a singular place in the ‘history and affection of the Protestant establishment’. Post-Restoration, however, due to Charles II’s re-establishment of Oxford as a centre for national religious and political life, through a decree issued by the ‘Cavalier Parliament’, the established church restricted itself to ‘conformist Protestants and reverted to ‘historic Anglicanism, episcopacy and liturgy’, in which puritanism as part of the established church became much diminished.³⁹⁵ As seen with the Popish Plot and Gyles’ letter, though, there was still a lack of encouragement for history painting within the wider country, but not in the Oxford colleges. Returning to Gyles’ history painting commission for Fairfax’s private chapel at Denton Hall, the Fairfax in question was Thomas Fairfax, 5th Lord Fairfax of Cameron (b. 1655, d.1716), not to be confused with his cousin and Civil War leader, the 3rd Lord Fairfax of Cameron. The 5th Lord Fairfax was educated at Magdalen College, Oxford, during the reign of James II and became a priest, which is not surprising given that the Fairfaxes, of which there were many, were historically Catholic and remained so throughout the Civil War, although with some exceptions.³⁹⁶ Therefore, whether it be the 5th Lord’s Catholic tastes or his exposure to High Anglicanism at Magdalen, he felt secure enough in the privacy of his own chapel to commission art which reflected his religious sensibilities. The Denton Hall window was not Gyles’ last major commission.

³⁹¹ Haynes, *Pictures and Popery*, 3.

³⁹² Anne Thackray, “Streater, Robert (1621-1679), painter”, *ODNB*.

³⁹³ Haynes, *Pictures and Popery*, 4.

³⁹⁴ Henry Gyles to Ralph Thoresby, (York, 4th March 1698/9), Ms7, f.78, YAS, as transcribed in, *Letters addressed to Ralph Thoresby*, 21, ed. W. T Lancaster (Leeds: Thoresby Society, 1912), 68-69.

³⁹⁵ R. A. Beddard, “Restoration Oxford and the Remaking of the Protestant Establishment”, Nicholas Tyacke (ed.), in *The History of the University of Oxford: Volume IV Seventeenth Century Oxford*, (Oxford University Press, 1997), 803.

³⁹⁶ Hugh Aveling, “The Catholic Recusancy of the Yorkshire Fairfaxes. Part I”, *Biographical Studies* 3, no 2 (1956), 68. 96. 97. doi:10.1017/S0268419500002890.

From 1700 to his death in 1709, Gyles completed at least sixteen other projects that we know of, some large in scale, mainly armorials and perhaps one other religious history painting for Wadham College, Oxford, now lost.³⁹⁷ A quite remarkable feat for one with seriously debilitating infirmities which again brings into question Gyles' use of glass painter journeymen; a situation finally confirmed in a 1703 letter to Thoresby about the sale of a new product called 'China Glass', in which Gyles berates the negative comments of another glass painter apparently working in Yorkshire: 'I wish [...he] had no other way to get his bread than by my employment' (to be discussed more fully in chapter 3).³⁹⁸

With these examples, this thesis suggests that Gyles pursued a liberal arts agenda throughout his working life, to the detriment, in some part, of his father's business. Ironically, it was perhaps his father's work for the Corporation of York during the Interregnum that raised the family's social status, creating the conditions that nurtured his son's ambitions. But given that Gyles freely admitted to copying prints, could he justifiably claim artistic status, especially with the arrival in England of Northern European artists like van Dyck and Lely, who came to define what it meant to be an artist in England with their creative abilities, qualities widely prized within the courtly circle of Arundel?³⁹⁹ Following the Civil War, figures like Evelyn looked to the remnants of Arundel's intellectual circle, the texts of Norgate, Peacham and Junius, and the works of Hollar, as models for the renewal of the arts as a means of recovering a lost Golden Age.⁴⁰⁰ The German language scholar Franciscus Junius (1591-1677) contributed *The Painting of the Ancients*. Published in English in 1638 and reprinted in 1659, the text is essentially a compilation of existing sources of mainly classical origin presented as a theoretical conversation which compares the visual arts to poetry - *Ut pictura poesis*.⁴⁰¹ The idea that 'speaking paintings' equated with 'silent or mute poetry' was not only widely taken up by English art theorists after the Restoration but also continues to hold sway over the English artistic imagination today.⁴⁰² Junius' point was that painting, like poetry, should not be

³⁹⁷ Brighton, "Enamel Glass Painters", 1, 209.

³⁹⁸ Henry Gyles to Ralph Thoresby, 1703, as transcribed in Hunter, *Letters of Eminent men*, 34.

³⁹⁹ Butts, *Painting on Light*, 1.

⁴⁰⁰ Denys Sutton, "Thomas Howard, Earl of Arundel and Surrey, As a Collector of Drawings-III", *The Burlington Magazine for Connoisseurs* 89, no. 528 (1947), 75 -77. <http://www.jstor.org/stable/869439>. In addition to his publication *Sculptura* in 1662, written under the auspices of the Royal Society, which celebrated the past but looked to the future of printmaking, John Evelyn was also central to saving much of Arundel's pre-Civil War manuscript collection, in which he organised its relocation to the Royal Society.

⁴⁰¹ *Ut pictura poesis* is a Latin phrase literally meaning, as is painting, so is poetry.

⁴⁰² Leonard Barkan, *Mute Poetry, Speaking Pictures* (Princeton: Princeton University Press, 2012), 14. 32.

mechanical, but invented through ‘phantasy’ or the imagination.⁴⁰³ Phantasy, and indeed illusion, had been associated with art theory from the Renaissance and was considered critical to ‘invention’.⁴⁰⁴ In this, Junius’ thesis reflects and distils other Renaissance theorists, like Battista Alberti’s 1435 treatise *On Painting* and pre-empts André Félibien’s *Conferences de L’Académie Royale de peinture et de Sculpture Pendant l’année*, published in 1667. In arguing against the work of the ‘sordide, mechanike’, who must content themselves ‘with the Inventions of other men, and employ their whole life in copying their works’, Junius measures imitation against worthy invention and truth.⁴⁰⁵ As demonstrated, Gyles certainly had imagination in adapting Dürer print models to paint the University College Oxford window to create a new composition, which, according to Norgate’s classification at least, placed Gyles within the ‘genealogy of painters who practiced a legitimate method of technique’.⁴⁰⁶ Within Junius’ discourses, however, who presents the Roman poet Ovid as an expert in and an exemplar of artistic qualities, citing his poem *Ars amatorial* to illustrate the role of artistic imagination in pictorialism, that Gyles used text from *Ars amatorial* in his Nun Appleton Hall sundial, suggests that Junius would have been approving.⁴⁰⁷

6.0 CONCLUSION

The central theme of this chapter has been Gyles’ pursuit of artistic status to redefine himself and the direction of glass painting after the Restoration. His father’s model of a skilled Glasier/Painter ‘mechanick’ working within the guild system was no longer sustainable for Henry or the craft, and so he actively sought a new direction. The cultural climate favoured the ‘encouragement of the arts’ and offered opportunities for native-born artists, particularly with publications such as Sanderson’s *Graphice* (1658), setting new standards for connoisseurship and creating a demand for pictures.⁴⁰⁸ This situation was

⁴⁰³ Judith Dundas, Franciscus Junius’ “The Painting of the Ancients” and the Painted Poetry of Ovid”, in *International Journal of the Classical Tradition* 3, no. 2 (1996), 159-160. Accessed January 4, 2021. <http://www.jstor.org/stable/30222267>.

⁴⁰⁴ Dundas, “Franciscus Junius’s “, 165.

⁴⁰⁵ Franciscus Junius, *The Painting of the Ancients* (London: Richard Hodgkinsonne, 1638), 254. 349.

⁴⁰⁶ Norgate, *Miniatura*, 4.

⁴⁰⁷ Dundas, “Franciscus Junius’s “, 161-162.

⁴⁰⁸ Good, “A Royal Subject”, 459.

further advanced with the publication, and subsequent translation into English, of various continental (mainly French) treatises, such as André Félibien's *Conferences de L'Académie Royale de peinture et de Sculpture Pendant l'année* (1667), which disseminated the idea of painting as a liberal art more widely.⁴⁰⁹ Further, from a craft perspective, by combining the mechanical craft of goldsmithing with the courtly fashion for limning, practitioners such as Rowland Locket had opened the way for glass painters like Greenbury and later Gyles to claim facility.⁴¹⁰ Although working in a different social and cultural climate, Greenbury could be considered a model for Gyles, someone from near Beverley in Yorkshire with family in York who travelled to London to train as a goldsmith before becoming a glass painter.⁴¹¹ In adopting courtly modes of art theory and practice, Gyles made glass painting relevant once again. His creative intelligence placed him within a new and small but growing breed of native-born artists who emerged in England in the second half of the seventeenth century.⁴¹² Gyles' status as a liberal artist is further reinforced in chapter 3. More specifically, this chapter demonstrates that Edmund most likely had some glass painting knowledge and that he may have acquired Dininckhof's workshop in the 1640s, which meant that his son Henry had all the materials and equipment necessary to start glass painting in c. 1656 with oversight from his father. New evidence also suggests that Gyles probably had draughtsmanship training from Silvanus Morgan in London. Further, that he had a different artistic status from other glaziers contracted to York Minster and that he was commissioned, when required, outside the guild system. Gyles was also an early experimenter with oil painting techniques on glass and in the making of enamel colours, an activity that demonstrates that, from 1664, he participated in the wider culture of experiments and practices at the heart of the Royal Society and the York virtuosi.

⁴⁰⁹ Alexandra Skliar-Piguet. "Félibien, André", in *Grove Art Online, Oxford Art Online* (Oxford University Press, 2015). Félibien (1619-1695) was a French administrator, art historian and critic, who developed his art theories whilst in Rome. In the Preface to his book, Félibien expanded on the idea that art was not about mere imitation. For Félibien, to be a great artist required true imagination to tell the great stories of history through allegorical composition; then, in his hierarchy, came portrait painting, landscape, animal painters, and finally those who paint dead things like fruits, flowers, or shells.

⁴¹⁰ James Ayres, *Art, Artisans & Apprentices* (Oxford & Philadelphia: Oxbow Books, 2014), 282.

⁴¹¹ Town, "A Biographical Dictionary", 95.

⁴¹² During the second half of the seventeenth century, the art market was very much dominated at the high end by Dutch, Flemish & French figures, with little English participation.

This chapter has discussed Gyles' motivation to become an artistic glass painter, but not the circumstances that encouraged and supported his ambitions. The philosophical and artistic milieu of the York virtuosi, which became Gyles' vehicle for pursuing his liberal arts education and research interests, is the subject of the following chapters.

CHAPTER TWO

HENRY GYLES: THE YORK VIRTUOSI, PHILOSOPHICAL AND ANTIQUARIAN ENQUIRY, AND THE ROYAL SOCIETY

A graph compiled from Trevor Brighton's list of Henry Gyles' known works identifies many barren periods amounting to almost half his working life; invariably, these periods coincide with other commercial ventures stemming from his association with the York virtuosi.⁴¹³ [Fig. 28] Post-Restoration, York was re-invented as both a centre for urban leisure and the north's cultural capital, with its rich historic past making it a reference point for the study and recording of national history.⁴¹⁴ Driven by the city corporation, these initiatives helped stimulate the cultural activity from which the York virtuosi emerged: a group of remarkable individuals who became the north-east's principal vehicle for cultural and philosophical exchange.⁴¹⁵ This chapter explores Gyles' key role in the York virtuosi and his engagement with the Royal Society's History of Trades programme, revealing how these connections shaped his business and his contribution to York's intellectual and cultural life.

Gyles' participation with the York virtuosi and their philosophical programme (as much as it can be understood in such terms) breaks down into four main time periods: the early history of the group, c. 1663/4, in which Gyles and probably his father Edmund played a role; the arrival of Lister in York in 1670, at which point Gyles' home and workshop in Micklegate become a key site of activity; the six or seven year period between the death of Gyles' father in 1676 and 1683 when Lister left for London, a moment which saw Henry attempt to diversify the family business through his philosophical contacts; and

⁴¹³ Brighton, "Enamel Glass Painters", 1, 714 -718.

⁴¹⁴ Ann- Marie Akehurst, "'tis risen again": York, architecture, and national identity', *The English Urban Renaissance Revisited*, eds. John Hinks, and Catherine Armstrong (Newcastle-upon-Tyne: Cambridge Scholars Publisher, 2018), 31-32. Also, see Borsay, *The English Urban Renaissance*, 30.

⁴¹⁵ "The Seventeenth Century: Social and Religious Life", Tillott, 198-206.

when Thoresby's arrival refocused the group's activities away from natural history to become increasingly exercised by antiquarian and artistic matters.

1.0 THE 'ORIGINS' OF THE YORK VIRTUOSI: C.1662/3-1670 ⁴¹⁶

Before the English philosopher Francis Bacon (1561-1626) promoted the 'objectification of scientific knowledge', curiosity had been regarded with suspicion as a worthless activity. ⁴¹⁷ But with the publication of Henry Peacham's revised 1642 edition of his courtesy book *The Compleat Gentleman*, 'curiosity' became an essential requirement for a new activity in England, that of being a *virtuoso*, encompassing one who studied 'rarities' with a 'princely' mind. ⁴¹⁸ After the Restoration, however, a virtuoso became more associated with aristocratic men who 'accumulated knowledge for Knowledge's sake', so undermining 'the moral status of the curious sensibility'. ⁴¹⁹ Virtuosi gatherings were initially held in a range of ad hoc venues, including alehouses, coffee shops, and domestic residences. They were an urban phenomenon that began in London and spread through correspondence networks (the Republic of Letters) to provincial towns and cities. ⁴²⁰ Various virtuosi models emerged in the late 1640s, like the circle around the German-born polymath and follower of Baconian theory Samuel Hartlib (c.1600-1662), who helped establish intellectual and natural philosophical links between local clergy and gentry during the Commonwealth. Other such groups included the short-lived club formed by Theodore Haak at Gresham College, which met between 1645 and 1648, Robert Boyle's 'Invisible College' in operation between 1646 and 1647, and the 'experimental philosophical club' formed by John Wilkins at Wadham College after 1649. ⁴²¹ What characterised these various groups was the breadth of their cultural interests and the

⁴¹⁶ The use of the word 'origins' is not meant to imply a specific starting point for a defined virtuosi group in York. It is used to suggest when this organic professional/friendship circle of like-minded individuals probably began to develop.

⁴¹⁷ Peter Harrison, "Curiosity, Forbidden Knowledge, and the Reformation of Natural Philosophy in Early Modern England", *Isis* 92, no. 2 (2001), 265. <http://www.jstor.org/stable/3080629>.

⁴¹⁸ Henry Peacham, *The Compleat Gentleman*, ed. G.S Gordon (Oxford: Clarendon Press, 1906), 105.

⁴¹⁹ Sloan, *A Noble Art*, 12.

⁴²⁰ Peter Clark, *British Clubs and Societies 1580-1800, The Origins of an Associational World* (Oxford: Clarendon Press, 2000), 3-4.

⁴²¹ Alan Craig Houston and Steven C. A. Pincus, *A Nation Transformed: England After the Restoration* (Cambridge University Press, 2001), 302. Also, see Michael Hunter, "Boyle, Robert (1627-1691), natural philosopher", *ODNB*.

connections they made between disciplines.⁴²² Populated by like-minded men with similar philosophical interests, members of these early pre-Restoration virtuosi groups were to eventually form the Royal Society.

Founded in 1660, the Royal Society was modelled on the writings of Francis Bacon, who pursued knowledge through collaborative scientific experimentation and first-hand observation.⁴²³ These new empirical virtuosi, with their adopted mission to promote ‘useful learning’ to serve the common good, were very different from their self-serving contemporaries. One of the most significant early activities of the Royal Society was the instigation of the ‘History of Trades’ programme in 1664.⁴²⁴ Promoted by Bacon as a ‘crucial part of the enterprise of reforming knowledge’, its primary objective was to raise standards within manufacturing through the transfer of knowledge from the craftsman to the owners of production.⁴²⁵ Key to the investigation of Gyles’ activities are the programme’s enquiries into glass manufacture made by the English physician and natural philosopher Christopher Merrett (1614-1695), chairman of the History of Trades Committee.⁴²⁶ Later, Lister also became part of the programme, tasked with researching ‘dyestuffs’.⁴²⁷ Although the History of Trades programme was ultimately abandoned as unrealisable, it produced ‘many histories’ during the Society’s first decade, spreading information about the natural world throughout the sciences, and instigating the long-term ‘transfer of manufacturing knowledge from the craftsman to the engineer, scientist, and corporation’.⁴²⁸

⁴²² Ilaria Bignamini, “George Vertue, art historian and art institutions in London, 1689-1768: a study of clubs and academies”, Vol. 54 (1988): 21.

⁴²³ Michael Hunter, *Establishing the New Science: The Experience of the Royal Society* (Woodbridge: Boydell Press, 1989), 1. 6. Although this overarching foundation is generally accepted academically within the current learned community, there is still, however, a lack of understanding of the complexity of overlapping social networks and interactions, which enabled both virtuosi groups and the Royal Society to form. Also see Walter E. Houghton Jr., “The English Virtuoso in the Seventeenth Century: Part 1”, *JHI* 3, no. 1 (1942): 51-74. R. H Syfret, “The origins of the Royal Society”, *Notes Rec. R. Soc.* (London: 1948): 75-137; K.T. Hoppen, “The Nature of the Early Royal Society: Part I”, *BJHS* 1(976):1-24.

⁴²⁴ Walter E. Houghton, “The History of Trades: Its Relation to Seventeenth-Century Thought: As Seen in Bacon, Petty, Evelyn, and Boyle”, in *Journal of the History of Ideas*, 2, no. 1 (1941): 33. Also see Kathleen H. Ochs, “The Royal Society of London’s History of Trades Programme: An Early Episode in Applied Science”, *Notes Rec. Roy. Soc. Lond* 39, no. 2 (1985): 129.

⁴²⁵ Ochs, “The Royal Society of London”: 150.

⁴²⁶ Hunter, *Establishing the New Science*, 285. 84.

⁴²⁷ Ochs, “The Royal Society of London”: 143.

⁴²⁸ Ochs, “The Royal Society of London”: 151.

Discussions about the origins of the York virtuosi and their connection to the Royal Society have focused on the arrival of Lister in 1670.⁴²⁹ Aside from Peter Clark, however, little attention has been paid to the group's earlier formation, which coincided with the emergence of various philanthropic and philosophical bodies at the local and national levels in the wake of the Civil War.⁴³⁰ In York, the trades guilds had significant influence, and their organisational structures, with craftsmen and other professional workers serving as wardens and stewards, were arguably the model for the new social gathering.⁴³¹ The York virtuosi probably formed in the early 1660s, at about the same time as the 'London virtuosi club' and may have been initiated by the theologian and natural philosopher John Wilkins.⁴³² Edmund's commission to paint a major scheme of heraldic armorials for Ripon Minster, c.1662/3 coincided with Wilkins being appointed as Dean of Ripon.⁴³³ When Warden at Wadham College, Oxford in the 1650s, Wilkins had presided over the so-called Wadham Group (or 'experimental philosophical club' as the antiquarian and natural philosopher John Aubrey FRS (1626-1697) was to dub it), playing the role of harmonising sage, nurturing the philosophical interests of 'boy wonders' such as Christopher Wren and Laurence Rooke. Because of this capacity to assemble men of talent and encourage their collaboration, Wilkins is considered one of the founding figures of modern science. The organisational structures and working methodologies he put in place, which emphasised the application of practical activities to complex theoretical problems, created a new experimental model of science; practices that were to become central to the English scientific revolution and the ethos of the Royal Society in its early years.⁴³⁴ The importance of Wilkins' encouragement to the entire circle of English virtuosi was acknowledged by his student, the natural philosopher and polymath Robert Hooke, in the preface of his seminal work, *Micrographia*:

If these my first Labours shall be any wayes useful to inquiring men, I must attribute the encouragement and promotion of them to a very Reverend and Learned Person, of whom this ought in justice to be said, That there is scarce any

⁴²⁹ Anna Marie Roos, *Web of Nature: Martin Lister (1639-1712), the First Arachnologist* (Brill: Leiden & Boston, 2011), 7.

⁴³⁰ Clark, *British Clubs and Societies*, 26.

⁴³¹ Clark, *British Clubs and Societies*, 23-24. Also, see Christopher Hill, *Intellectual Origins of the English Revolution Revisited* (Oxford: Clarendon Press, 1997), 102.

⁴³² Sloan, *A Noble Art*, 12.

⁴³³ E. J Bowen and Harold Hartley, "The Right Reverend John Wilkins, F.R.S. (1614-1672)", Notes Rec. Roy. Soc. Lond 15 (1960): 47.

⁴³⁴ Lisa Jardine, "The 2003 Wilkins Lecture: Dr Wilkins's Boy Wonders", Notes Rec. Roy. Soc. Lond 58, no.1, (2004):107.

one invention, which this Nation has produced in our Age, but it has some way or other been set forward by his assistance. My reader, I believe will quickly guess, that it is Dr. Wilkins that I mean.⁴³⁵

Hooke's effusive gratitude frames Wilkins as a nurturing professor and a facilitator for the 'exchange of ideas and skills between like-minded experts', which would not have been realised without his involvement.⁴³⁶ Wilkins was a visionary who empowered a generation of brilliant minds by promoting the virtues of shared knowledge, an ideal that helped establish the modern collaborative model for intellectual and scientific investigation.⁴³⁷

With overall responsibility for the Ripon Minster fabric, Wilkins would certainly have communicated with both Edmund and Henry Gyles around c.1662/3 about the painting of the new heraldic scheme. As Henry had just completed his training as a glass painter, the initial connection would have been between Wilkins and Edmund, the workshop's head. As no correspondence has been found regarding the project, communication must have been verbal. Wilkins was also a prebend at York Minster and had duties to fulfil which would have brought him to York. While there, he would no doubt have visited the Gyles' workshop in Micklegate to oversee progress on the Ripon Minster scheme. Interestingly, Wilkins' father, Walter Wilkins (*d.* 1625), was a tradesman who worked as a goldsmith in Oxford. Although Wilkins was only eleven when his father died and spent his formative years in the household of his half-brother, the writer and astronomer Walter Pope, it is plausible to suggest that Wilkins and Gyles junior shared a mutual interest in furnace work.⁴³⁸ As Wilkins was a founding member of the Royal Society and one of its two elected Secretaries, and given his history of promoting shared knowledge, it is unlikely that when visiting the Gyles' workshop, he was not curious about Gyles' working practices. There is an obvious connection between Gyles' activities and the Royal Society's 'history of trades' programme, particularly Christopher Merritt's enquiries into glassmaking.⁴³⁹ Circumstantially, it would be fair to assume that Gyles lost contact

⁴³⁵ Robert Hooke. *Micrographia, or, Some physiological descriptions of minute bodies made by magnifying glasses with observations and inquiries thereupon* (London: John Martyn, 1665), preface.

⁴³⁶ Bermingham, *Learning to Draw*, 72.

⁴³⁷ Jardine, "The 2003 Wilkins Lecture":110-111.

⁴³⁸ Henry, "Wilkins, John", *ODNB*. Also, see A Clerke, & A McConnell, Pope, Walter (bap. 1628, d. 1714), astronomer and writer, *ODNB*.

⁴³⁹ Ochs, "The Royal Society of London": 131-133.

with Wilkins when he became Bishop of Chester in 1668, a position he owed to the influence of Buckingham, who, like Wilkins, believed in religious tolerance and in bringing together the Presbyterians and the Church of England.⁴⁴⁰

As seen in Chapter 1, Edmund was a man of standing in the community, an owner of property with broad business interests, and it is feasible that it was both he and Henry who initially established the York virtuosi with Wilkins' encouragement. The bell founder Samuel Smith and his London brother James were most likely involved, as were the mason-sculptors and architect brothers Thomas Mann (d. 1680) and Joshua Mann (d. 1688). Thomas Mann is first recorded in 1665 building the Market Cross in 'Pavement' in York, a project which Edmund Giles would also have been involved with as the city's husband.⁴⁴¹ Once the brothers returned to York after working in London under Hooke following the Great Fire, evidence suggests Joshua made scientific instruments.

⁴⁴² Although Edmund was of the 'middling sort', it is telling that neither he nor Henry was invited to join the Royal Society, even though its aim was to foster creativity and experimentation across both the arts and sciences, something the Society saw as fundamental to advancing the wealth of the nation. To do so, it professed to be open to 'craftsmen, instrument makers, and mechanics' as well as educated men drawn from the upper classes, such as natural philosophers and physicians.⁴⁴³ This did not necessarily work in practice; although the Society did not exclude people for doctrinal reasons, membership appears not to have been open to all.⁴⁴⁴ Social discrimination appears to have extended to geography, and it is probably no coincidence that very few elected members

⁴⁴⁰ N. H. Keeble, *The Restoration: England in the 1660s* (Padstow: Blackwell, 2002), 123.

⁴⁴¹ Raine, "Proceedings of the Commonwealth Committee for York and the Ainsty", 11-17. The last record of Edmund undertaking husband duties was in 1664. W.C. B., 'Mann, Brass Engraver, York', *N. & Q* 7th Series, 10, (London: John C. Francis, 1890): 305-306. Notes record a different date for the market cross that 'Mr Mann was an architect who designed the new market cross in York in 1672'.

⁴⁴² R. J. Malden, "Elusive virtuosi - Thomas and Joshua Mann", *York Historian*, vol. 6 (York: Ebor Press, 1985): 43. Also, W.C. B., "Mann, Brass Engraver, York", *N. & Q* 7th Series, 10 (London: John C. Francis, 1890): 305-306.

⁴⁴³ Bermingham, *Learning to Draw*, 66. Also, see *Translation of First Charter, granted to the President, Council and Fellows of the Royal Society of London, by King Charles the Second*, (1662): 10. https://royalsociety.org/-/media/Royal_Society_Content/about-us/history/Charter1_English.pdf?la=en-GB&hash=EE2FF8F0745DE30775F7EBD6F9A7A1E5. Further, <https://royalsociety.org/-/media/news/2012/2012-supplemental-charter.pdf>.

⁴⁴⁴ Michael Hunter, "The Problem of 'Atheism' in Early Modern England", *TRHS* 35 (1985): 2. doi:10.2307/3679180.

were from the provinces, let alone York, except for those who travelled to London and stayed there.⁴⁴⁵

The utopian ideal, as promoted by Wilkins, of bringing together eminent men of science and men of trade was both visionary and pragmatic, and was arguably realised in York before London. From notes gathered between 1721-25, imparted by Thoresby, the English engraver and antiquarian George Vertue (1684-1756) records that the York virtuosi met ‘at the house of Mr. Henry Gyles y^e famous glass painter’.⁴⁴⁶ This speculative narrative may illustrate how, encouraged by Wilkins, craftsmen and professional workers interested in experimentation clustered around the Gyles family home and workshop. With Lister's arrival in 1670, this informal group became more directly connected to the Royal Society in London.

1.1 The York virtuosi, natural philosophy and antiquarianism

In his comments, Vertue listed some of York's ‘Ingenious Virtuosos’ post 1670, when the virtuosi became more formalised and hierarchical in structure, with gentlemen like ‘Dr Martin Lister, John Lambert Esqr. Tho. Kirk Esq’. Mr. William Lodge & Mr Francis Place’.⁴⁴⁷ As this discussion focuses on the natural philosophers and antiquarians, the artists of the group: William Lodge, Francis Place, John Lambert, Jacques Parmentier (1658-1730), and other potential artists/architect builders, will be discussed in chapter 3.

⁴⁴⁵ Hunter, “The Problem of ‘Atheism’”: 12.

⁴⁴⁶ “Vertue's Note Book, Add. MS. 23,069, British Museum, London, Vol. 18 (1929), 120-121. These men were the physician Dr. Martin Lister (c.1638-1712), the topographer John Lambert (c.1640-1701), the engraver and printmaker William Lodge (1649-1689), the topographical artist and mezzotint printmaker Francis Place (1647-1728) and the mathematician Thomas Kirke (1650-1706). This extract is from a letter Ralph Thoresby sent to Vertue, detailing the biography of William Lodge. The date of the note is given as 1721-25 in “The History of the Vertue Manuscripts”, Vol. 18 (1929): xix, xv–xxv.

⁴⁴⁷ George Vertue, “Vertue's Note Books”, *The Walpole Society*, 18, 1, (1929-1930): 120.

Gyles' fellow 'ingenious virtuosos' were as diverse in their interests as their backgrounds. Thomas Kirke was an avid collector and noted amateur mathematician, an interest given extraordinary expression in the form of a "most surprizing labyrinth", a woodland maze affording some '300 Views' laid out along geometric principles at his Cookridge Hall estate, near Leeds. Travelling extensively on the Continent and domestically, Kirke's keen eye for local custom, industry and topography is apparent in his journal of a pioneering tour of Scotland, if less so in the notably slanderous version published in 1679 as *A Modern Account of Scotland*.⁴⁴⁸ His close friend, Thoresby, is best known for his *Ducatus Leodiensis* (1715), which detailed the topography of the town and parish of Leeds.

As a neighbour of Gyles, the Duke of Buckingham, FRS, and Lord-Lieutenant of York from 1661 to 1674, should also be considered. Although post-Restoration Buckingham was a significant patron of the arts, he spent most of his time in political life as a courtier and later as a government minister, which may explain his limited engagement with the York virtuosi.⁴⁴⁹ In 1657, he married Mary Fairfax, which made him joint heir to the Fairfax estates in Yorkshire where, from 1674, he went into semi-retirement. The year before, he became owner of the Vauxhall glasshouse in London, and his precarious income was therefore bolstered by the profits from his glassmaking enterprise. At Vauxhall, he employed a team of Venetian glassmakers to blow glass plates for mirrors and coach windows using the cylinder method.⁴⁵⁰ Buckingham's glassmaking enterprise was informed by his primary interest, chemistry. He had a laboratory installed at his London residence, Wallingford House and even had one fitted in his chambers when he was sent to the Tower in 1677.⁴⁵¹ What is not widely known is that he also had a York residence, Buckingham House in Micklegate (built for the Fairfax family in 1642), which

⁴⁴⁸Ralph Thoresby, *Ducatus Leodiensis*, 2nd edn., (Leeds: Ed. Whitaker, 1816), 157-9.

Anna Marie Roos, *Martin Lister and his Remarkable Daughters* (Oxford: Bodleian Library, 2019), 3. Also, Clair Jackson, "Kirke, Thomas (1650-1706), antiquary and topographer", *ODNB*.

⁴⁴⁹ Bruce Yardley, "George Villiers, Second Duke of Buckingham, and the Politics of Toleration", *HLQ* 55, no. 2 (1992): 324.

⁴⁵⁰ Frank T. Melton, "A Rake Refinanced: The Fortune of George Villiers, Second Duke of Buckingham, 1671-1685", *HLQ* 51, no. 4 (1988): 300.

Louw, "Window-Glass Making in Britain": 49.

⁴⁵¹ John Harold, *A Rake and his Times: George Villiers, 2nd Duke of Buckingham* (New York: Farrar, Straus and Young, 1954), 21. Also see, John H. O'Neill, *George Villiers, Second Duke of Buckingham* (Boston: Twayne Publishers, 1984), 6, and Robert D. Hume, "Editing a Nebulous Author: The Case of the Duke of Buckingham", *The Library*, 4, Issue 3, September (2003): 251.

was where he spent much of his later retirement.⁴⁵² Although the house was a ‘skeleton’ by 1736, Drake records that there was:

... an out shot from this house which I am told was built for the duke’s laboratory in chemistry. Which mystery he expended vast sums of money in; and if he did not find out the philosopher’s stone by it, it is certain he knew a way of dissolving, or evaporating, gold and other metals, quicker than any man of that age ...⁴⁵³

Although Buckingham House was demolished in c.1727, it was located, to some extent, opposite Gyles’ own house in Micklegate.⁴⁵⁴ [Fig. 3] The significance of Buckingham here is that, although, like Wilkins, he appears not to have been drawn into the burgeoning virtuosi, he and Gyles shared an interest in glassmaking, which will be explored later.

Gyles’ correspondence also mentions more peripheral natural philosophers, such as the physician Moses Ashenden, the Rectors George Plaxton and Miles Gale (1647-1721), and the apothecary Henry Wilkinson. They too, therefore, can be assumed to have been part of the York virtuosi.⁴⁵⁵ Lister’s own correspondence further points to the physician, naturalist, and antiquary Nathaniel Johnston (bap. ?1629-1705) and Sir John Brooke MP as contributors. Brooke was a Baronet from Boroughbridge in North Yorkshire, with a townhouse in York. Importantly, he kept Lister and the York virtuosi informed of Royal Society activities by sending notes of the previous meetings.⁴⁵⁶ Brooke, along with Lodge, also helped Gyles gain work and recoup debts, as evidenced by a dispute with the former soldier and governor of York, Lord Freshville (1607-1682).⁴⁵⁷ Additionally, with York’s reinvention as a national historical monument, the Minster became a key destination for

⁴⁵² Clements Hall Local History Group -<https://www.clementsallhistorygroup.org.uk/projects/bishophill-history/bishophill-important-houses-and-architecture/>

⁴⁵³ Drake, *Eboracum*, 69.

⁴⁵⁴ Brooks, “York -1066 to Present Day”, 306. 309. Brooks states that Buckingham’s mansion was in St. Mary’s Bishophill Junior and was demolished in c. 1727.

⁴⁵⁵ Lord Vaughan, third Earl of Carbery to Martin Lister via Henry Wilkinson (Port Royal, Jamaica, 18 January 1675/6), Bodl. MS Lister 35, fol.32, as transcribed in *The Correspondence of Dr. Martin Lister (1639-1712) Volume One: 1662-1677*, ed. Anna Marie Roos (Leiden: Brill, 2015), 823.

⁴⁵⁶ Henry Oldenburg to Martin Lister (London, 12 June 1673), Bodl. MS Lister 34, fol. 98. Letter Book, 6, fol.124, in *The Correspondence of Dr. Martin Lister*, Roos, 547.

⁴⁵⁷ William Lodge to Henry Gyles (London 9 October 1678) Stowe 746, f- 3, BL. Hake, “Some Contemporary Records”, 64. It appears that Freshville questioned Gyles’ bill two years later for an armorial Gyles had painted in 1676 for St John the Baptist, Staveley.

antiquarian studies.⁴⁵⁸ Possible antiquarian members of the York virtuosi were the Dean of York Thomas Gale (1697-1702), the Hull-based Abraham de la Pryme (1671-1704), and Torre.⁴⁵⁹ Because of their antiquarian tastes, scholars have suggested that the Fairfax family were also encouragers.⁴⁶⁰

This rather large collection of names suggests that ‘membership’ of the York virtuosi group (if that is what it could be called) appears to have been a rather loose, ad hoc set of associations, like an interested circle, as it were, with varying degrees of commitment. Even though the term ‘club’ was often used interchangeably with ‘society’, the York virtuosi could most likely be compared with the pre-Restoration London group of physicians and mathematicians initiated by Theodore Haak, whose group also held meetings in taverns and private houses.⁴⁶¹ In structure, therefore, the York virtuosi probably had at its core a group of York-based figures which was swelled by other visiting linked figures from the Yorkshire region. [Fig. 30] This now more gentlemanly social structure, with its intellectual and philosophical interests, marked a shift away from this author’s proposed informal group of tradesmen/professional workers. So, how did Gyles, a glass painter ‘mechanic’, fit into this new structure?

2.0 GYLES AND THE YORK VIRTUOSI: 1670-1676

With the arrival of Lister in 1670, the York virtuosi became the expression of Yorkshire’s cultural and philosophical life. After his marriage to Hannah Parkinson (1645-1695), the English naturalist and physician moved from London to York to set up a new medical practice.⁴⁶² The couple initially resided with Hannah’s parents at Carlton-in-Craven from 22 August 1670 before moving to a house ‘without Micklegate barr’ (just outside the city

⁴⁵⁸ Akehurst, “is Risen Again”: 4 and 56.

⁴⁵⁹ F.W. Brooks, “York-1066 to Present Day”, in *The Noble City of York*, ed. Alberic Stacpoole (York: Cerialis Press, 1972), 307-8.

⁴⁶⁰ Brighton, “Enamel Glass Painters”, 1, 95.

⁴⁶¹ Clark, *British Clubs and Societies*, 10. 49. 51.

⁴⁶² J. D. Woodley, ‘Anne Lister, illustrator of Martin Lister’s *Historiae Conchyliorum*, 1685–1692’, *Archives of Natural History*, 21 (1994), 225.

walls) in October 1670, then to Stonegate in June 1672.⁴⁶³ In addition to his transactions for the Royal Society, Lister is best known for two publications, *Historiae animalium Angliae tres tractatus* (1678) and *Johannes Geodartius of Insects Done Into English and Methodised* (1682), which will be discussed in chapter three. Lister was a man of considerable intellect and energy who would drive the city's virtuosi for the next ten years. He brought purpose and direction to the group and, through communication with the Royal Society, helped formalise the virtuosi as a cohesive collection of talented, if somewhat disparate, individuals. Lister's correspondence from his time in York also shows that he kept in regular contact with like-minded figures across Europe on matters of natural and chemical philosophy, making York an international, as well as a regional, centre of scientific investigation.⁴⁶⁴

Although an original member of the pre-1670 York virtuosi, Gyles would have been one of the exceptions within the new intake of gentlemen with independent means.⁴⁶⁵ The notion that to be a virtuoso required wealth and a liberal education does not seem to have been upheld by the York virtuosi.⁴⁶⁶ Even though members belonged to a hierarchical society founded on clientage and patronage, those from the aristocracy and gentry happily spent time, and even socialised, with those of a lower social rank like Gyles, especially if they were perceived to be men of 'talent'.⁴⁶⁷ This mixing of social ranks was not about embracing social diversity but about respecting competence and ability.⁴⁶⁸ During this period, the attributes necessary for acceptance into this hierarchical structure and for acquiring genteel status were in flux; gentility could be a matter of personal presentation as much as bloodline.⁴⁶⁹ For example, in 1675, the Lincoln's Inn lawyer John Brydal argued that gentility resided in one's birth, office, creation, and reputation, a list that certainly left room for successful merchants and tradespeople like Gyles to aspire to.

⁴⁶³ Letter headings from RS EL/L5/20, NHM MDD Ray 1, fol.16, Bodl. MS Lister 35, fol. 16, in *The Correspondence of Dr. Martin Lister*, Roos, 278.

⁴⁶⁴ *The Correspondence of Dr. Martin Lister*, Roos, 37.

⁴⁶⁵ Bermingham, *Learning to Draw*, 52.

⁴⁶⁶ Bermingham, *Learning to Draw*, 52.

⁴⁶⁷ Tim Somers, "Tradesmen in Virtuoso Culture: 'Honest' John Bagford and His Collecting Network, 1683-1716", *HLQ* 81, no. 3 (2018): 371.

⁴⁶⁸ Rob Iliffe, "Material Doubts: Hooke, Artisan Culture and the Exchange of Information in 1670s London", *BJHS* 28, no. 3 (1995): 285.

⁴⁶⁹ Penelope J. Corfield, "The rivals: landed and other gentlemen", in *Land and Society in Britain, 1700-1914*, eds., N. B. Harte & Roland Quinault (Manchester, 1996), 2.

⁴⁷⁰ Gentility also required integrity and honesty; however, as a gentleman's word was his bond. ⁴⁷¹ In this, Gyles and his father Edmund (as we have seen) would have qualified on this basis alone, particularly as Gyles was referred to as 'Honest Harry' by Lodge, and 'Honest Landelord' by Lambert. ⁴⁷² The regularity with which tradesmen were described as honest in virtuoso culture was no accident, as it was a way of acknowledging someone's trustworthiness, comparable but different from the honour of a gentleman as discussed by Tim Somers. ⁴⁷³ Honesty was broadly associated with moral behaviour in economic trade, particularly among the urban middling sort, epitomising the civil interaction between social elites and trustworthy trades. ⁴⁷⁴ It also, as an identified characteristic of the tradesman, enabled gentlemen virtuosi to distance themselves from socially lesser contacts when required. ⁴⁷⁵

Reading, however, how the gentlemanly elite valued and acknowledged trade status more broadly informs our understanding of Gyles' experience among the York virtuosi. Somers argues that tradesmen like the London-based print collector/dealer and antiquarian John Bagford (1683-1716), a contemporary of Gyles, did not just passively supply specialist services to their gentleman virtuosi patrons but actively shaped this elite hierarchical world of virtuosi culture through his demonstration of 'honesty' and 'his ability to create and maintain networks...' ⁴⁷⁶ While Steven Shapin contrasts gentlemanly 'codes of honour' and civility with the self-serving interests of tradesmen but makes the case that, while the gentlemanly elite with their gentle truthfulness were best placed to contribute to the Baconian empirical model, tradesmen also had a role. ⁴⁷⁷ Additionally, Michael Hunter reads the contribution of tradesmen to virtuosi culture as being generally

⁴⁷⁰ John Brydall, *Ius Imaginis apud Anglos: The Law of England relating to the Nobility and Gentry* (London: John Billinger and Geo. Dawes, 1675.), 57-58.

⁴⁷¹ Corfield, "The rivals": 29.

⁴⁷² Lodge to Harry, (19th February 1682/3), Ms. 3 f. 98. Also, Lambert to Gyles (27 Sept. 1683), Ms. 3/87. Brighton, "Enamel Glass Painters", 3, 662. As a host, Gyles provided a service to the virtuosi as their innkeeper. Other virtuosi lived outside of York and needed a meeting place in the city. Members of the Fairfax family used his house as a boarding house. These points will be expanded upon in Chapter 3.

⁴⁷³ Somers, "Tradesmen in Virtuoso Culture": 371.

⁴⁷⁴ Richard Steele, *The Tradesman's Calling* (London: Samuel Sprint, 1684), 112. Also see Phil Withington, *The Politics of Commonwealth: Citizens and Freemen in Early Modern England* (Cambridge: Cambridge University Press, 2005), 173-74.

⁴⁷⁴ William Lodge to Honest Harry, (19th February 1682/3), Ms. 3 f. 98, YAS. Also, John Lambert to Henry Gyles (27 Sept. 1683), Ms. 3/87, YAS. Brighton, "Enamel Glass Painters", 3, 662.

⁴⁷⁵ Lodge to Harry, (19th February 1682/3), Ms. 3 f. 98. Also, Lambert to Gyles (27 Sept. 1683), Ms. 3/87. Brighton, "Enamel Glass Painters", 3, 662.

⁴⁷⁶ Somers, "Tradesmen in Virtuoso Culture": 359.

⁴⁷⁷ Steven Shapin, *A Social History of Truth* (University of Chicago Press, 1994), 68. 71. 81. 94.

restricted to trade specialities, as trade members were deficient in the “intellectual curiosity” possessed by their elite clients.⁴⁷⁸ In short, tradesmen helped shape the culture of virtuosi while looking after themselves. Gyles, like Bagford, did not just supply materials and skills to the virtuosi but became a true virtuoso himself, as Vertue stated; like the gentlemen, he participated in empirical learning. Vertue’s more fundamental comment, however, that the York virtuosi met at Gyles’ house in Micklegate is significant as, by the mid-1670s, Lister was the dominant figure, and his house would have been the obvious meeting place. So why was Gyles’ home and workshop so important?

2.1 York virtuosi in practice, magic lanterns, speculum metal and nocte lucis

In 1674, Kirke wrote to Gyles ‘... in some vacant place of ye letter you shall find a Circle of ye same sise with *Mr H Bells Lanthornes glasses*’.⁴⁷⁹ In the vacant place, Kirke drew the circular rim of an optical lens from a magic lantern 1 $\frac{3}{4}$ inches in diameter, into which he inscribed ‘Mr I-Bell’s Lanthorne glass T K’ (for Thomas Kirke presumably). In addition, he also drew a set of ‘dividers fitted with a screw for fine adjustment fixed horizontally’, then in another space, wrote the names of a ‘Pencill maker in squirrell’ (paint brushes) called Mr. Flaggatt and a ‘London Dutchman that Collors statues of Iron like Brass, Mr Addam Colonici in Peter Street in Bloomsberry’. Kirke is asking Gyles to purchase these items on his behalf. Although this request may be Gyles simply returning a favour as part of a gentleman’s obligation within the social contract referred to now as the ‘Republic of Letters’, it is more probable that he had some kind of retainer role within the virtuosi.⁴⁸⁰ The ‘*Lanthorne glasses*’ mentioned above probably refer to painted or printed transparent glass slides, not the lens itself, as although microscope lenses, etc., were glasses, they were usually called object glasses or convex eyeglasses.⁴⁸¹

⁴⁷⁸ Michael Hunter, *Science and Society in Restoration England* (Cambridge: Cambridge University Press, 1981), 74.

⁴⁷⁹ Kirke to Gyles, (20th June 1674), Stowe Ms. 745, f. 78, Hake, “Some Contemporary Records”, 61-63.

⁴⁸⁰ Anne Goldgar, *Impolite learning: conduct and community in the Republic of Letters* (New Haven: Yale University Press, 1995), 11.

⁴⁸¹ Issac Newton, “An Accompt of a New Catadioptrical Telescope Invented by Mr. Newton, Fellow of the R. Society, and Professor of the Mathematiques in the University of Cambridge”, *Philos. Trans. R. Soc.* (1665-1678) 7 (1672): 4004.

Given the use of optical projection at the Royal Society and that many of its members, like Samuel Pepys, owned a magic lantern from 1666, it is unsurprising that York virtuosi like Kirke should also own one.⁴⁸² A magic lantern slide was a rectangular sheet of glass with a series of circular images painted onto it, of the same size as the lens. This is because the lens itself had a maximum diameter of 1 ¾ ins., which could be projected. As the name Bell was not found in any post-Restoration London newspaper advertisement between 1674 and 1680, a candidate for ‘Mr H Bell’ could be Henry Bell (1647-1711), a provincial ‘merchant-architect’, sculptor, art collector, connoisseur and engraver living in King’s Lynn, Norfolk, who like Gyles, earned the epithet ‘ingenious’ from his contemporaries.⁴⁸³ His involvement in the rebuilding of Northampton following the fire of 1675 seems to have taken him to London to consult with Robert Hooke as Surveyor to the City of London. Hooke’s diary includes a few references to Bell, detailing business with him and illustrating his involvement in intellectual society while he was there.⁴⁸⁴ Bell was also a painter and an engraver/printer, and a small number of his signed engravings are preserved in the British Museum and the Bodleian Library. They are all topographical, portraying scenes and buildings in King’s Lynn. Therefore, Kike may have been looking to purchase similar images from Bell for topographical discussion.

While magic lanterns were still a novelty item and not publicly advertised for sale in London until c. 1693, the London optical instrument makers Richard Reeves and Christopher Cock were selling them from about 1666.⁴⁸⁵ Invented by Athanasius Kircher (1602-1680) in the 1640s, the magic lantern or ‘laterna magica’ was only made in large numbers from 1672, when the technology had reached a sufficiently advanced stage. [Fig.

⁴⁸² Pepys diary entry 8.22.1666, <https://www.pepysdiary.com/diary/1666/08/19/> Wednesday 22 August 1666, so home, and there find Reeves, and so up to look upon the stars, and do like my glasse very well, and did even with him for it and a little perspective and the Lanthorne that shows tricks, altogether costing me 9l. 5s. 0d. So to bed, he lying at our house’.

⁴⁸³ He was most noted for the Customs House in King’s Lynn (1683) and published an engraving of this himself, https://www.britishmuseum.org/collection/object/P_Nn-4-21.

⁴⁸⁴ P. J. West-Taylor, “Henry Bell of King’s Lynn”, *Architectural History* 4 (1961): 41, 45, 49, 57. *The Diary of Robert Hook M.A., M.D., F.R.S. 1672-1680*, eds., Henry W. Robinson, and Walter Adams (London: Wykeham Publications, 1968), 246. ‘With Martin corner at Rainbow where Bell architect III all day’.

⁴⁸⁵ *London Gazette*, Issue 2918, (26 October 1693), 2. ‘These are to give notice to all Gentlemen and others that have occasion for Glass Lanthorns finely painted, to burn Candles in, or other Lights, for Halls, Stair-Cases, or Passages.’ Also see, *The Diary of Samuel Pepys*, 7, 1666, eds., Robert Latham, and William Matthews (Berkeley and Los Angeles: Harper Collins, 1995), 257. ‘in a darke room with smoake, which is very pretty. He did also bring a lanthorne with pictures in glasse, to make strange things appear on a wall, very pretty’.

31] Although initially used for entertainment as part of the baroque theatrical experience, there is evidence that magic lanterns were used for anatomical lectures at an early stage.⁴⁸⁶ Concerns about their association with magic and the projection of dislocated images, however, meant that experimental philosophers were initially wary of using such ‘optika’ or optical instruments, as they did not want science to be considered as mere spectacle.⁴⁸⁷ These concerns receded, however, with the publication of Hooke’s *Micrographia* in 1665, in which he argued that experimental investigation needed a new method of analysis, a ‘novum organum, some new engine and contrivance’, after which optical instruments became more accepted for ‘ocular demonstrations’ within the Royal Society.⁴⁸⁸ Hooke’s work with projected images began in the early 1660s and continued until the late 1690s.⁴⁸⁹

The public, however, still viewed optical instruments with scepticism as a way to acquire knowledge. As Gilde points out, Thomas Shadwell’s play *The Virtuoso* (1676), although appearing to satirise the Royal Society’s use of the microscope to acquire ‘useless knowledge’, was not the object of the play’s satire but rather the foolish virtuoso who did not comply with its belief that the pursuit of knowledge should serve a practical purpose.⁴⁹⁰ This scepticism stemmed from the public’s lack of trust, driven by their limited access to the creation of new knowledge. Empirical research undertaken in private residences was highly controlled by those who needed to ensure ‘that the knowledge produced in such places was reliable and authentic’. The demonstration of new knowledge, therefore, was validated by the presence of trusted gentlemen acting as witnesses.⁴⁹¹ Nevertheless, for the broader public to accept new knowledge as reliable, the question was: who was objective enough to be trusted?⁴⁹²

⁴⁸⁶ W. Engels, and Klaus Staubermann, “Replicating early 18th century magic lantern practice”, *Bulletin of the Scientific Instrument Society*, no. 130, (2016): 40. 43.

⁴⁸⁷ Thomas Hankins and Robert Silverman, *Instruments and the Imagination* (Princeton, New Jersey: Princeton University Press, 1995), 43.

⁴⁸⁸ Hankins, *Instruments and the Imagination*, 47.

⁴⁸⁹ Matthew C. Hunter, “‘Mr. Hooke’s Reflecting Box’: Modelling the Projected Image in the Early Royal Society”, *HLQ* 78, no. 2 (2015): 307.

⁴⁹⁰ Joseph, M. Gilde, “Shadwell and the Royal Society: Satire in *The Virtuoso*”, *Studies in English Literature, 1500-1900* 10, no. 3 (1970): 469.

⁴⁹¹ Shapin, *The House of Experiment*, 95.

⁴⁹² Shapin, *The House of Experiment*, 373-375.

Kirke and Gyles' pursuit of magic lantern glass slides, therefore, points to the York virtuosi attempting to use the same optical methods as the Royal Society to obtain topographical information, present observable phenomena, and acquire practical knowledge. As a glass painter, Gyles had the necessary skills to, for example, transfer the drawings of Lodge and Place, created for Lister between 1678/1681, onto glass slides for image projection.⁴⁹³ If Gyles did this, he would not have been the first, as Taylor notes that, in 1672, the glass painter Dutton made a series of magic lantern slides for the Scottish astronomer James Gregory.⁴⁹⁴ The drawings made by Lodge and Place were for Lister's natural history publication *Historiæ Conchyliorum*. Lister, however, also had more than a passing interest in chemistry, in particular antimony.

In the early 1670s, Lister fluxed Derbyshire mineral cawk with antimony to produce 'vitrium' or 'glass of antimony', a component used in the making of reflecting mirrors or specula for telescopes. This discussion now turns to Gyles' potential involvement in this activity. Antimony was also widely used in medical practice as an emetic, and its relevance to this discussion will become apparent later. In late 1671, Isaac Newton (1642-1726/27) had sent the latest version of his reflecting telescope to the Royal Society for inspection. When examined by King Charles II, Sir Robert Moray, Robert Hooke and Christopher Wren, its new system of reflecting mirrors (not to be confused with silver-on-glass mirrors introduced in the mid-nineteenth century) created a sensation. Newton was elected to the RS that night.⁴⁹⁵ Newton's reflecting microscope replaced the convex object glasses (the lenses), which refracted light and distorted the image, with a concave reflecting mirror that captured the true image before reflecting it onto a secondary flat mirror. The image was then directed to an eyepiece at the side of the telescopic tube. The reflecting mirror was made from 'speculum metal', an alloy of copper and tin called *bell-metal*, known to alchemists because of its similar brightness to silver. Copper is a relatively soft metal, but when alloyed with tin, it becomes harder, more elastic, and, importantly, less susceptible to tarnishing. Bell metal by itself was problematic, as it had a porous surface at the microscopic level; pores that became larger when polished, so

⁴⁹³ Robert W. Unwin, "A provincial man of science at work: Martin Lister, F. R. S., and his illustrators 1670-1683", *Notes Rec. Roy. Soc. Lond* 49 (1995): 221-3.

⁴⁹⁴ E. G. R. Taylor, *The Mathematical Practitioners of Tudor & Stuart England 1485-1714* (Cambridge University Press 1954), 246. 250.

⁴⁹⁵ A. Rupert Hall, F.B. A, and A.D.C. Simpson, "An Account of the Royal Society's Newton Telescope", *Notes Rec. Roy. Soc. Lond* 50 (1), 1-11 (1996): 4.

diminishing the reflective surface.⁴⁹⁶ Therefore, for his speculum metal, Newton used an alloy containing arsenic:

Thus Tin-glass mixt with ordinary Bell-metell makes it more white and apt to reflect a greater quantity of light; but with all its fumes, raised in the fussion, like so many aerial bubies [sic], fill the metal full of those Microscopical pores. But with white Arsenick both blanches the Metall and leaves it solid without any such pores...⁴⁹⁷

The author of Newton's account in the Royal Society's *Philosophical Transactions* then proceeds to comment that:

He not having tried, as he saith, many proportions of the Arsenick and Metall, does not affirm, which is absolutely best, but thinks, there may conveniently be used any quantity of Arsenick equally in weight between a sixt and eith part of the Copper, a greater proportion making the Metall brittle.⁴⁹⁸

So, Newton first melted six ounces (or parts) of copper alone, then one ounce (or part) of arsenic, and finally two ounces (or parts) of tin, before stirring them together and pouring off the mixture. The speculum would have been cast in an iron mould lined with clay or sand, then ground into shape before being polished.⁴⁹⁹ Maintaining the correct curvature during polishing was a problem which will be considered later. When the Dutch mathematician, engineer, astronomer, and inventor Christiaan Huygens (1629-1695) and FRS was asked to comment on Newton's invention, he noted that:

the main business will be, to find a matter for this speculum that will bear so good and even polish as glasses, and a way of giving this polish without vitiating the spherical figure. Hitherto, I have found no Specula, that had near so good a polish as glass; and if Mr. Newton hath not already found a way to make it better, then

⁴⁹⁶ Newton, "An Accompt of a New Catadioptrical Telescope": 4006.

⁴⁹⁷ Newton, "An Accompt of a New Catadioptrical Telescope": 4006.

⁴⁹⁸ Newton, "An Accompt of a New Catadioptrical Telescope": 4006/7.

⁴⁹⁹ Henry C. King, *The History of the Telescope* (New York: Dover Publications, 2003): 74-75 and 80-81.

ordinarily I apprehend, his Telescopes will not be so well distinguish objects, as those of glass.⁵⁰⁰

In 1674, Lister published his findings on his use of cawk to flux antimony in the Royal Society's *Philosophical Transactions*:

Take of Antimony one pound; flux it clear: Have an ounce or two of the Cawk-stone in a lump red hot in readiness. Put it into the Crucible to the Antimony; continue the flux a few minutes: Cast it into a clean and not greased Mortar, decanting the melted liquor from the Cawk.⁵⁰¹

Responding to Lister's research, the natural philosopher and first secretary of the Royal Society, Henry Oldenburg (c.1619-1677), requested cawk from Lister for the making of 'perspectives especially of such are of Mr Newtons invention'. Lister's reply to Oldenburg suggests that the York virtuosi were casting specula of their own:

... [the] vitrum was here judged to serve well the businesse of perspective, & espeacially Concave speculums of wch we cast some. There is some difficulty in the exceeding tendernesse of ye mettall, but we have in part corrected yt; ye mould we use to cast ym on, is a Christal-glasse.⁵⁰²

The making of vitrum, or glass or antimony, called 'crude antimony', was historically made from Stibnite, a sulphide mineral which was ground, then heated to produce a calcined product before being poured and cooled to form a 'glass'. But as described above, Lister heated antimony and Cawk-stone separately before combining them. Importantly, 'the cawk itself did not incorporate with the antimony', so it served purely as a flux. Lister's description of cawk-stone has been identified as barite (barium sulphate), termed by coal miners as heavy spar.⁵⁰³ When barium sulphate and antimony are heated together, the cooled product results in a mixture of antimony and sulphide. Lister's fluxing,

⁵⁰⁰ Newton, "An Accompt of a New Catadioptrical Telescope": 4008.

⁵⁰¹ Martin Lister, "Of the Speedy vitrifying of the whole body of Antimony of Cawk", *"Philos. Trans. R. Soc."* 9, issue 110, (London: Jan.1, 1674): 225-226. Cawk is a form of barite (barium sulfate, BaSO₄) or heavy spar, an alkali earth metal.

⁵⁰² Martin Lister to Henry Oldenburg (London, 16 January 1674/5), RS EL/L5/73; RS Letter Book 7: 124-125, in *The Correspondence of Dr. Martin Lister*, Roos, 756-7.

⁵⁰³ Roos, "A Speculum of Chymical Practice", 108-109.

however, achieved a purer ‘glass’ because barium sulphate is a natural salt with a pH of 7, which would probably have encouraged the antimony to melt more easily, thus producing a more refined product. The significance of the York virtuosi’s refinement of speculum metal and the casting process, and so their contribution to epistolary and the calibration of the ‘business of perspective’ which was preoccupying the Royal Society and Newton in London, cannot be overstated.⁵⁰⁴ Roos argues that Lister was probably casting specula in response to Newton’s work on the reflecting telescope.⁵⁰⁵ In 1676, a year after Oldenburg’s request, Nathaniel Johnston wrote to Lister requesting samples of his cawk for Newton himself, as he was interested in establishing whether it might improve the reflectiveness of his own specula.⁵⁰⁶ Newton’s speculum tarnished easily, and so its reflective properties were reduced. Lister’s alloys, however, ‘increased telescopic efficiency and magnification’ by rapidly achieving ‘glass of antimony’ with the addition of cawk. Further, in measuring the refractive indices of various materials when collecting data for his later 1704 publication *Opticks*, Newton found that ‘glass of antimony’ had the highest index next to that of diamond.⁵⁰⁷ This would have been significant for Newton as the refractive index number ‘determines the speed by which light travels through a medium other than a vacuum’, so ‘glass of antimony’ would have improved reflectiveness.⁵⁰⁸

After reviewing the York virtuosi, including Gyles, as possible collaborators in making speculum with Lister, Roos suggests the most likely candidate was the mineralogist and ‘chymist’ Francis Jessop (1638-91) of Broomhall, Sheffield. Jessop had published in the Royal Society’s *Philosophical Transactions*, and his correspondence illustrates how scientific inquiry occurred in pockets across the country connected by epistolary networks of like-minded people.⁵⁰⁹ York was evidently one such pocket. Jessop had previously corresponded with Lister on other mineralogical matters, including cawk, and seems to have attempted to make reflecting mirrors himself. In a letter from Lister to Oldenburg, however, Lister relays previous correspondence, in which Jessop

⁵⁰⁴ Roos, “A Speculum of Chymical Practice”, 110. As explained by Roos, the term was first used by Adam Moseley to describe how (epistolary) correspondence exchange led to a fine-tuning or calibration of intellectual knowledge between interested parties.

⁵⁰⁵ Roos, “A Speculum of Chymical Practice”, 111. Newton’s specula were ‘two inches broad and about one-third of an inch thick’, which were then ground into their ‘spherically concave profile’ before being polished.

⁵⁰⁶ Roos, “A Speculum of Chymical Practice”, 105.

⁵⁰⁷ Roos, “A Speculum of Chymical Practice”, 111-112.

⁵⁰⁸ Gallegos J, Stokkermans, “Refractive Index”, in *StatPearls* (National Library of Medicine, 2024), <https://www.ncbi.nlm.nih.gov/books/NBK592413/>

⁵⁰⁹ Roos, “A Speculum of Chymical Practice”, 110.

acknowledges Oldenburg's generous offer for '... a better receipt for the mixture of Metalls for speculums ...' but that he could not put it to use as: '... I find my workmen here able to doe soe little ...'.⁵¹⁰ Lister himself records that he conducted his smelting experiments with cawke at his home laboratory, and that the fumes polluted the neighbourhood.⁵¹¹ The actual making of the speculum itself, however, may have been a different matter. As the curious mention of 'Christal-glasse moulds' has not been probed by others, what exactly Lister meant is difficult to determine, but it seems to have something to do with the 'exceeding tendernesse of ye mettall' mentioned above. This use of glass to make a mould for the speculum, to produce a more rapid cool, perhaps suggests Gyles rather than Jessop as Lister's collaborator. Gyles' workshop in Micklegate was fully equipped to flux/smelt glass and minerals at scale. Moreover, as seen in Chapter 1, Gyles' brother-in-law, Samuel Smith, was a bell founder and would have been highly proficient in working with *bell metal*; and his brother, James Smith, was a chemist and maker of antimonial cups based in London and so presumably had a deep understanding of the properties of antimony. Smith's bell foundry was in Toft Green at the top end of Micklegate, where Gyles lived – literally a two-minute walk. Further, bell founders also cast Mortars (mixing vessels) for Laboratory work, and several are known to have been cast by the Smiths.⁵¹² It is therefore highly probable that the Smith foundry cast Mortars for members of the York virtuosi, like Lister and Buckingham, who both had laboratories at home. Between them, therefore, the Gyles and Smith families were surely more qualified to collaborate with Lister than Jessop, especially as the team assembled by Jessop was, by his own confession, '... able to doe soe little ...'.⁵¹³ In addition to probably making speculum, it appears Gyles may have been instructed to make Nocte Lucis, or phosphorus, and may even have exploited it for his own commercial benefit.

In 1671, Oldenburg wrote to Lister asking for his opinion on a Royal Society exhibition which showcased a curious female glowworm. Oldenburg proceeds to explain how:

⁵¹⁰ Roos, "A Speculum of Chymical Practice", 111.

⁵¹¹ Roos, "A Speculum of Chymical Practice", 109.

⁵¹² Benson, "York Bellfounder", 28-31.

⁵¹³ Roos, "A Speculum of Chymical Practice", 111.

‘After Sun-set that night, she walked briskly up and down in her box, shining as clearly as the night before, and that, when there was so much day-light that I could read in Sylvius without a candle.’⁵¹⁴

Lister responds that he had never heard of such a curious thing.⁵¹⁵ This exhibition, showcasing the ‘night light’ then called *Nocte Lucis*, now known as phosphorus, seems to have generated much excitement amongst the York virtuosi, to such an extent that by 1682 it appears that Gyles was given the responsibility of researching the substance. Gyles wrote to his cousin in London seeking information about the isolation of phosphorus from urine, and Smith’s reply outlines the unreliability of the methods being followed in London:

As to the makeing the Nocte Lucis yr receit is the comon way as sqr Boyle mentions and ther is one yt writs a particular Booke of it. And the way of making it, but you may mise it ten traills, it is so tickle to doe. Mr. Stafford at Apotecary Hall who makes it as well as the most yet has missed some- times 3. or 4. times togeather. Here is one not far from me who makes it the readiest of Any, and never misses for he has one thing more then they Any of them yet knows and does not use h  lfe the quantity of urine.⁵¹⁶

The book Smith mentioned was Boyle’s *The Aerial Noctiluca*, published in 1680. Along with his assistant, Ambrose Godfrey (1660-1741), Robert Boyle (1627-1691) was one of the first to make phosphorus in Britain. The substance had been discovered in 1669 by Hennig Brand (c.1630-1710), a German merchant and amateur alchemist, when trying to discover the secrets of the legendary ‘philosopher’s stone’.⁵¹⁷ The German physician Johannes Daniel Kraft acquired knowledge of Brand’s secret recipe in 1675 and promoted the magical substance throughout the courts of Europe. During Kraft’s visit to Britain, Boyle learned the secret of its production.⁵¹⁸ Hennig named the new substance phosphorus from the Greek for ‘light-bringer’ because it glowed in the dark; a property, however, which only occurred when it was exposed to air.⁵¹⁹

⁵¹⁴ Henry Oldenburg to Martin Lister (London, 10 June 1671) Bodl. MS Lister 34, fol. 25. Transcribed by Roos, *The Correspondence of Dr. Martin Lister*, 361.

⁵¹⁵ Lister’s reply (14 June 1671) RS EL / L 5/34 and RS Letter Book, vol. 4, fol. 313-314. Transcribed by Roos, *The Correspondence of Dr. Martin Lister*, 364.

⁵¹⁶ Smith to Gyles, (1682) Stowe MS. 746, f. 57. Knowles, “Henry Gyles”, 66-68.

⁵¹⁷ Michael A. Sommers, *Phosphorus* (New York: The Rosen Publishing Group, 2007), 7.

⁵¹⁸ Sommers, *Phosphorus*, 10.

⁵¹⁹ Richard Beatty, *Phosphorus* (New York: Marshall Cavendish, 2001), 5.

After leaving Boyle's employment, Godfrey established his own laboratory making 'noctiluca' in Southampton Street, London, in 1680.⁵²⁰ From c.1685, he was advertising 'solid' phosphorus for sale.⁵²¹ The commercialisation of phosphorus, however, 'gave it a monetary value that obstructed its free circulation', which meant that it was a scarce commodity even among the virtuosi.⁵²² Dated some three years before Godfrey began advertising phosphorus commercially, Smith's letter to Gyles is telling, as Gyles was seeking to make a product that was not yet commercially available. To achieve this, Gyles must have had a copy of Boyle's book, which gives a general description, or Boyle's unpublished paper on the making of phosphorus deposited with the Society in 1680.⁵²³ It can therefore be suggested that Gyles may have been making phosphorus on behalf of the York virtuosi for experimental purposes. It can further be suggested that Gyles was personally and commercially interested in Nocte Lucis as a form of artificial light.

These discussions around magic lanterns, the making of speculum, and Nocte Lucis point to Gyles having a specific role within the York virtuosi. While no records survive to show how the York virtuosi functioned, it can be compared to the London Society of the Virtuosi of St. Luke (act. c.1689-1743), a social club dedicated to the visual arts, with the sculptor Gibbons as a member of both. The records of the Virtuosi of St. Luke reveal that, like a traditional guild, all their activities were managed by a funded steward.⁵²⁴ As arguably the origins of the York virtuosi lay within the city's trade guilds, the role of steward may have been carried over and, as an 'honest' tradesman, was performed by Gyles. The York virtuosi, therefore, may not have followed the model promoted by Shapin in his London-centric analysis of experimental research, which implies that experimental research took place in private residences. In York, while Lister had a private laboratory in his home, it appears that Gyles' home and workshop operated as a shared hub for collective virtuosi experiments, presentations, and activities.⁵²⁵ Like Hooke as 'Curator of Experiments' at the Royal Society, Gyles' role may have been similar, although not

⁵²⁰ Lawrence M. Principe, "Godfrey, Ambrose, the elder [known as Ambrose Godfrey Hanckwitz the elder] (1660-1741), chemist", *ODNB*.

⁵²¹ Golinski, "A Noble Spectacle": 20.

⁵²² Golinski, "A Noble Spectacle": 28.

⁵²³ "A paper of the Honourable Robert Boyle's, deposited with the secretaries of the Royal Society, October 14, 1680. ... being an account of his making the phosphorus, etc", *"Philos. Trans. R. Soc."* 17, Issue 196 (London: 1693): 583.

⁵²⁴ Bignamini, "George Vertue": 23. 35.125.

⁵²⁵ Shapin, *The House of Experiment*, 394. Also, Roos, "A Speculum of Chymical Practice", 5.

intellectually, as Hooke was charged with providing experiments at each meeting and presenting demonstrations.⁵²⁶ Gyles, however, did not merely facilitate others' activities; he also used this knowledge for commercial gain.

3.0 GYLES' NEW VENTURES AND THE YORK VIRTUOSI: 1676-1682

The lack of demand for traditional glass painting other than heraldry encouraged Gyles to diversify. A single undated letter from his cousin in London, James Smith, indicates the breadth of this diversification, in which we learn that Gyles was sourcing materials to make gnomons for sundials, amongst other things.⁵²⁷ In addition to sundial glass painting, Gyles also ventured into japanning. Although this may seem a minor commercial deviation, his activities during this time reveal a profound shift in his engagement with the connoisseur community. At its core, his experimentation with various decorative surfaces was a scientific study of artificial light.

When the exiled Stuart court returned from the Continent in 1660, they brought with them a taste for French and Dutch architecture and interior design. The Great Fire of London in 1666 created the opportunity to adopt these ideas, initiating a national movement of architectural and decorative renewal. An essential element in the new Baroque architectural style was the balanced sliding sash window (from the French for window frame, *chassis*), which was central to the increased illumination of interior spaces.⁵²⁸ Although casement windows fitted with large panes of glass, rather than leaded glass, were already in use, they were quickly superseded.⁵²⁹ Pier mirrors, made from

⁵²⁶ Hunter, *Science and Society*, 64-65.

⁵²⁷ Smith to Gyles, (undated pre-1676), Stowe Ms. 746. f. 60, in Knowles, "Henry Gyles", 65. Gyles' earliest recorded sundial was for Tong Hall near Bradford in 1665, followed by one at Nun Appleton Hall in 1670.

⁵²⁸ Peter Thornton, *Seventeenth-Century Interior Decoration in England, France and Holland* (New Haven and London: Yale University Press, 1979), 40. 48. 83.

⁵²⁹ Louw, "The Origin of the Sash-Window": 62.

numerous panes of mirror glass, were also installed between the windows to reflect candlelight.⁵³⁰ Moreover, light played off japanned surfaces and ceramic displays. [Fig. 32] The wonder and magic of these new illuminated interiors were recorded by the English travel writer, Celia Fiennes (1662-1741) whilst visiting Chatsworth House, Derbyshire in 1697. The house was rebuilt from 1684 by William Cavendish (1641-1707), who was created 1st Duke of Devonshire in 1694, and the interiors were in the process of completion. Walking through the state apartment, intended for royal use, she describes the quality of both the bevelled window and mirror glass. She also draws attention to the ‘Japan Closet’ which was created in 1692 by Gerrit Jensen (Dutch, 1667-1715), Cabinet Maker in Ordinary to William III, using ornate incised Oriental lacquer or ‘coromandel’, only to be dismantled eight years later in 1700 to make cabinets for the State Drawing Room.⁵³¹ An interesting connection emerges between the use of glass and lacquer in the new Chatsworth interiors: Jensen not only supplied both window and mirror glass but also japanned the wooden panelling in the Japan Closet.⁵³² Here, opposing mirrors amplified the light from the silver chandelier (1694):

Thence you Enter a dineing roome, two drawing roomes, a bed Chamber and Closet wch opens quite thro’ the house a visto, and at the End of the dineing roome is a Large door all of Looking glass in great pannells all diamond Cutt. This is just opposite to ye doores that runs into ye drawing roome and bed Chamber and Closet so it shews ye roomes to Look all double. Ye ffloores of ye Roomes are all finely Inlaid, there is very Curious Carving over and Round the Chimney pieces, and Round the Looking-glasses that are in ye peers between the windows, and fine Carv’d shelves or stands on Each side of ye glass. Every roome is differing work and all fine Carving and over ye doores some of it is of ye Natural Coullr of ye wood and varnish’d only – others painted. Ye Dutchess’s Closet is wanscoated wth ye hollow burnt japan, and at Each Corner are peers of Looking glass; over the Chimney is Looking glass an oval and at the 4 Corners after this figure and hollow

⁵³⁰ Thornton, *Seventeenth-Century Interior*, 75.

⁵³¹ Fiennes calls this the ‘Duchess’s Closet’, and after 1700, it was renamed the State Closet. See Hannah Obee, “The golden age returns: this issue of APOLLO celebrates the redisplay of Chatsworth’s State Apartment, a sequence of rooms created for the 1st Duke of Devonshire at the end of the 17th century as a backdrop for baroque court ceremonial. Their purpose is made newly evident by the recent changes.” *Apollo* (June 2008): 60.

⁵³² Adam Bowett, *English Furniture 1660-1714, From Charles II to Queen Anne*, (Woodbridge: Antique Collectors Club, 2002), 149; British and Irish Furniture Makers Online: <https://bifmo.furniturehistorysociety.org/entry/jensen-gerrit-1680-1715>.

Carving all round ye glass. The roomes are all painted very finely on ye top; all ye windows ye Squares of glass are so large and good they Cost 10s. a pannell.⁵³³

The celebrated poet Charles Cotton (1630-87), author of *The Wonders of the Peake* in 1681, dedicated to the Duchess of Devonshire, knew both the old Tudor house with its leaded glass casements and its Baroque replacement, described the sash windows as ‘so many Suns’ and ‘one great *Eye* / T’ examine and admire thy beauties by’.⁵³⁴ At night, these sash windows turned into black mirrors and, together with the intermediate pier glasses, created a continuous reflective surface that magnified candlelight and firelight. In the duchess’s closet the ebonised wall panelling, opposing pier glasses at each of the four angles, and the mirror over the fireplace would have created an enveloping, reflective environment. This playful amplification of night-time lighting, together with japanning, was arguably where Gyles’ new interests lay.

Gyles was involved with japanning from c.1674, a decade or so before Stalker and Parker (1688) claimed that japanning was invented by the English and the French so that the ‘Nobility and Gentry might be completely furnished with whole sets of Japan-work’.⁵³⁵ The demand for Asian lacquer began in the late sixteenth century, fuelled by trade links with India, China, and Japan, with British craftsmen attempting to imitate the decorative process from the first half of the seventeenth century. The key ingredient in lacquer was the sap of the lac tree, *Rhus verniciflua*, which was unavailable in the West. Only with the Restoration and the development of spirit varnishes could British craftsmen produce enough decorative objects to meet public demand.⁵³⁶ In Britain, as Japanese lacquer was the most prized on account of its flawless finish and light-reflecting qualities, the term ‘japanned’ was used to describe imitation lacquer, in the same way that ‘china’ was used to describe imitation porcelain.⁵³⁷

⁵³³ Celia Fiennes, *Through England on a Side Saddle in the Time of William and Mary 1662-1741* (London: The Leadenhall Press, 1888), 48-49.

⁵³⁴ Charles Cotton, *The Wonders of the Peake* (London: 1681), 82.

⁵³⁵ John Stalker & George Parker, *Treatise of Japanning and Varnishing* (Oxford: John Stalker & George Parker, 1688), Preface.

⁵³⁶ E. Chamberlayne, *The Present State of England*, Part 3 (London: William Whitwood, 1683), 93.

⁵³⁷ “The influence of East Asian lacquer on European furniture”, *The Victorian & Albert Museum Collections*, accessed 21.9.2019. <https://www.vam.ac.uk/articles/east-asian-lacquer-influence>; Also, Adam Bowett, *English Furniture 1660-1714, From Charles II to Queen Anne*, (Woodbridge: Antique Collectors Club, 2002), 144-169.

Henry Gyles Booke contains thirty-two pages of highly detailed text on japanning and recipes for the making of varnishes compiled between 1679 and c.1683, and by 1679, he was making his own tooth and agate burnisher for polishing japanned surfaces.⁵³⁸ The *Booke* also shows that he purchased recipes for the gilding and the making of varnishes from ‘Mr. Whittaker, who sold recipes ‘to severall persons in Yorke for 3 Guineys’, and from Goe. Thomlinson, whom Gyles referred to as the ‘varnish man’.⁵³⁹ Gyles also describes using Pear tree and other softwoods, and how to draw landscapes on a black japanned surface with shell gold.⁵⁴⁰ *Henry Gyles Booke* also documents the receipt of information from a Mr. Vermuling ‘for ye true way of Water Gilding and Burnifhing with Leafe gold and silver: which I had from Gyles Vermeulen a Dutch man. An 1679’. Given the amount of information from Vermeulen (or Van der Meulen) recorded by Gyles, which amounted to some fourteen pages, their correspondence must have lasted for quite some time.⁵⁴¹ Gyles Vermeulen may be related to Peter Vandermulen, brother of Louis XIV’s favourite battle painter, Adam Frans van der Meulen, who presented himself at the Painter-Stainers’ Hall in September 1682 and became a Foreign Brother of this Company.⁵⁴² A letter from London dated 15 July, 1682, from James Smith suggests that Gyles was having cabinet pictures fitted into japanned black or ‘ebonised’ frames:

As to Mr Lorowne [Marcellus Laroon], I cannot git the picters of him and in truth the Copy he has done I would not give him sixpence for it. I have the frames by me Mr Moore will do y^r fathers, I left the Astrick for him ...⁵⁴³

Marcellus Laroon (1653-1702) was a Dutch painter who specialised in cabinet pictures. Although only speculation, ‘Mr Moore’ might have been related to the London cabinet

⁵³⁸ *Henry Gyles Booke*, Harley MS 6376. f.116. ‘Your teeth must be firmly sett in sockets of Tinn or Sylver, fitted upon proper handles of Wood which you may use boldly and not feare to hurt the gold’.

⁵³⁹ *Henry Gyles Booke*, Harley MS 6376 f.130. Thomlinson's name appears twice, in folio 130 with the date 1683 and folio 134. From folio 134 to the end of the text, on folio 143, all gilding recipes were provided by Goe. Thomlinson, whose name also appears on the last folio with Henry Gyles signature written over it in a lighter ink.

⁵⁴⁰ *Henry Gyles Booke*, Harley MS 6376 f. 127.

⁵⁴¹ “Vermeulen”, Database of Surnames in The Netherlands. Vermeulen is a Dutch toponymic or occupational surname, meaning “from the (wind/water) mill” (modern Dutch *molen*). <https://www.cbgefamilienamen.nl/>

⁵⁴² Richard Johns, “Framing Robert Aggas: The Painter-Stainers' Company and the ‘English School of Painters’”, *Art History*, 31, 3, (June 2008), 333.

⁵⁴³ Smith to Gyles, (1682) Stowe Ms. 746, f. 57. Knowles, “Henry Gyles”, 66-68.

maker and glass seller James Moore senior (c. 1670-1726) who made *japanned pieces*.⁵⁴⁴ The content of japanned frames (Mezzotints) along with the term ‘Astrick’ will be discussed in Chapter 3. The letter from Smith also confirms that Vermeulen was working in London:

I received...the frames and a letter before, Mr Vermuling promises to answer you very shortly but has been mighty throng att worke...he has done yre frames all Blacke, and Mr Lorowne has begun of the pickturs I told him of the salmon which he and his wife take very well.⁵⁴⁵

Smith’s letter also includes the following comment: ‘I hope you have write to Mr. Vermulin by this and after he has Recd yr letter I shall urge him to Anser yr queries more ffully then he has yet’.⁵⁴⁶ So, although Gyles was japanning his own frames in York, he had more specialist work done in London. Moreover, Gyles sending salmon to Vermuling in London suggests they were on very personable terms. As information on the post-Restoration japanning trade is sparse, the early dates of Gyles’ letters and personal notes are significant. Also, as Vermeulen is not recorded in *The British Catalogue of Picture-frame Makers 1600-1950*, *Henry Gyles Booke* sheds new light on the London market and the activities of European artisans who settled in London after the Rebuilding Act of 1667.⁵⁴⁷

Henry Gyles Booke and his letters show that he had all the knowledge required to undertake the varnishing and japanning of frames from c.1674, a date that connects Gyles to Laroon and further to Gibbons and York as a centre of social and cultural absorption of European activity. Gyles’ making of japanned picture frames coincides with Robert Boyle’s letter on varnish to the Royal Society, published in 1673, suggesting that his attention was drawn to the new decorative process through his virtuoso friends and the

⁵⁴⁴ British and Irish Furniture Makers Online: <https://bifmo.furniturehistorysociety.org/entry/moore-james-snr-1670-1726>. Laroon had worked in Yorkshire and was connected to Vertue and Tempest and engraved mezzotints - Cust, L. H. “Laroon or Lauron, Marcellus, the elder (1653-1702)”, *ODNB*.

⁵⁴⁵ Smith to Gyles, (1682) Stowe Ms. 746, f. 57. Knowles, “Henry Gyles”, 66-68.

⁵⁴⁶ Smith to Gyles, (1682), Stowe Ms. 746, f. 59. As transcribed by Knowles, “Henry Gyles”, 64-65.

⁵⁴⁷ John Schofield, John, Stephen Freeth, I M Betts, Lyn Blackmore, Julian Bowsher, Jacqui Pearce, and Alan Pipe. “Living and Working in London, 1666 to 1750”. In *London’s Waterfront and Its World, 1666-1800* (Archaeopress, 2023), 132.155. Also, Bowett, *English Furniture*, 33-34. If Vermeulen was Dutch, he was unlikely to have been a Huguenot - and Moore certainly was not.

Royal Society's enquiry. Both Evelyn and Boyle are credited with pioneering what became known as 'English varnish' for japanning. In 1670, Evelyn had published one of the first English descriptions of japanning.

In 1682, Lister was preparing to move to London, and the York virtuosi would lose their primary intellectual and scientific connection with the Royal Society.⁵⁴⁸ This role would partly be filled by Kirke and later by Thoresby.⁵⁴⁹ Gyles was still working for Lister as late as September 1682, as a letter from Miles Gale notes that Lister had paid him for some unidentified work.⁵⁵⁰

4.0 GYLES, INTERIOR DESIGNER: 1682-1700

1682 proved to be Gyles' most productive and creative year, coinciding with the rise of the 'Consumer Revolution' which stimulated urban demand for fashionable goods and services as documented by Clark.⁵⁵¹ Gyles' correspondence in the early 1680s shows that he was sourcing moulds and plaster to cast, sconces to gild himself, pre-cast plaster putti for sconces, and then sourcing mirror glass. As there is a mention of chimneypieces, this suggests that he was assembling overmantels with the light from sconces being reflected in mirrors, even mirrors with japanned frames:

I shall have some good pattrans for sconces shortly and shall take you of a good mould or two of plaister of paris for I can doe those things very well. I will also send you some plaister by R. P. As you write. I shall send it ready burned being I know not whether you can Burne it Right crude there is very good has formerly

⁵⁴⁸ Woodley, 'Anne Lister', 225.

⁵⁴⁹ Ralph Thoresby, who did not join the York virtuosi until about 1684/5, did not become a fellow of the Royal Society until 1702.

⁵⁵⁰ Miles Gale to Martin Lister, (25 Sep 1682) MS Lister 35, 076. Alternative shelfmark (MS Lister): 22, Bodleian Library, Oxford. EMLO URL [/tinyurl.com/y9h6zqu9](https://tinyurl.com/y9h6zqu9)

⁵⁵¹ Clark, *British Clubs and Societies*, 144.

been got about weatherby it is sold heare for I8^d p Ct. unburnt and from 5.s. to 8.s p Ct burnt according. ⁵⁵²

Wall-mounted sconces were usually made of silver or brass to hold candles. At their simplest, they were backed with a metal plate, but at their most elaborate, they contained mirror glass to intensify the light. ⁵⁵³ In August of the same year, Smith provided Gyles with information on the cost of precast plaster heads and little boys, or putti, for ‘chimneys’, most likely overmantels. ⁵⁵⁴ Smith’s pithy comment at the end of his letter, ‘Ingenium Largitor venter’ (I have not else to doe wthall), is telling as it suggests that Smith thinks he is above such works, and more to the point, Gyles should be too. ⁵⁵⁵ During this period, Gyles is moving quickly between different ventures and opportunities. In one such venture involving looking glass mirrors in the same year, 1690, he commandeers the services of another old friend, Geldart, to source mirror glass on his behalf in London from a Mr Swan: ‘... I would desire him also to give me y^e lowest rates of all sises of Looking glass plates both plain and dimond cutt, as well before they by foiled or after’. ⁵⁵⁶ Although speculative, bringing together the various materials bought and knowledge gained from his correspondence with his nephew Smith and Geldart, and the recipes for varnishes in *‘Henry Gyles Booke’*, Gyles seems to be bringing together japanning, sconces and mirror glass, perhaps for highly reflective over-mantles for elite residences in a similar way that Gerrit Jensen created for the Japan Closet in Chatsworth.

5.0 GYLES, COLOURED GLASS MAKING AND THE SEARCH FOR A ‘TRUE RED’: 1682-1700

Meanwhile, Gyles was still working as a glass painter, but both he and other London glass painters were finding it increasingly difficult to source glass from the Continent. Problems

⁵⁵² Smith to Gyles, (15 July 1682) Stowe MS. 746, f. 57. Knowles, “Henry Gyles”, 66-68.

⁵⁵³ Thornton, *Seventeenth-Century Interior*, 273.

⁵⁵⁴ Smith to Gyles, (London 10th August 1682), Stowe Ms. 746. f. 59. Knowles, “Henry Gyles”, 64-65. ‘as for figuurs of plaister of paris, you may have heads of Boys they are of severall prices...small for chimneys as for lead figuurs they all exceeding deare ...’

⁵⁵⁵ Jon. R. Stone, *The Routledge Dictionary of Latin Quotations* (London & New York, Routledge, 2005), 46.

⁵⁵⁶ Gyles to Geldart, (24th September 1690), add. 78684, 15r-v f.1.

with supply would lead him to embark on his most technically challenging venture yet – to make his own-coloured glass, and a ‘true’ red in particular. This research would once again bring him into Hooke's orbit and into the Royal Society.⁵⁵⁷

The Thirty-Year War (1618-48) destroyed glassmaking in Lorraine and Normandy, the main manufacturing regions for coloured glass in Europe. As early as 1621, the lack of availability in England was noted by a London importer who, regarding a new east window for Wadham College, Oxford, wrote to the warden explaining that he could only supply coloured glass left over from an earlier project: ‘I will let you have collared Glasse out of that With I pvided for Poules (old St. Paul’s) For I am sure there is not any to be bought in England’.⁵⁵⁸ In 1633, the armies of Louis XIII devastated Lorraine, and by 1640, when the Parisian glass painter Rimaugia was competing for a contract at Auch Cathedral, he had to advise that: ‘You ask us for Lorraine glass... but this is impossible even though a thousand times what is worth were paid for it....’⁵⁵⁹ By 1669, there was ‘no trace left of any glassworks’.⁵⁶⁰ As a result, glass painters had to rely on enamels and stains to ‘surface colour’ clear transparent window glass. Silver nitrate and copper sulphate were used to make ‘silver stain’, a colour ranging from yellow to amber when applied to clear glass and furnace-fired. Enamels were first introduced in the mid-sixteenth century with the influx of Northern European artists such as Dininckhof, but they only produced an opaque colouring.⁵⁶¹ [Fig. 15] Gyles’ correspondence from this period clearly reveals his frustration and determination to succeed. While he sought to profit from commercial demand, his pursuit of a true red required knowledge available only within the Royal Society.

There were three glasshouses in Yorkshire in c.1680, including one in York itself at the bottom of Marygate and so only a short walk from Micklegate, but Gyles’ activities

⁵⁵⁷ Geoffrey Lane, “Adding ‘Beauty to Light’: London glass-painters 1660-1710”, *JSG* 33 (Dorchester: The Dorset Press, 2009): 58.

⁵⁵⁸ Knowles, “Henry Gyles”, 49. Citing Sir T.G. Jackson, *History of Wadham College*.

⁵⁵⁹ Raymond McGrath & A. Frost, *Glass in Architecture and Decoration* (The Architectural Press, 1937), 14. Also, Knowles, “Henry Gyles”, 49. Knowles cites L’Abbé Caneto, *Sainte Marie d’Auch*, (1857), 69.

⁵⁶⁰ E. Graham Clark, “Glass making in Lorraine”, *Society of Glass Technology*, 15, (Sheffield: 1931): 111.

⁵⁶¹ Charles Winston, *Memoirs illustrative of the art of glass-painting*, (London: John Murray, Albemarle Street, 1865), 81.

suggest that none of these was either able or willing to manufacture coloured glass.⁵⁶² Archaeological evidence that Gyles made glass at 68 Micklegate was found in 1983 when the York Archaeological Trust unearthed blue-coloured glass fragments and melted glass slag in the back garden.⁵⁶³ As discussed earlier, through Lister and Kirke at the Royal Society, Gyles would have owned Merrett's translation of Neri's *L'Arte Vetraria*, to which Merrett added one hundred and forty-seven pages of his own observations on Neri's work.⁵⁶⁴ Published in 1662, *The Art of Glass* was written as Merrett's contribution to the Royal Society's History of Trades programme and probably informed the manufacture of flint (lead) glass by both Ravenscroft and Buckingham. Although written in German, Gyles likely also had access to Johann Kunckel's *Ars Vittraria Experimentalis* (1679), which added to Neri. The Royal Society's response to Kunckel's work is discussed later. It is unlikely, however, that Gyles embarked upon this glassmaking venture alone and may have been advised by his fellow virtuosi who also invested in glass manufacture, namely his neighbour Buckingham.

In 1682, Gyles was corresponding with his London cousins about a 'little hand ffornice' that would keep an 'equall heat 24 hooer' (hours), also, a larger furnace, one capable of melting batch ingredients to make coloured glass.⁵⁶⁵ Gyles was evidently successful as, some fourteen years later, he wrote to Thoresby about making large sheets of glass in a variety of colours, sending him samples of the glass used for the east window at University College, Oxford, completed in 1687, now lost:

[I have sent] some specimens of my owne coloured glasse, such as I shou'd be glad to be employed in to make draperies for figures as large as the life in hystory worke for windows; and if I had incouragement, could make large quantities of such glasse, but truely S^r, I have none; and, S^r, can tell you as to the ancient coloured glasse and these, I know no difference except that these exceed in greater varieties; but the charge is so great to make this glasse that my poore abillities will not allow me to do it to lay waist by me; for, S^r, this glass is first of all made into flat sheets, and then I cutt it out according to my desined draperies, and then shaddows uppon

⁵⁶² Hunter, *The Diary of Ralph Thoresby*, 1, 9. (1677-Nov. 20th), 11 (1678-Feb. 7) and 134 (1682-Sept. 7).

⁵⁶³ Melted glass slag, Catalogue Number: GB2837-SIT-A0275-2-1-1, The York Archaeological Trust, York.

⁵⁶⁴ J. A Koinm, "Christopher Merret's use of experiment", *Notes Rec. Roy. Soc. Lond* 54, no. 1 (2000): 27.

⁵⁶⁵ Smith to Gyles, (1682) Stowe MS. 746, f. 57. Knowles, "Henry Gyles", 66-68.

it and passes it thro' the furnice, before it can come to be sett in lead for the window: and these small swatches now sent you are of the remains of the window I did at University College, in Oxford. ⁵⁶⁶

Gyles' account of making coloured glass for this window was corroborated when 'fragments of green, blue and red pot-metal were found among its remains', the archaeological evidence for the presence of a red pot-metal (probably flashed, meaning a thin layer of red over clear glass) being particularly significant. ⁵⁶⁷ The letter makes clear, however, that while Gyles had made enough glass to complete the Oxford window, without financial support, he could not venture to make any more. Brighton has argued that his 'best surviving work..., in terms of the use of pot metals, is undoubtedly the east window of Denton Chapel in Wharfedale', where he made use of 'flashed ruby for the robe of King David and amethyst, or purple for the drapes on the angels'. ⁵⁶⁸ The window in the chapel on the Denton Hall estate was completed in 1700, but the letter from Gyles to Geldart quoted above, of which Brighton was unaware, confirms that he began the window in 1690 and sourced both quality white glass and coloured glass from Mr Swan in London. It seems that, to fulfil the Fairfax commission, he sought to collaborate with a London glassmaker on the manufacture of coloured glass:

wish good successe to Mr. Swan and y^t I may hear those 20 plates have gott through the Fier, and indeed my desiring you to give him ye whole 50 shill was for his greater incouragement confuering of a greater quantity of plates were assoon made up a few: I hope however he will blow out what mettle he makes and may tell him if these 20 plates proves to my purpose I may be his chapman for y^e remainder, [...] Dear Roy^{er}: do comand y^r prudence however in not giving him y^e whole sum till something be seene: and I pray God it may be to my expectation. for this last weeke my lord Fairfax gave me his final orders to paint y^e East Window of his family chappell at Denton against y^e next spring y^t he brings downe his Lady, so

⁵⁶⁶ Gyles to Thoresby, (York, 4th March 1698/9), Ms7, f.78, in *Letters addressed to Ralph Thoresby*, 68-69. Here, Gyles is seeking to make life-size figures for history subjects with minimal lead time.

⁵⁶⁷ Lane, "Adding 'Beauty to Light': 58 The actual reference for the find is Brighton, *York Historian* 4, 14.

⁵⁶⁸ Brighton, "Enamel Glass Painters", vol. 1, 107. Pot metal glass refers to glass coloured all through and made in a metal pot; the name, therefore, derives from the vessel the glass is made in. Whereas flashed glass is two layers of glass fused together when made in its plastic form. In this case, a thin layer of red glass is applied to a base of clear glass. When blown and flattened, the red appears as a 1-2mm layer on top of a clear layer. Red glass was made in the flashed form because if made in the solid pot metal form, it would be too dark and appear black.

woud [faine] be at worke. [...] I pray disire him to let me know w^t sises their
[purest] glass carrys and y^e rates & this I would know before my coloured plates
come... ⁵⁶⁹

The precarious and experimental nature of coloured glass manufacture is clear from Gyles' hesitation about paying Swan in advance. He was willing to offer Swan the financial 'encouragement' he himself had previously lacked and, should there be promise of success, be 'chapman' and buy the entire batch. As further encouragement, Geldart was instructed to give Swan 'one of y^e veiwes of York and one of my pictures' and to let him know that he had 'made a piece of glasse fit for my furnace wth Mr. Swanns name on it'. ⁵⁷⁰ Who Swan was is unknown, and no record has been found of him being involved with Buckingham's glasshouse in Vauxhall, or any other glasshouse in London.

By the 1690s, the English glass industry was buoyant. Newspaper advertisements indicate the rising demand for 'all sorts of exquisite Looking Glass Plates, Coach Glasses, Sash and other lustrous Glass for Windows and other Uses'. ⁵⁷¹ There were approximately eighty-eight glasshouses in England in 1696, with about twenty-six of them in London making crystal, flint glass, green bottle glass, plate glass and crown glass. ⁵⁷² As there was no equivalent demand, none of these glasshouses made coloured window glass. This may explain why, in the early 1690s, Gyles was still pursuing recipes and enamels through his fellow virtuoso Dr John Place, Physician to the Grand Duke of Tuscany, who made enquiries on his behalf whilst visiting Murano. Place even provided a list of available colours and their costs, including a 'fine red gold Amell' for two Venetian duckets. ⁵⁷³ As discussed in chapter 1, Gyles had been experimenting with enamelling from the 1660s and used a double layer of silver combined with sanguine to create a red for the armorials of

⁵⁶⁹ Gyles to Geldart, (24th September 1690), add. 78684, 15r-v f.1. 'have gott through the Fier' could refer to the glass surviving the annealing process, which removes the stresses and strains from the glass before it can be cut successfully, or it could refer to certain colours being temperature sensitive and therefore fugitive (changing to a different colour) during the heating process.

⁵⁷⁰ This quote alludes to Gyles painting a piece of glass as a gift for Swan.

⁵⁷¹ Advertisement, "News - Looking Glass Plates", *London Gazette*, June 2, 1692-June 6, 1692. Issue 2773. *17th and 18th Century Burney Collection*.

⁵⁷² "Industries: Glass", in *A History of the County of Middlesex: Volume 2, General; Ashford, East Bedfont With Hatton, Feltham, Hampton With Hampton Wick, Hanworth, Haleham, Littleton*, ed. William Page (London: Victoria County History, 1911), 155-158. *British History Online*. McGrath, *Glass in Architecture and Decoration*, 41.

⁵⁷³ John Place to Gyles, (1693), Stowe Ms. 747, f.26. Knowles, "Henry Gyles", 69.

Ripon Minster.⁵⁷⁴ This technique, however, only produced a dull reddish brown and not the ‘true’ red required for heraldry. Gyles corresponded with his virtuoso friends about rediscovering a method for making red glass, and from 1674, they began sending him samples. Kirke reported that Addinall in London (mentioned above) had sourced red glass but was sceptical: ‘Mr. Addinall will needs persuade mee yt hee hath red glasse pictured quite thorough I wish you could see the truth of it’. Also, in 1682/3 Lodge sent him a parcel ‘of new-red-Glass’.⁵⁷⁵ By this point, however, Gyles was making his own-coloured glass.

The Royal Society had a long-standing interest in glassmaking as an essential material for conducting experiments in vessels and for lenses to magnify, particularly in the context of Hooke’s experiments on vision and light.⁵⁷⁶ While interest in red glass had been a subject of discussion since 1665/6, the making of a true red was pursued seriously only in 1680, an endeavour that was to last ten years.⁵⁷⁷ In 1685, a letter was sent to the Royal Society on behalf of Frederick William, Elector of Brandenburg and Duke of

⁵⁷⁴ Sanguine, an iron-based glass paint that produced shades of pink to red-brown on firing, was mainly used to highlight lips, cheeks, and flesh tones.

⁵⁷⁵ Kirke to Gyles, (London, 20th June 1674), Stowe Ms. 745, f.78. and Lodge to Harry, (19th February 1682/3), Ms. 3 f. 98. Transcribed by Hake, “Some Contemporary Records”, 61-63.

⁵⁷⁶ T. Birch, *The History of the Royal Society of London*, 3, (London: A. Millar, 1756), 10-15.

⁵⁷⁷ Transcribed by Birch, *The History of the Royal Society*, vol. 3:15 & 34, vol. 4: 137, 179, 387, and 403. vol. 3:15, Mons. Schroter’s paper was ordered to be ‘regifted’, and read:

This red glass, made by the help of a metallic tincture, doth in its colour or else not differ from the antient red [...] the colour of this glass can be heightened and made darker. The manner of tinging it is not difficult, but it may be quickly prepared without great labour or danger: the charges are likewise small, so that, with a small quantity of tincture, much glass may be tinged [...]

3: 34, 1680 - Mr. Hooke conceived that he could make glass beads as beautiful of colour but could not imitate the hardness and fixedness of them.

vol. 4:137, March 22, 1681/2 - Evelyn in chair [...] much discourse was occasioned hereby about the colours of glass.

4: 179, 1682/3-Dr. Plot sent the Society two small boxes of the following earths [...] Zaffer, used to tinging glass blue.

4: 387, 1685-A letter of Mr Musgrave to Mr. Aston, was read, concerning some old painted glass brough from Woodburn abbey in Bedfordshire [...] It was concieved, that the ancient glass-painting was but [c]rude, as being pieces of glass coloured quite through, or bubbles dipt in coloured glass, and then blown, the colour being but on one side, which is often scratched away till you come to the white, where another colour may be laid on, or the white feft for highlighting.

4: 403, 1685-a letter of Mr. Musgrave was read, mentioning, that he had been written to by Dr. Mark, that the Elector of Brandenburg desired to know the Society’s opinion concerning the controversy of Mons.

Knunckel: that he had commanded him to disire the *Philosophical Trasactions* to be sent, and to hold a correspondence with the Society, and to acquaint them, that Mons. Kunckel had an art of making red glass like ruby: another glass like agate: and artifical amber: and that he desired to have the receipt for making Prince Rupert’s metal. Dr. Lister remarked, that the arcanum of red glass was to make the red jet or glass lead, which flows upon nealing. Mr. Hooke observed that the scarlet-red window glass was bought from Germany; but that there had been none bought over for eighty years past.

Prussia, seeking their opinion of a ‘Mons. Knunckel’ and his recent experiments with making red glass. This was the Bohemian glassmaker Johann Kunckel of Potsdam (c. 1637-1703), who was the son of an alchemist and is now famous for luxury objects made from a dark gold ruby glass. He wrote *Ars Vittraria Experimentalis* (1679), which builds on Neri’s recipes for colouring glass red. The Elector of Brandenburg had appointed him director of his laboratory and glassworks in Berlin.⁵⁷⁸ Both Lister and Hooke responded. With reference to alchemy, Lister observed that ‘the arcanum [or secret of the mystery] of red glass was to make the red jet or glass lead, which flows upon nealing [annealing]’.⁵⁷⁹ Hooke, meanwhile, noted that red window glass had not been available for many years: ‘the scarlet-red window glass was bought from Germany; but that there had been none bought over for eighty years past.’⁵⁸⁰ After a meeting of the Royal Society on Wednesday 6 February 1688/9, however, Hooke was able to record in his diary that: ‘One Giles of York glasse-painter makes the true red glasse’.⁵⁸¹ This must have been in response to some form of announcement at the Royal Society, and the most likely person to have made it would have been Thomas Kirke, Gyles’ fellow York virtuoso and FRS. The diary entry of 1688/9 records the importance of Gyles’ success to Hooke, as do his previous entries, which record his interest in glass painting, particularly as a means of embellishing mirrors. After his workshop was destroyed during the Great Fire of 1666, the glass painter Oliver (mentioned above) worked under Hooke in his capacity of City Surveyor. On 9 December 1673, Hooke records Oldenburg observing Oliver painting glass.⁵⁸² Lane connects this event to Oliver painting the Blewcoats badge Hooke designed for the Newly built Christ’s Hospital.⁵⁸³ The following year, on 19 July 1674, Hooke visited a Mr Bartue with Sir John Hoskyns (author of Gyles’ variant of *Miniatura*), also a Fellow of the Royal Society, to inspect ‘a curious way of painting on the backside of a looking glasse plate at Mr Bartue chamber’ executed by a Frenchman, ‘Monr Tués’.⁵⁸⁴ Gyles’ further achievements with

⁵⁷⁸ Maartje Brattinga, “Through a Glass Brightly”, *Apollo*, 197, issue 720: 80-85.

⁵⁷⁹ M. Vilarigues, A. Ruivo, T. Hagendijk, M. Bandiera, M. Coutinho, LC. Alves, et al. “Red glass in Kunckel’s *Ars Vittraria Experimentalis*: The importance of temperature”. *Int J Appl Glass Sci.* 2023; 14: 202. <https://doi.org/10.1111/ijag.16605>. Kunckel’s translation of Neri’s original recipes was for red glass used as enamels called *rosichiero*, in which “a calx of lead and tin” was used with frit as the base.

⁵⁸⁰ Birch, *The History of the Royal Society* 4, 403. Hooke’s reference to a scarlet red was probably a ruby red.

⁵⁸¹ Robert Theodore Gunther, *Early Science in Oxford, 10: The Life and Work of Robert Hooke (Part 4). Tract on Capillary Attraction, 1661. Diary, 1688 to 1693* (Oxford: Printed for the Author, 1935), 95

⁵⁸² Hooke’s diary entry for 9 December 1673. Transcribed in *The Diary of Robert Hooke 1672-1680*, Robinson, and Adams (1935), 74.

⁵⁸³ Lane, “Adding ‘Beauty to Light’”: 54.

⁵⁸⁴ Hooke’s diary entries for 19 July 1674, transcribed in *The Diary of Robert Hooke 1672-1680*, Robinson, and Adams (1935), 113. This was a form of reverse glass painting, a process described later in this section when discussing William Salmon’s *Polygraphice*. It was also a precursor to *Verre églomisé*, a French term for the process of applying a design and gilding to the reverse of glass, creating a mirror effect.

coloured glass manufacture, particularly red, must also have captured Hooke's commercial interest and entries in his diary for January 1690 show that he was making enquiries in London about how to make red glass: 'Mr. Jed [of] Red glasse made with antimony, Query how?' and 'At Mr. Boyles [who] Knew not Red Antimony glasse'.⁵⁸⁵ Boyle's confusion about the use of antimony was well justified, as Merrett's 1662 translation of Neri's *The Art of Glass* did not cite either fine silver or antimony as a means of making red glass.⁵⁸⁶ Antimony, along with tin, was used to make red glass.⁵⁸⁷

In 1691, and significantly, only a year after Gyles' collaboration with Swan in London, Gunther records that:

Hooke and Dodsworth were granted a licence and privilege for the sole use of mixing metal so as to make glass for windows of more lustre and beauty than that heretofore made in England, red crystal glass of all sorts, and also the art of casting glass, particularly looking-glass plates much larger than ever blown in England, and on October 7 Robert Hooke was nominated Warden of the Company of Glassmakers, a trade the higher developments of which he had always been the first to encourage.⁵⁸⁸

It is also curious that Hooke's mother, Cecily, was nee Gyles before she married the Rev. John Hooke in 1622. The Hooke family resided on the Isle of Wight, as did their cousin Robin Giles/Gyles.⁵⁸⁹ Hooke's diary entries record that Robin Gyles was often in London, and two entries from 3 and 4 January 1689 suggest that he was connected to the glass industry: 'R. Giles, lodges at Glasiers in Aldermanbury' and 'In the morn, brough tenants

⁵⁸⁵ Gunther, *Early Science in Oxford*, 10: (Part 4), 176, 182.

⁵⁸⁶ Antonio Neri, *The Art of Glass*, translated into English, with some observations on the author, translated by Christopher Merrett (London: Octavian Pulleyn, 1662), 76. Neri only cites crocus Martis (a naturally occurring red oxide) and the use of brass metals, manganese, and copper. Neri used only fine silver and antimony to make calcidony glass, a type of pale blue onyx agate.

⁵⁸⁷ Vilarigues, "Red glass in Kunckel's *Ars Vitruvia Experimentalis*", 209.

⁵⁸⁸ Gunther, *Early Science in Oxford*, 10: (Part 4), xxxii. Also see Hooke and Dodsworth, *The Art of Casting Glasse*. Crystal glass was made with lead oxide added to increase its density. It also increased the glass's refractive index, giving it a sparkling brilliance. Robert Hooke & Christopher Dodsworth, *The Art of Casting Glasse and particularly Looking Glasse Plates much larger than was ever blowne in England or any Forreigne Parts*, Patent no. 268 (1691).

Gunther, *Early Science in Oxford*, 10: (Part 4), 176, 182.

⁵⁸⁹ *The Diary of Robert Hooke 1672-1680*, Robinson, and Adams (1935), 491, 492.

lease. With him Johnson Glasier, Aldermanb[ury], Gyles prentice, Toms companion...⁵⁹⁰ The reference to the 'Glasiers in Aldermanbury' links Robin to the Worshipful Company of Glaziers, which was located in Aldermanbury, the guildhall being destroyed by the Great Fire of London in 1666.⁵⁹¹ Robin Gyles seems to have had a former apprentice named Johnson, who was now working as a glazier in Aldermanbury.⁵⁹² His son Tom had come to live with Hooke in July 1675 but had fallen seriously ill and died on Wednesday, 12 September 1677. On Thursday, 13 September 1677, Hooke recorded that he visited 'Mrs. Kedges in Silver Street to acquaint Hanna Gyles of Toms Death'.⁵⁹³ Was Hanna Gyles Robin's wife, or was there a direct connection with the Gyles family in York, and had Henry Gyles' wife, Hannah (Anna), travelled to London? In a curious diary entry, Tuesday, 15 May 1677, Hooke notes that he was "Subpenad to Guildhall by Brace against Anne Gyles. faild the Lord Ranalaugh. Kept at Guildhall till 7 at night".⁵⁹⁴ This may have been the son of the London glazier/glass painter John Brace, who died in 1674, whom Kirke wrote to Henry Gyles about regarding the journeymen previously discussed.⁵⁹⁵ So, was the Anne Gyles in dispute with Brace in London the same Anna Gyles (Henry's wife) of York? In relating Hooke's diary entry of 4 Jan 1688/9 – "Gyles prentice" (page 88), with the "One Giles of York glasse-painter makes the true red glasse" (page 95), Gunther suggests that 'This celebrated glass painter may have been related to R. Giles'.⁵⁹⁶ No evidence has been found to make this connection.

Gyles' venture into glass manufacture was part of his drive to reverse the decline of glass painting and, by recapturing its beauty of colour, to attract more discerning clients. As discussed above, Gyles encouraged a London glass manufacturer, Swan, to experiment with coloured pot-metal glass, and it subsequently seems to have become available to other glass painters. Discussing William Price's painted armorial of 1698 for the Middle Temple at Gray's Inn, Lane notes that 'things were beginning to change' as the window contains pot-metal green and red (flushed) glasses for the shield's main tinctures and that these

⁵⁹⁰ Hooke's diary entries of the 3 January 1688-9 and 4 January 1688-9, transcribed by Gunther, *Early Science in Oxford*, 10: (Part 4), 88.

⁵⁹¹ Ashdown, *History of the Worshipful Company of Glaziers*, 46.

⁵⁹² Ashdown, *History of the Worshipful Company of Glaziers*, 58. There is no record of a glazier called Johnson being registered with the Company of Glaziers.

⁵⁹³ The Diary of Robert Hooke, 1672-1680, Robinson and Adams (1968), 312.

⁵⁹⁴ The Diary of Robert Hooke 1672-1680, Robinson, and Adams (1935), 290

⁵⁹⁵ Kirke to Gyles, (20th June 1674), Stowe Ms. 745, f. 78. Hake, "Some Contemporary Records", 61-63.

⁵⁹⁶ Gunther, *Early Science in Oxford*, 10: (Part 4), 95.

appear to be authentic.⁵⁹⁷ Two years later, Price was advertising that he was able to match the coloured glasses once made on the Continent, including the ‘lost’ red (flashed) glass:

Whereas the ancient Art of painting and Staining Glass has been much discouraged by reason of an Opinion generally received, That the red Colour (not made in Europe for many years) is totally lost: These are to give Notice, that the said Red Colour is made to as great a degree of Curiosity and Fineness as in former Ages by *William Price*, Glazier and Glasse-Painter, near Hatton Garden in Holborn, London.’

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As Price was known as a glass painter, not a glass manufacturer, if the red glass he used was authentic, he most likely sourced it from a London glasshouse. If, however, the red colour was produced by a surface application, Price’s advertisement begins to make more sense.⁵⁹⁹ His reference to ‘staining’ suggests that he was using another method of colouring glass. While Hooke was pursuing the making of red flint glass, the Royal Society was also pursuing another method called ‘tinging’, which, it could be suggested, led to a permanent change in nomenclature for the craft, from glass painting to glass ‘staining’.⁶⁰⁰

6.0 FROM GLASS PAINTING TO STAINED GLASS

The Royal Society was generally interested in how colour worked. As seen, in 1680, discussions referred to both the ‘dying’ and ‘tinging’ of glass. The Royal Society’s use of the term ‘tinging’ and Price’s use of the term ‘staining’ is read as referring to the surface colouring of window glass, a technique which Gyles undertook daily. It should be noted, however, that throughout the seventeenth century, the term ‘tinging’ had more than one meaning, even within the glass trade. Neri in 1616 and Place in 1693 used the term to describe the colouring of glass throughout its thickness (when liquid); this is now

⁵⁹⁷ Lane, “Adding ‘Beauty to Light’”: 57. The window has not been seen by this author.

⁵⁹⁸ “News.” *London Gazette*, July 15, 1700–July 18, 1700. *Burney Collection*.

⁵⁹⁹ This author has not seen the William Price 1698 painted armorial for the Middle Temple at Gray’s Inn that Lane has commented upon, so cannot confirm the glass type used.

⁶⁰⁰ Transcribed by Birch, *The History of the Royal Society*, 3:15

described as pot-metal colouring in the body and was the process Hooke used to make red flint glass. Others, such as Gedde (1615) and Peacham (1606), used the term to describe a method of surface colouring with both enamel and ‘stain’ in the form of silver.⁶⁰¹ Whereas Gedde and Peacham instructed the reader in how to make ‘yellow’ for glass painting with either silver or antimony, others, like William Salmon, in his practical art compendium for the skilled amateur *Polygraphice*, published in 1672, included two types of ‘yellow’.⁶⁰² This reference to an additional yellow indicates how glass staining had become more sophisticated in the intervening years.

As an aside, Salmon’s book provides additional insights into the status of glass painting in the latter part of the seventeenth century. It describes both traditional glass painting and another form of increasingly popular picture-making, reverse glass painting: Salmon stating that there are two ‘ways of painting upon glass; the one is for oyl colour the other for such colours as are afterwards to be annealed or burnt on’.⁶⁰³ Both these methods are discussed as painting on glass with no preference or prominence given to either. In other words, it appears that glass painting had a not entirely dissimilar status to that of wall-mounted glass-painted pictures in the later quarter of the seventeenth century.

As red is essential to glass painting as both a symbolic and heraldic colour, in the absence of red flashed glass, the pursuit of a red stain was of particular importance. The mentions of ‘tinging’ glass in the minutes of the Royal Society are expanded upon in both Evelyn’s and Hooke’s diaries. Regarding the discussion about colouring glass on 22 March 1682, Evelyn makes a specific reference to glass painting and the problem of achieving a red stain:

At the meeting of the Royal Society [...] there was a discourse of ye tingeing of glass, especially with red, and ye difficulty of finding any red colour, effectual to

⁶⁰¹ John Place to Gyles. (1693), Stowe Ms. 747, f- 26. 5. (ff. 157). ‘1 yr sheets tinged w,h colours’ [...] and glass’s which ‘are all thorow tinged, or as they call it tinte in corpo’, Knowles, “Henry Gyles”, 69.

⁶⁰² William Salmon, *Polygraphice: or the Arts of Drawing, Engraving, Etching, Limning, Painting, Varnishing, Japaning, Gilding, etc.* (London: A. & F. Churchill, 1672), 197-237.

⁶⁰³ Salmon, *Polygraphice*, (1672), 200.

penetrate glass among ye glass painters. that ye most diaphanous as blue, yellow, & c did not enter into the substance, of what was ordinarily painted, more than very shallow unless incorporated into the metal itselfe, other reds and whites not at all beyond ye superficies. ⁶⁰⁴

Here, Evelyn describes the process of tinging, or colouring, glass by applying a silver stain that penetrates the glass during firing. He compares the ineffectual results of tinging to achieve a red with the application of blue enamel and yellow silver stain to illustrate how little these surface-applied processes are incorporated into the body glass. The Royal Society's use of the verb 'dyeing' associated the colouring of glass with the colouring of cloth. As Lister was also part of the History of Trades programme and tasked with researching 'dyestuffs', his virtuosi relationship with Gyles may have influenced the Royal Society's classification of glass as just another material that could be dyed. ⁶⁰⁵ An example of this association is the title page of Salmon's *Polygraphice*, where the contents of the book are listed as including the 'dying of Cloaths, Silks, Horns, Bones, Woods, Glafs, Stones and Metals...' ⁶⁰⁶ In both the hallowed halls of the Royal Society and in published manuals for domestic consumption, therefore, glass was coloured through a process of 'dyeing', and this would direct how glass painting itself would eventually be termed.

The association between glass painting and cloth dyeing began in the late sixteenth century, as oil was a contested painting medium between the Guild of Glaziers and the Painter-Stainers, often causing tensions. The Painter-Stainers had been granted protected rights as detailed under Article 5 of their Ordinance in 1581/2 for:

washing or laying...or working any kind of colour...with oil or gum or any other kind of temperature [tempera] or mixture, or gilding with gold or silver or the colouring, painting or staining upon silk, cloth, wool, leather, stone, iron, tin, plaister [sic], paper, parchment, vellum, or other thing. ⁶⁰⁷

⁶⁰⁴ *The Diary of John Evelyn, with an Introduction and notes*, 3, ed. Austin Dobson (Cambridge: University Press, 2015), 82.

⁶⁰⁵ Ochs, "The Royal Society of London": 143.

⁶⁰⁶ Salmon, *Polygraphice*, 163.

⁶⁰⁷ Ayres, *Art, Artisans & Apprentices*, 133, citing Alan Borg, *The History of the Worshipful Company of Painters* (Huddersfield, 2005), 31-33.

Clearly, this ordinance covered all surfaces to be painted with either oil or gum as a medium. In the 1660s, however, the Painter-Stainers raised a complaint against other trades, claiming that their ordinance had been infringed:

“the following artificers did break out into the Art of Painting to the great deceit of the people of this nation viz. Bricklayers, Carpenters, Wyermakers, box makers, imbroydermakers, Turners, Joiners, Drum makers, Coachmakers, Virginal makers, Plumbers, Glaziers.”⁶⁰⁸

Though not specified, the complaint against the glaziers most likely referred to their use of oil as a painting medium, even though they were permitted to do so by this point.⁶⁰⁹

Therefore, oil became another link between the guilds, as both trades used it to apply colour. This connection is once again confirmed by Salmon when describing the process of glass painting: ‘To lay colours upon the glass you must first grind them in gum water once and afterwards temper it with Spanish Turpentine’.⁶¹⁰ By the mid-seventeenth century, however, glass painting as a means of window decoration had been overtaken by the popularity of painted window blinds, painted by members of the ‘Painter-Stainers Company’. This further reinforced the association between glass painting and the dyeing/staining of fabric by stainers, as Painter-Stainers painted and ‘stained’ cloth to make window blinds, while glass painters painted and ‘stained’ glass to make painted windows. The word stain replaced the terms tinging and dyeing, becoming synonymous with applying colour to a surface, whether cloth or glass. Thus, the reason why the Royal Society still pursued information on the surface tinging of glass and why Price advertised ‘stained’ glass was, as Gyles himself stated, because there was no encouragement for the making of coloured glass.⁶¹¹ Price’s use of the term ‘staining’ in 1700 was also the first published reference to the surface colouring of glass with enamels, silver and antimony; techniques that Gyles still used. Thereafter, it began to appear in publications such as the 1701 edition of Salmon’s *Polygraphice*, where the title page referred to ‘Staining and Painting Glass,’ a term that eventually became restricted to stained glass.

⁶⁰⁸ Ayres, *Art, Artisans & Apprentices*, 141, citing Harl. Ms. 1099 f.79 BL. – not dated but no older than c.1665.

⁶⁰⁹ Ayres, *Art, Artisans & Apprentices*, 178.

⁶¹⁰ Salmon, *Polygraphice*, (1672), 200.

⁶¹¹ Gyles to Thoresby, (York, 4th March 1698/9), Ms 7, f. 78, in *Letters addressed to Ralph Thoresby*, 68-69.

7.0 CONCLUSION

This chapter has argued that the York virtuosi originated as early as 1663/4, inspired by John Wilkins' meeting with Edmund and Gyles junior at Ripon Minster, when Henry was completing his apprenticeship. The virtuosi frequently met at Gyles' house in Micklegate because it was their original meeting place, and the area behind contained a workshop fully equipped for experiments, even though Buckingham and Lister had their own research laboratories close by. The virtuosi activities that took place there not only contributed to York's intellectual and cultural life but also, through Lister's London contacts, had an impact further afield. It is probable that Gyles acted as a paid steward, a role like but somewhat lesser than that of Robert Hooke as 'Curator of Experiments' for the Royal Society. In this capacity, Gyles sourced a magic lantern for lectures in 1674 and Nocte Lucis (phosphorus) for demonstrations in 1682, and this suggests that the Royal Society was used as a model for virtuosi activities at Gyles' house and workshop. It is therefore appropriate to think of the York virtuosi not just as a group of independently minded individuals who pursued their own interests, but as an affiliate of the Royal Society, a northern outpost, as it were, working symbiotically with the centre in London. In his probable capacity as steward, Gyles also seems to have acted as an assistant to Lister, helping him to make 'vitrium of antimony' and specula for telescopes from *c.* 1673/4, so playing a significant role both locally and nationally in the development of optical instruments.

While these virtuoso activities satisfied Gyles' broader cultural ambitions, they did not pay the bills or benefit his business ventures. To enhance his professional prospects, Gyles drew on knowledge gained from the Royal Society through Lister and Kirke. Gyles' commercial activities and diversification away from glass painting seem to have begun as early as 1673/4, a move that became more pronounced following his father Edmund's death in 1676. Throughout the 1680s and 1690s, the diversity of Gyles' activities is quite staggering. Gyles' commission list suggests his motivation for diversification, as it shows how little work there was in glass painting: it occupied only 50% of his time. This prompted Gyles to take an interest in reflective surfaces within

illuminated interiors, perhaps offering complete schemes including japanned frames, wall sconces and mirrors for over-mantles. He perhaps also japanned frames for glass prints, as will be discussed in the next chapter. With the help of his friend Kirke, he re-engaged with sundial-making, and this is the first evidence of Gyles using virtuosi knowledge to inform his commercial activities, followed by his successful venture into the manufacture of coloured window glass. Gyles had not one business but many. So, although he was a glass painter, he was also (despite claims that he was no businessman) a significant local employer. To sustain all these activities, Gyles must have had access to an amenable and affluent client base, eager to furnish their Yorkshire homes with the latest decorative interior fashions from London. His contacts among the virtuosi were no doubt crucial to securing these clients. In other words, Gyles was not just intellectually engaging with the York virtuosi but living through them and profiting from their collective contacts and knowledge. His japanning of frames drew on not only personal research but also information from the Royal Society, where Hooke played a prominent role. In his glassmaking, he was probably assisted by Buckingham and the Royal Society's History of Trades programme, in which Hooke played an initiating role through his own connections with the glass industry. Gyles, through Wilkins at the formation of the York virtuosi, also contributed to the Royal Society's interest in the making of coloured glass, particularly in the recreation of red glass. Boyle's research into phosphorus was, in turn, central to Gyles' foray into Nocte Lucis and provided the York virtuosi with phosphorus for demonstrations. This access to information would have come initially through Lister, who, while in York, received copies of the Society's minutes and philosophical tracts from his friend Brooke.⁶¹² Following Lister's leaving for London, Kirke became that crucial link.⁶¹³ The York virtuosi provided the intellectual and social vehicle for Gyles not only to reinvent himself and glass painting, but also to change the family's commercial fortunes.

Regarding Gyles' role within the York virtuosi, as Iliffe argues for Hooke at the Royal Society, this thesis also claims that Gyles followed the same trajectory, in that Gyles' social and professional identity only existed at the 'interface between gentleman natural philosophers, instrument makers and skilled craftsmen' in which intellectual knowledge exchange flowed between these groups and individuals. Also, like Hooke,

⁶¹² Roos, *The Correspondence of Dr. Martin Lister*, 1. 23.

⁶¹³ Gunther, *Early Science in Oxford, 10: (Part 4)*, 77.

Gyles operated without rigid boundaries but within a network of information exchange, social hierarchy, and mechanical expertise. ⁶¹⁴ Further, as Iliffe points out, the Royal Society would have ceased to function without Hooke; so too with Gyles and the York virtuosi, in which, like Hooke, Gyles was treated by the natural philosophers as their paid steward. ⁶¹⁵ But unlike other mechanics within virtuosi culture who were only valued for their utility to gentlemen-scholars, Gyles, as will be shown, proved to be much more.

This chapter focused on Gyles' association with the natural philosophers in the York virtuosi, like Lister and Kirke. Gyles was clearly deferential -as if accepting of his status, and there is no record of him being invited to social gatherings with these eminent members of the Royal Society, a point raised by Somers regarding how tradesmen like the secretary of the Society of Antiquaries, the ironmonger Joseph Ames (1687-1759), were excluded from polite elite society gatherings due to their lower social status. ⁶¹⁶ The following chapter broadens the discussion of York's print culture and Gyles' relationships with the artists, within the context of Shapin's and Hunter's opposing views on the acceptance of tradesmen by the artistically social elite, to determine whether his trade status was an impediment to acceptance.

⁶¹⁴ Iliffe, "Material Doubts": 285.

⁶¹⁵ Iliffe, "Material Doubts: Hooke": 289. Also, Mark Hailwood, "'The Honest Tradesman's Honour': Occupational and Society Identity in Seventeenth Century England", *TRHS* 24 (2014): 81. And, Somers "Tradesmen in Virtuoso Culture": 370.

⁶¹⁶ Hailwood, "The Honest Tradesman's Honour": 81. Also, Somers "Tradesmen in Virtuoso Culture": 370.

CHAPTER THREE

HENRY GYLES: THE YORK VIRTUOSI ARTISTS AND EARLY PRINT CULTURE

Before the Restoration, with the publication of books like Sanderson's *Graphice*, which promoted the idea of collecting 'Old Masters' as 'an education in taste for the nation', a new connoisseur culture began to emerge in England.⁶¹⁷ This collecting culture was informed not only by the legacy of Arundel's literary patronage (among others) but also by his collection of antique statuary and paintings, which had evolved well before his exile to Italy in 1642, when he acquired additional statuary.⁶¹⁸ With a focus on connoisseurship, collecting, and print culture, a new art market emerged, dominated by Dutch, Flemish, and French works, with little attention being paid to English artists. Finding novel ways to break into this new art market shaped most of Henry Gyles' future activities. Chapter three examines how Gyles used prints to create new kinds of pictures for walls and windows, an activity not considered in the existing scholarship. What he achieved is discussed against the backdrop of early print culture in York, encompassing written correspondence, visual materials, and the making, publication and sale of prints.

1.0 YORK VIRTUOSI PRINTMAKING AND MEZZOTINT: 1670-1676

After the Restoration, the use of printmaking as a means of attaining a new visual 'accuracy' within natural science and antiquarian illustration was very much a contested field of enquiry. Recent scholarship on the York virtuosi, who were also artists and illustrators, has tended to treat the group as a homogeneous collective.⁶¹⁹ Only Pierce and

⁶¹⁷ Good, "A Royal Subject", 462.

⁶¹⁸ Sutton, "Thomas Howard", 75-77. Also, Thornton, *Authentic Décor*, 14.

⁶¹⁹ Brighton, "Enamel Glass Painters", 1, 85-100. Also, Unwin, "A provincial man of science": 209-230, Roos, "A Speculum of Chymical Practice", 6-7, and Hampson, "Casting a dim religious light", 140-144.

Hallet have concentrated on specific artists.⁶²⁰ This chapter argues that they were far from a homogeneous collective. It maps how they joined the York virtuosi at different times over a thirty-year period from c. 1670 to 1700 and how this affected their individual contributions. As will be shown, Gyles counted himself as one of them and, on a personal level, he engaged with them very differently from the natural philosophers.⁶²¹ There were at least five primary ‘artists’ in the York virtuosi: William Lodge, Francis Place, John Lambert, Grinling Gibbons, and the latecomer Jacques Parmentier (c.1658-1730) in c. 1700. Little is known about Parmentier, but like Lodge, he was to prove a great friend to Gyles in his later years. [Fig. 30] Referring to these men as ‘artists’, however, is problematic. Lodge, Lambert, and Place, who to varying degrees were gentlemen of independent means, are probably best understood as ‘amateurs’ rather than professionals, although some of their work clearly had a commercial imperative. Meanwhile, Gibbons and Parmentier were the exceptions, with one working as a jobbing carver and the other as a portrait painter. Both were émigrés, which may explain why their relationship with the York virtuosi was partial at best.

The engraver and ‘landscape draughtsman’ Lodge came from a wealthy family of Leeds cloth merchants, like Thoresby, who came from a family of Leeds wool merchants.⁶²² Lodge took up painting, drawing, and etching while at Jesus College, Cambridge, before accompanying Thomas Belasyse, first Earl Fauconberg (1627/8-1700) to Venice in 1669-70, where he remained for two years. Other than making drawings and engravings for Lister, his most notable work was to illustrate with etchings a translation of Giacomo Barri’s *Viaggio pittoresco d’Italia*, which was published in 1679 under the title *The Painter’s Voyage of Italy*. Lodge was also a relation of Thoresby’s wife, suggesting that he introduced Thoresby to the York virtuosi in c. 1683, just before Lister left York for London.⁶²³ The first known correspondence between Lodge and the York virtuosi is a letter dated 30 September 1673 regarding the drawing of Lister’s fossils.⁶²⁴

⁶²⁰ Pierce, “This Ingenious Young Gent”, 313-334; Also, Hallett, “Pictorial Improvement”.

⁶²¹ Gyles to Lister, (4 December 1693), Bodl. Ms. Lister 3- folios-117-118. Transcribed by Brighton, “Enamel Glass Painters”, 3, 677.

⁶²² Antony Griffiths, “Lodge, William (1649-1689), etcher and landscape draughtsman”, *ODNB*.

⁶²³ Griffiths, “Lodge, William”, *ODNB*. Also see, Thoresby Diaries-17 Jan 1694, <https://www.thoresby.org.uk/content/diary/diary.php>. ‘Morning, dispatching away additions to Cam-den’s Brit; afternoon, with Esquire Lambert, (son to the General,) an ingenious painter, inquiring of cousin Lodge’s works, but spent too much time. Evening, read’.

⁶²⁴ William Lodge to Martin Lister, Bodl. MS Lister 34 (25263) as transcribed in Unwin, “A provincial man of science”: 210.

Gyles' most significant artistic friendship was with the printmaker/potter Place, fifth son of Rowland Place of Dinsdale, co. Durham. Although articled at Gray's Inn, London, Place left his legal studies to pursue his passion for drawing and engraving under the guidance of Wenceslaus Hollar (1607-1677), the Bohemian printmaker in London; his mezzotint tutor remains unknown. Through Hollar, Place gained a commission in 1669 to etch plates for John Ogilby's edition of Jan Nieuhoff's *Embassy to the Emperor of China*, which brought him to the attention of Dutch publishers and a more continental market.⁶²⁵ Place collaborated with the topographical draughtsman and engraver Robert Thacker (d. 1687) on a set of views of the new Greenwich observatory (c. 1675), which points to his wider connections with the London print-making scene during his early career. The first record of Place meeting a member of the York virtuosi was in 1674/5 when he met with William Lodge in London. He relocated to York in 1675, which was when he made his earliest drawing of the city.⁶²⁶ [Fig. 33] Place's arrival in York also coincided with Lodge's engraving of plates for Lister, which will be discussed later. From around 1678, Place travelled widely throughout Britain on sketching tours with his virtuosi friends Lodge and Lambert and later produced plates for Thoresby's *Ducatus Leodiensis* (1715) and Francis Drake's *Eboracum* (1736).⁶²⁷ From 1683, in addition to his drawing and etching, Place also experimented with the manufacture of stoneware pottery and porcelain in York.⁶²⁸

The painter, printmaker and limner John Lambert of Calton, Yorkshire, is one of the lesser-known artists associated with the York virtuosi. Although he was the son of John Lambert, the English Parliamentary general and politician, John (junior) did not live in his illustrious father's shadow. Lambert was also Thoresby's cousin, and the latter collected his limnings. The editor of Thoresby's diaries, Joseph Hunter, records in a footnote that:

in one of Thoresby's MSS, at the Museum, there is a biographical notice of Mr. Lambert, in which, it is said, that "He was a most exact limner and had a choice

⁶²⁵ Richard Tyler, *Francis Place, 1647-1728* (York: City Art Gallery, 1971), 8-9.

⁶²⁶ Lodge to Lister, (London, 5 January 1674/5), Bodl. MS Lister 34, fol. 149. Transcribed by Roos, *The Correspondence of Dr. Martin Lister*, 751-2.dd.

In writing to Lodge about his progress on engraving Lister's spiders, Lodge mentions that he met with Place in London. Also see, Tyler, *Francis Place*, 8-9.

⁶²⁷ Tyler, *Francis Place*, 8-9.

⁶²⁸ Tyler, *Francis Place*, 8-9.

collection of paintings: an excellent scholar, man of much reading, great memory, admirable parts; and in the exercises of bowling, shooting, and the like, excelling all the gentry of Craven.”⁶²⁹

Lambert had been discussing practical aspects of painting with his cousin Lodge since 1667, according to a letter he wrote to his mother on 20 October.⁶³⁰ So, Lambert may have joined the York virtuosi around 1673 or earlier, when his cousin Lodge began communicating with Lister. As we will see, Lambert also joined Lodge and Place on their drawing excursions.⁶³¹

Jacques Parmentier was an artist of some significance. Born in France, he studied under his uncle, Sébastien Bourdon, and became a member of the St Luke’s Guild in The Hague. In 1676, the young Parmentier moved to England and worked under the decorative painter Charles de La Fosse. He came to the attention of William III, who sent him to the Netherlands to work on the palace at Het Loo (built between 1684 and 1686). He returned to London c.1685 but was unable to find suitable patronage, so moved to Yorkshire, where he remained until 1721. He is known to have painted portraits for wealthy patrons. He also painted an altarpiece depicting the *Last Supper* for Holy Trinity Church in Hull (1711) and a ceiling depicting *Moses Receiving the Law* for St. Peter’s Church in Leeds.⁶³² On hearing of the death of Louis Laguerre (1663-1721), a French decorative painter working in England, Parmentier returned to London in 1721 in the hope of succeeding him and became a member of the Rose and Crown Club of artists who met weekly in a tavern in Covent Garden. This final ambition was not realised, and Parmentier died in London on 2 Dec. 1730 and was buried in St. Paul’s, Covent Garden. Parmentier, therefore, spent most of his working life in Yorkshire.

⁶²⁹ Hunter, *The Diary of Ralph Thoresby*, 1, 131. 132.

⁶³⁰ Hake, “Some Contemporary Records”, 60.

⁶³¹ John Lambert to Henry Gyles (October: 29-1680) B. M. Stowe 746, f- 34. transcribed by Knowles, “Henry Gyles”, 64.

⁶³² Lionel Henry Cust, “Parmentier, James”, *ODNB*. 43, ed. Sidney Lee (London: Smith, Elder & Co. 1895), 322.

A slight outlier was the Netherlandish woodcarver and sculptor Grinling Gibbons, who emigrated to England in *c.* 1667, potentially attracted by the opportunities to work on the rebuilding of London after the Great Fire in 1666. On arrival, however, he first went to York and worked under the York architect, builder and master carpenter John Etty (*c.* 1634-1708). While in York, he carved ‘a 6 inch by 4-inch wood sculpture depicting Elijah with a juniper tree and an angel’, now lost. In 1670, Gibbons moved to the royal dockyard in Deptford, where he earned a living as a ship carver. Although Evelyn promoted him as a carver of figural relief sculpture to Wren and Pepys, and later to Charles II, no commissions were forthcoming. By 1671, Gibbons had reinvented himself as a decorative carver and attracted the attention of the court artist Sir Peter Lely (1618-1680), who then advocated for him. It was as a decorative carver that Wren employed him at St James’s, Piccadilly, in 1684 and Charles II at Windsor Castle in *c.* 1676-1682. Gibbons retained his interest in figural relief carving, however, and in the 1680s his London workshop began producing funerary monuments in stone and marble, including two for York Minster: Archbishop Richard Sterne (1684) and Archbishop Thomas Lamplugh (*c.* 1691). Royal appointment as master sculptor and carver in wood was finally achieved under William III on 2 December 1693.⁶³³ Gibbons may have become acquainted with the York virtuosi in the late 1660s. Certainly, he maintained a connection with Thoresby who placed Gibbons and Gyles on an equal artistic footing, recording in his 1702 diary entry: ‘Evening sat up too late with a parcel of artists I had got on my hands, Mr. Gyles, the famousst painter of glass perhaps in the world and [...] the most celebrated Grinlin [sic] Gibbons...’

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Other potential candidates for virtuosi membership as illustrators are two women: Margery Power, whose broader philosophical discussions focused on microscopic experiments, and her sister, Ellen Power, a botanical artist.⁶³⁵

⁶³³ David Esterly, “Gibbons, Grinling (1648-1721), woodcarver and sculptor”, *ODNB*.

⁶³⁴ Hunter, *The Diary of Ralph Thoresby*, 1, 366.

⁶³⁵ Margery Power was Henry Power's wife; Ellen Power was his sister. Henry Power was a physician. After completing his studies at Cambridge in 1655, he set up practice in Halifax and Wakefield. He was a Fellow of the Royal Society from 1663, bought lens equipment from Ramsden in London, undertook atmospheric experiments, and presented his studies to the Royal Society in London using microscopes. He also published his only book, *Experimental Philosophy*, in 1664, which solidified his standing within the RS; see *ODNB*. Adrian Johns, “Power, Henry (*c.* 1626-1668)”. For reference to Ramsden, see Power's memorandum book for 1660, BL, MS Sloane 1353, fol. 17. Also, see Kim Sloan. “Sir Hans Sloane's Pictures: The Science of Connoisseurship or the Art of Collecting?”, *HLQ* 78, no. 2 (2015): 402-412.

These short biographies show that Gyles and Parmentier were the only professional artists/painters among the York virtuosi, while Place, Lodge, and Lambert were gentlemen amateurs. Also, that Lodge was a member of the York virtuosi from c. 1673, Place from c. 1675, and Lambert from c. 1676/7; Parmentier did not appear until c. 1686. Although Gibbons may have been one of the original members from c.1662, he left for London in 1670, around the same time Lister arrived in York. The extraordinary concentration of such artists in post-Restoration York and the wider region, both amateurs and professionals working across various media and genres, along with many others, is highly significant as it points to new opportunities outside of London. The migration of artists such as Place, Gibbons, and Parmentier to the north indicates the growth of interest in the visual arts in Yorkshire after 1660, a development that recent scholarship has shown to be far more extensive and vital than previously thought.⁶³⁶ This chronology may also explain Lister's choice of Lodge over Gyles as the artist to create his first scientific illustrations. To understand how Lister's ambitions were realised, however, it is necessary to examine the state of printmaking and the visual arts more generally in York and the surrounding area earlier in the century.

1.1 Martin Lister and scientific illustration

Although Lister's arrival in York in 1670 was the catalyst for the creation of a certain kind of printed imagery, 'scientific illustration', printmaking in York already had a history. Printing was well established by 1660, having been revived in 1642 by the Royalist printer Robert Barker (d. 1645) and continued to thrive under the Licensing Act of 1662.⁶³⁷ Even though Lister researched and published on mineralogy, his primary interests lay in entomology, botany, and shellfish. In addition to his many articles for the Royal Society, he published three works that included scientific illustrations. Two of these are of

⁶³⁶ Helen Pierce, "This Ingenious young Gent", John Bonehill, "The View from the Gentleman's Seat", Peter Moore, "Dialogues in Paint and Print: Mezzotint Portraiture and Intermediate Exchange", in *Court, Country, City*, eds., Mark Hallett, Nigel Llewellyn, Martin Myrone, (Yale University Press, New Haven and London, 2016), 313-334. 389-410. 433-456. Pierce discusses the growth and opportunities for artists in York post 1660, Bonehill explores the 'improvement' and enhancement of the country house outside the capital, while Moore illustrates how the secret of the mezzotint was not kept within a select few but grew more widely following the Restoration.

⁶³⁷ *A History of the County of York*: Tillott, 199. Also, Unwin, "A provincial man of science": 223.

particular interest on account of York being their place of publication. The London printer John White arrived in York c.1680, and it was then that Lister became confident that his books could be printed there.⁶³⁸ Firstly, *Historiae animalium Angliae tres tractatus*, with etchings by Lodge, was published in London in 1678, but then, in 1681, with additional plates by Place, in York. Secondly, *Johannes Geodartius of Insects Done Into English and Methodised*, with fourteen plates of insects from around the world by Place, was published in York in 1682 again by White.⁶³⁹

As Unwin notes, Lister and other naturalists such as John Ray ‘were pursuing a new kind of natural history which aimed at exact observation, description and taxonomy’.⁶⁴⁰ This explains Lister’s obsession with having complete control over his scientific illustrations. Both he and the Royal Society were dissatisfied with the way scientific illustrations were presented, as they tended to be fanciful creations by painters and could not be relied upon for comparison with actual specimens.⁶⁴¹ The significance of accurate scientific illustration was part of the Royal Society’s grand design to collect what Oldenburg called the ‘universal history of nature’, and its objective was to record and disseminate this scientific knowledge accurately. Based on collecting cabinets prized by natural philosophers, the Royal Society’s ‘Repository’ became the reference point for ‘the observation of similarities and differences’ in natural history and zoology, which was increasingly seen as an essential part of the society’s scientific rationale.⁶⁴² Accurate recording and draughtsmanship were vital for disseminating knowledge through the society’s publications and for comparing objects across different scientific collections. Investment in visual knowledge was also central to antiquarian scholarship and the graphic recording of ancient monuments and townscapes, which is discussed later. This explains why, from the 1670s, Lister pursued his passion for objectivity in field studies so religiously. The question remains, however, why he did not employ Gyles, whom he knew to be a proficient miniature artist and draughtsman, as an illustrator.

⁶³⁸ *A History of the County of York*, Tillott, 199. Also, Unwin, “A provincial man of science”: 223. Unwin, “A provincial man of science”: 223. Although printed in 1682, Lister began the translation of *Geodartius*’ from the Latin in the early 1670s.

⁶⁴⁰ Unwin, “A provincial man of science”: 209–230.

⁶⁴¹ Unwin, “A provincial man of science”: 210–211.

Also, Anna Marie Roos, “The Art of Science: A ‘Rediscovery’ of the Lister Copperplates”, *Notes Rec. Roy. Soc. Lond.* 66, (2012): 20.

⁶⁴² Unwin, “A provincial man of science”: 218. Citing *The Correspondence of Henry Oldenburg*, 8, eds., A.R. & M.B. Hall (London: Taylor & Francis 1986), 21. Oldenburg’s letter dated October 1671.

Lister's drive for visual accuracy raises questions about what shaped his singular view of how field-study illustrations should be presented, and what he and Place contributed to the 'new science'.⁶⁴³ The opening remarks to his translation of *Johannes Geodartius of Insects* reveal his understanding of the social status of the artist-illustrator: "that Naturall History is much injured, through the little incouragement, which is given to the Artist, whose Noble performances can never be enough rewarded; being not only necessary, but the very beauty, and life of this kind of learning".⁶⁴⁴ Lister then emphasises that he had "taken great care of the Designes, in transferring them upon Copper Plates, which I dare promise are Exquisitely performed, by the best of our English Artists". His use of the adjective 'Noble' asserts that the illustration of natural history was the province of the gentleman artist.⁶⁴⁵ While Gyles aspired to such a status, Lister clearly did not think of him in those terms.⁶⁴⁶ Lister would have seen Gyles primarily as a glass painter, not a printmaker.⁶⁴⁷ Irrespective of this obvious class divide, the fact that Lodge was a distant relative may also have been enough to secure his role as Lister's scientific illustrator.⁶⁴⁸ Moreover, both Lodge and Place were acknowledged draughtsmen and gifted printmakers, familiar with drawing perspectives and 'prospects', as seen in their 1675 York townscapes.⁶⁴⁹ For such a prestigious endeavour, Lister would have wanted to work with a social equal by bringing together the complementary skills of empirical scientific observation and accurate perspective drawing to make what Roos described as a 'novel genre'.⁶⁵⁰

When *Historiae animalium Angliae tres tractatus* was eventually published in 1678, Lister expressed his singular view on how illustrations should be presented, identifying the counterbalancing role of the scientist to curb the imaginative tendencies of

⁶⁴³ Roos, *Martin Lister and his Remarkable Daughters*, 3.

⁶⁴⁴ Lister's address to the reader as transcribed in Unwin, "A provincial man of science": 223-4.

⁶⁴⁵ As discussed in chapter 1, 70-72.

⁶⁴⁶ For the significance, definition and meaning of the word "Noble" in the second half of the seventeenth century, see the discussion in chapter one regarding Gyles' claiming of Noble status as validation for him being commissioned to undertake the painting of the Nativity window for University College, Oxford.

⁶⁴⁷ In a British context, the distinctions between 'art'/'artist' & 'craft'/'craftsman' did not begin to harden as it were until the end of the eighteenth century, so Lister's use of the term during this earlier period was less settled. In other words, what it meant to be an artist around this time was not clear-cut.

⁶⁴⁸ With thanks to Helen Pierce for the information connecting Lodge to Lister.

⁶⁴⁹ Tyler, *Francis Place*, 8-9.

⁶⁵⁰ Roos, "The Art of Science": 19.

the printmaker. His remarks would seem to imply that he was demanding that the artist suppress any sense of an individual sensibility, the opposite of a liberal practitioner:

I have made sure that practically all the drawings of the animals were carried out in my presence. My aim was to see that the excellent artist did not merely (as is often the case) express his own personal conception. To facilitate this I first of all indicated with my finger the characteristics of each species that I most particularly wished to have depicted... Now we ask ourselves not what would make a more pleasant picture as regards the animal's shape or position, but what drawing resembles the living animal most closely and would more readily and accurately be recognised by other people.⁶⁵¹

In a letter of 1673, Lodge is anxious to persuade Lister of his 'best endeavours' to illustrate crinoid fossils for *Historiae animalium Angliae tres tractatus*. He sends Lister two comparative drawings to demonstrate how resemblance and recognition could be enhanced by naturalism and the use of three dimensions rather than one: 'one as it appears with most advantage, plane wise the other as it is erected perspective wise'. These drawings appear side by side in Roos, *The Correspondence of Dr Martin Lister* (1639-1712), Volume One: 1662-1677, which clearly illustrates the advantage of tonal difference. He also suggests that naturalism would be heightened if the image were engraved rather than simply drawn in pen and ink, presumably because printing allows greater tonal depth.⁶⁵² The *Historiae animalium Angliae tres tractatus* (1678) contains prints by both Lodge and Place. Although Unwin suggests that Lister was displeased with Lodge on the grounds of reliability and cost, there may also have been issues around resemblance and recognition, as Lodge struggled with the smallest spiders (see letter above). Lister may have preferred Place because of his knowledge of how to recreate form in mezzotint rather than in intaglio.⁶⁵³ As noted by Julie Nurse, in addition to his topographical views and landscapes made around this time, Place also 'took an interest in three-dimensional botanical drawing, which enhanced two-dimensional prints with deeper tone to create greater depth'.⁶⁵⁴ A cursory examination of plates 2 (shells) and 6 (ammonites) appears to show two different

⁶⁵¹ Transcribed by Unwin, "A provincial man of science": 222.

⁶⁵² Lodge to Lister (30 September 1673) Bodl. MS. Lister 34, fol. 116, and Bodl. MS Lister 34, fols 167-168. Transcribed by Roos, *The Correspondence of Dr. Martin Lister*, 605. 715.

⁶⁵³ Unwin, "A provincial man of science": 221-3.

⁶⁵⁴ Julia Nurse, "Place, Francis (1647-1728), printmaker and potter", *ODNB*.

hands and approaches. Plate 2 is executed in intaglio, whereas plate 6 appears to combine intaglio with areas of tone to enhance modelling. [Fig. 34] The inclusion of prints by Place so late in the day suggests that, even with all Lister's oversight, there was room for improvement before an objective visual language could be realised.

Lister's focus on observational accuracy was the same as Robert Hooke's at the Royal Society in that both argued for a new method, or 'a novum organum' as termed by Francis Bacon, to record observable nature.⁶⁵⁵ For Lister, this was achieved by close collaboration between scientists and printmakers, while for Hooke, as stated in *Micrographia*, by 'some new engine and contrivance'; a magnifying glass (microscope), which changed forever how humanity viewed nature and the environment, enabling sight beyond the naked eye into a previously hidden world.⁶⁵⁶ There is little doubt that Lister and the York printmakers contributed significantly to the recording, representation, and presentation of observed objects during a period in which an inextricable connection between art and science was embodied by virtuoso collaboration. Both Hooke and Lister's papers, published in the *Philosophical Transactions*, brought a significant improvement to the quality of scientific illustrations.⁶⁵⁷

Place's acquisition and subsequent release to the York virtuosi of protected knowledge from within the Royal Society is now discussed to clarify Lister's interest in Place's technique and to contextualise Gyles' later use of mezzotints.

⁶⁵⁵ Francis Bacon, *Novum Organum* (Oxford: Clarendon Press, 1620).

⁶⁵⁶ Hooke, *Micrographia*, 93.

⁶⁵⁷ Roy Porter, *The Making of Geology: Earth science in Britain 1660-1815* (Cambridge: C.U.P. 1977), 36.

1.2 Francis Place and the mezzotint secret

In his engraving *A Tavern scene after Brouwer* c.1666-1668, Place produced one of the first mezzotints made in England.⁶⁵⁸ Throughout the 1670s and 1680s, the mezzotint was a protected and prized secret within the Royal Society because, as Evelyn noted, it was unlike other engraving methods, resembling “the best designs of the Old masters for the manner of delicacy”.⁶⁵⁹ For the first time, printmakers could create genuine shadow and halftone without linework, which, as Griffiths has noted, ‘was an important turning point in the history of British print’.⁶⁶⁰ The other value of the mezzotint was its perceived status, as the medium’s best exponents were not mechanical copyists but rather, like Abraham Blooteling (1640-1690), creative printmakers producing original works.⁶⁶¹ The earliest account of mezzotint in England appeared in 1661, when Evelyn produced a manuscript report for the Royal Society entitled *The History of Arts illiberall and Mechanick*. In this, he categorised the various trades under eight headings, and in the last, ‘exotick and very rare secrets’, he refers to ‘Pr. Ruperts new way of ingraving’.⁶⁶² Prince Rupert of the Rhine (1619-1682) was a German English army officer and admiral who commanded the Royalist cavalry during the English Civil War. He was also a scientist and FRS who claimed to have discovered the art of the mezzotint whilst in Europe. Following his 1661 report, Evelyn published a deliberately cryptic account of the mezzotint in *Sculptura* (1662), keeping the process elusive to those who wanted to try the new method of engraving.⁶⁶³ Evelyn’s apparent reluctance to describe the process fully may reflect the vigorous debate at the Royal Society over how much information to release. Although *Sculptura* was written to promote a wider market for prints, Evelyn may have reserved the secrets of mezzotint for the ‘polite arts’ by withholding them from the trades. As Thomas suggests, Evelyn was ‘attempting to place the invention into an intellectual

⁶⁵⁸ Thomas, “Noble and Commercial”, *Printed Images*, 290-291. In discussing the mezzotint of ‘*A Tavern scene after Brouwer*’, which carries the inscription, ‘Sold by John Overton at the White Horse in Little Britaine’, Thomas notes that this was ‘an address which the print seller operated from between 1666 and 1668’ and was only used from 1666-7 when Overton was forced to relocate temporarily after the Great Fire. Thomas goes on to say that ‘Places print is probably a copy in reverse of an undated mezzotint by Wallerant Vaillant after Brouwer’s now lost painting’, Thomas then asserts that this print could be the earliest mezzotint made by an English printmaker.

⁶⁵⁹ Thomas, “Noble and Commercial”, 284-285, citing BL Add. MS 78340, f. 154.

⁶⁶⁰ Antony Griffiths, “Early Mezzotint Published in England – II Peter Lely, Tompson and Browne”, *Print Quarterly*, 7, no.2 (June 1990): 144.

⁶⁶¹ Hunter, “Introduction”, *Printed Images*, 2.

⁶⁶² Thomas, “Noble and Commercial”, 279.

⁶⁶³ John Evelyn, *Sculptura*, ed. C. F Bell, (Oxford: Clarendon Press, 1906), 145-8.

paradigm’, aligning it to the virtuosi community. From Evelyn’s perspective, though, ‘it would be debasing to disclose it to the vulgar’, or to ‘mechanical capricious persons’. ⁶⁶⁴ Whatever Evelyn’s reasons may have been, the result was that knowledge of mezzotint remained secret and the prerogative of approved virtuosi, mainly Evelyn’s friends within the Royal Society, for the next five years. In 1669, the engraver William Sherwin (c.1645-c.1709) discovered the secret of the ‘loaded file’, which allowed him to make two ‘specimen’ mezzotint portraits of Charles II and Catherine of Braganza. Given that he dedicated the ‘specimens’ to Prince Rupert, it suggests he was somewhat nervous about upsetting the Royal Society. ⁶⁶⁵ Clearly, Sherwin was still protecting the secret from commercialisation because, in the same year, Alexander Browne published a description of the process in *Ars Pictoria*, but his account of the ‘engin’ was still vague and unusable. With the arrival in London of several Dutch mezzotinters, however, including Abraham Blooteling and Gerald Valck (1652-1726), the mezzotint became widely used within courtly circles from c. 1672. This use arose through the rivalry of two court painters, Lely and Henri Gascar (1635-1701). ⁶⁶⁶ Gascar employed a Dutch mezzotinter to produce print copies of his portraits to promote his court paintings. Not to be outdone, Lely followed suit, commissioning Blooteling to do the same. It would be another ten years before artists, printmakers, and publishers collaborated commercially in mezzotint making, with John Smith publishing the first mezzotint in 1683. ⁶⁶⁷ A further five years had to pass before the secret was released with the publication in London in 1688 by Dorman Newman of *The Pen and Pencil’s Excellency*. ⁶⁶⁸

⁶⁶⁴ Thomas, “Noble and Commercial”, 282.

⁶⁶⁵ Thomas, “Noble and Commercial”, 279.

⁶⁶⁶ Thomas, “Noble and Commercial”, 279.

⁶⁶⁷ Carol Blackett-Ord & Simon Turner, “Early Mezzotints: Prints Published by Richard Tompson and Alexander Browne”, *The Walpole Society*, 70, (2008): 7.

⁶⁶⁸ Dorman Newman, *The Excellency of the Pen and Pencil* (London: Radcliffe and Daniel, 1668), 79-80.

2.0 GYLES' TRADE CARD, HIS MAKING OF GLASS PRINTS AND THE WRITING OF *SOME RULES*: 1676-1683

The seven-year period 1676-1683 was Gyles' most productive, not just in glass painting but also in his other printmaking activities, such as glass prints and China glass.⁶⁶⁹ In pursuing these activities, he appears to have relied heavily on knowledge from the Royal Society in London.

2.1 Francis Place and the making of Gyles' trade card

The death of his father, Edmund, gave Henry the freedom to pursue his own artistic ambitions, and it was then that he began to socialise more with the artists among the York virtuosi. In a 1677 letter, Place addresses Gyles affectionately as a 'brother of the brush' and invites him to his family home in Dinsdale to paint, sketch, and fish.⁶⁷⁰ Given their close friendship, it is not surprising that Place made a drawing of Gyles. The inscription below, by Ralph Thoresby, states, '[Y]e effigy of Mr. Hen: Gyles the celebrated Glasse-Painter at York'. The effigy shows the sitter as a man in his early thirties, so the portrait was probably drawn between 1675/80. With this likeness, Place then engraved a copper plate for mezzotints, which Gyles used as his trade card.⁶⁷¹ [Fig. 35] At the base of the trade card, etched into the plate, is a list of services Gyles offered: 'Glass painting for windows, as Armes, Sundyals, History, Landskipt, &c...' ⁶⁷²

⁶⁶⁹ *Some Rules* described the process as 'painting upon messo tinto', while *Albert Durer Revived* (1669) described it as 'laying pictures and paint on glass'. Twentieth-century commentators gave the process a name: Egan Mew and Clarke called them Old Glass Pictures. Current writers refer to them as Glass Prints.

⁶⁷⁰ Francis Place to Henry Gyles, (1677), YAS. Ms. 4, f. 127.

⁶⁷¹ Drawing of Gyles, catalogue number 1852,0214.372. British Museum, London. Also, see Gyles' trade card, NPG D2541, National Portrait Gallery, London.

⁶⁷² Copy owned by this author.

This author recently traced the original copper plate to the Rawlinson Collection held by the Bodleian Library, Oxford. Although catalogued as a ‘portrait of a lady’, the plate is, in fact, Place’s original plate of Gyles’ mezzotint portrait.⁶⁷³ [Fig 36]. Richard Rawlinson (1690-1755) was a gentleman Bishop who bequeathed his collection of manuscripts, medals, coins, seals, prints and copperplates to the University of Oxford. The plate was traced by following the events leading to the breakup of Thoresby’s museum after his death. In 1887, D. H. Atkinson recorded that Thomas Wilson (c.1702-1761), a schoolmaster and antiquarian from Leeds, gave ‘Dr. Rawlinson [...] a mezzotint Portrait of Henry Gyles’.⁶⁷⁴ The Wilson manuscript collection at the Leeds Central Library contains a copy of Thoresby’s *Ducatus Leodiensis* annotated by Wilson.⁶⁷⁵ Written in the margin, under the section *Seals, Impressions, Copper-Plates etc.*, and adjacent to the underlined name of Gyles, Wilson wrote, ‘Given to Dr Rawlinson by T.W’.⁶⁷⁶ [Fig.37]

Although trade cards had been in use in England from the 1630s, they were still a relatively novel way to promote oneself.⁶⁷⁷ These early cards, produced for the merchant and professional classes, usually displayed either identifying signs or emblems, some with ornamental frames, while others replaced signs with representations of the wares being sold. Gyles’ card, therefore, differs notably from others of the same period. Not only was he the first glass painter to advertise his trade, but he may also have been the first tradesman to use his portrait to promote himself.⁶⁷⁸ By using a miniature mezzotint portrait, Gyles asserts his status as a liberal artist and aligns his glass-painting practice with the courtly arts.⁶⁷⁹ His intended clients, the Yorkshire gentry, would have understood these messages and, hopefully, responded with commissions. When we consider its production date, 1676-80, Gyles’ trade card takes on far greater significance. It coincides not only with the Royal Society’s retention of secret mezzotint knowledge but also with

⁶⁷³“Portrait of a lady”, Rawlinson collection, shelfmark Rawlinson g.192. Bodl.

⁶⁷⁴ D. H. Atkinson, *Ralph Thoresby, the Topographer: His Town and Times*, 2 (London: 1887), 426-439.

⁶⁷⁵ There are two annotated copies of the *Ducatus* by Wilson: the first held by Leeds City Council in their Strong Room at the Municipal Buildings, whilst the ‘best’ copy is at The Leeds Library. I am grateful to Steven Burt of the Thoresby Society for directing me to this reference.

⁶⁷⁶ Thoresby, *Ducatus* (1715), 52. The Leeds Library, Ms. shelfmark A321.10

⁶⁷⁷ “A Short History of Trade Cards”, *Bulletin of the Business Historical Society* 5, no. 3 (1931): 3. Accessed November 23, 2020. doi:10.2307/3111063.

⁶⁷⁸ John Knowles, “Glass-Painters’ Advertisements”, *Journal of The British Society of Master Glass - Painters* 1. no. 1. (1927): 18.

⁶⁷⁹ Roy Strong, and V. J. Murrell, *Artists of the Tudor court: the portrait miniature rediscovered, 1520-1620* (London: Victoria & Albert Museum, 1983), 52. Hilliard introduced the oval format in the 1580s, which Gyles’ trade card references.

Gaspar and Lely's use of Dutch mezzotinters to produce promotional prints of their court paintings. [Fig. 38] A portrait of Charles II, by Abraham Blooteling after Lely, is in form and presentation the same as Gyles' trade card. This connection, it could be argued, is no coincidence, suggesting that Gyles and the York virtuosi were very much aware of these courtly printmaking activities in relation to the presentation of the self. So, once again, Gyles deliberately aligned himself with artistic innovation within court circles for his own commercial benefit. He not only used a mezzotint for his trade card but also produced mezzotinted glass prints, which, as discussed in chapter 2, he housed in japanned frames. He then wrote a treatise on the process.

2.2 Gyles, glass print maker and author of *Some Rules*

The late seventeenth-century glass print, which involved fixing a mezzotint print onto glass and overpainting it with colour, was a novel form of picture-making explicitly created to mimic canvas painting by deceiving the eye. This glass print fashion was documented by the gentleman artist Edward Luttrell (d.1737) in his unpublished treatise (1683), and a few years later by the mezzotint engraver John Smith (1652-1742) in *The Art of painting in Oil- Mezo Tinctor* (1687).⁶⁸⁰ Early glass print subjects favoured by the popular market are described by Tempest in a letter to Place, 'though the ladys have solely left painting Mezzo Tints yet they doe sell a little especially fancy's Head's and bawdy soe I am providing 3 or four new ones Against the Terme 2 Queens a new concession 2 Fancys after Larooned'.⁶⁸¹ These 'Fancy' prints most likely refer to 'conversation pieces' or small, humorous prints drawn by Laroon previously mentioned, who, while working for Tempest, produced drawings for a series of popular prints called 'The Cries of London'.⁶⁸² Although mainly undertaken by professionals in print shops, Tempest's comment about 'ladys' refers to glass print painting being a popular pastime for ladies of leisure. This growth in domestic artistic pursuits is evidenced by the proliferation of 'how to' manuals, like that of Stalker and Parker on Japanning, who promised to 'teach young ladies the art'.⁶⁸³

⁶⁸⁰ Antony Griffiths, "Early Mezzotint Publishing in England - I John Smith, 1652-1743", *Print Quarterly*, 6, no. 3 (September 1989): 138 & 251.

⁶⁸¹ Pierce Tempest to Francis Place, (1675/6), Stowe Ms., 746, f. 98, BL.

⁶⁸² Griffiths, *The Print in Stuart Britain*, 260.

⁶⁸³ Stalker and Parker, *Treatise of Japanning and Varnishing*, Epistle.

Pictures behind glass, however, were not new. Reverse glass painting (Hinterglasmalerei), which used the back of glass as a ‘canvas’ to paint upon, had been made since the fourteenth century.⁶⁸⁴ By the sixteenth century, with their gold-leaf and metal inclusions, they were increasingly used domestically, reflecting shimmering candlelight and creating light play in darkened spaces.⁶⁸⁵ Although influenced by reverse glass painting, Gyles’ glass prints probably owed more to pre-Restoration Dutch genre prints, such as ‘pen paintings’ (penschilderijen) and ‘print paintings’ (prentschilderijen), and to the growing baroque fashion for landscapes.⁶⁸⁶ Glass prints were a development of mezzotint printing intended to replace hand-painting. [Fig.39] The absence of extant examples from the seventeenth century explains why the written history of the practice is so deficient.

Although both Knowles and Brighton believe the ‘glass print’ treatise *Some Rules for Painting upon Messo Tinto, Justly Imparted* was written by Gyles, its attribution is problematic. Brighton based his attribution on the handwritten title page, which stated, ‘Treatise in Autograph of Henry Gyles, Glass-painter’ and even though finding discrepancies in the handwriting, was persuaded by the ‘style and content’.⁶⁸⁷ The treatise contains twenty-one separate folios: the cover page (*Henry Gyles + 1709 see D.N.B.*), a title page (*Treatise in Autograph of Henry Gyles, Glasspainter Coloring Mezzotints & Transferring them to glass*), and three folios of drawings (human figure and a man-of-war in red crayon). The treatise itself is unsigned, undated, and its provenance unknown. There is also no library accession date for the receipt of the work. The shelf lists state that the records for the treatise are lost while presenting two potential acquisition dates, 1892 and 1901, which were most likely recorded during re-cataloguing. Lot numbers written in

⁶⁸⁴ Reverse glass painting is an art form in which, after applying paint to the verso, the image is then viewed by turning the glass over to see from the other side.

⁶⁸⁵ Semone Bretz, “Maltechnik und Glastechnik in der Hinterglasmalerei 1600 bis 1650”, and Y. Jolidon, “Die Zürcher Hinterglasmalerei in der ersten Hälfte des 17. Jahrhunderts”, in *Farbige Kostbarkeiten aus Glas, Kabinettstücke der Zürcher Hinterglasmalerei 1600-1650*, eds., H. Lanz & Seeling, (Germany: Bayerisches National Museum, Schwizerisches Landesmuseum, 1999), 181-216. 49-71. There were two types, the folk art ‘hinterglasmalerei’ and the icon, ‘gamalierung’, used as a form of reliquary within homes as a ‘private altar piece’.

⁶⁸⁶ David Freedburg, Aviva Burnstock & Alan Phenix, “Paintings or Prints? Experiens Sillemans and the Origins of the Grisaille Sea-piece: Notes on a Rediscovered Technique”, *Print Q.* 1, no. 3 (September 1984): 161.168. Willem van de Velde the Elder (1611-1693) and Heerman Witmont produced works in pen and brush with complicated cross-hatching intended to look like prints when overpainted, whilst Experiens Sillemans (1611-1653) and Jan van der Heyden (1637-1712) cut up prints to transfer (offset) onto canvas, which, when overpainted, looked like paintings.

⁶⁸⁷ Gyles, *Some Rules* Add.4024: f2. Also, Brighton, “Enamel Glass Painters”, 1, 80-81.

pencil are evident on the title page and on the backs of the drawings, while the text pages have other numbers, suggesting that text and drawings were sold as different lots. The treatise, however, seems to have been sold at auction in its entirety before the University Library of Cambridge acquired it sometime before 1892. There are three different handwriting styles: on the title page recorded by the library as being written ‘in a nineteenth-century hand’; the main treatise text, which is written in a stiff naive hand with unjoined verticals; and the cover page, which references *The Dictionary of National Biography*, first published in 1885. Given this multiplicity of styles, confirmation of Gyles as the author was necessary to employ the treatise as evidence within this thesis. [Fig. 40] As a preliminary exercise, literary forensic and palaeographic methodologies, developed by the University of Warwick, were employed to compare the treatise to known examples of Gyles’ handwriting, his annotated copy of Norgate’s *Miniatura* and other seventeenth-century treatises on glass prints. The handwriting in the treatise was also analysed and compared to known exemplars.⁶⁸⁸ This pooled analysis found that, although not written in Gyles’ hand, the treatise is a copy of an earlier, lost original by him.

The treatise takes the form of a set of instructions to the ostensible addressee, ‘madam’ (real or imagined).⁶⁸⁹ Although the reference to ‘madam’ could be interpreted as the humanist third-person convention used to validate content, it could also be addressing a real person, as in Edward Luttrell’s 1683 treatise.⁶⁹⁰ As previously noted, virtuosi culture in Yorkshire depended upon the sharing and circulation of information, and so Gyles’ treatise may have been part of this process of knowledge exchange. The argument that *Some Rules* suggests that Gyles was a tutor is supported by Kim Sloan’s *Sir Hans Sloane’s Pictures: The Science of Connoisseurship or the Art of Collecting?* (2015). Sloan draws attention to one album listed in Sloane’s library catalogue under the category of ‘miniature’, which contains pictures from Ellen Power.⁶⁹¹ As Sloan notes:

Near the end of Mrs Power’s album of tulips and irises is a series of drawings of other flowers, and of birds, of the type that can be found in ornamental print or

⁶⁸⁸ *English Handwriting 1500-1700: an online course*, ed. A. Zurcher, Cambridge, accessed 25.9.2019. <https://www.english.cam.ac.uk/eres/ehoc/>

⁶⁸⁹ Gyles, *Some Rules*, Cambridge Add.4024, f. 2.

⁶⁹⁰ Edward Luttrell, *An Epitome of Painting*, (1683). call no. NE1815.L88E65, YCBA.

⁶⁹¹ Sloan, “Sir Hans Sloane’s Pictures”: 403.

pattern books, often used as copy books by children or people learning to draw, or pattern books for needlework in the sixteenth and seventeenth centuries.⁶⁹²

The album, characteristic of an amateur's drawing book, was most likely acquired by Sloane, along with other manuscripts from Margery, the widow of the physician Henry Power.⁶⁹³ Henry's memorandum books, while primarily documenting his practice as a physician, also contain information about his wife and sisters, including Ellen Power. One memorandum records a visit to the apothecary Henry Wilkinson at York and payment for 'pencills & colours for my wife'.⁶⁹⁴ The last memorandum book contains Power's final comments up to his death in 1668, followed by Margery's comments. One of Margery's letters records her visit to York, to reclaim a microscope from Matthew Widdops and to enquire of: 'Mr Giles how to lacquer picture frames and how to make a good green and how to make varnish and write her the receipt'.⁶⁹⁵ Sloan concludes that Gyles or his father were most likely candidates for 'providing drawing and limning lessons to Margery and Ellen Power'.⁶⁹⁶ As Henry would have been twenty-three at the time of Henry Power's death in 1668, this scenario is very plausible. Whether Margery and Ellen Power, as natural history painters, were part of the York virtuosi is unknown, but their presence here speaks to the potential role of women at the periphery, such as Lister's daughters Susanna (1670-1738) and Anna (1671-1714?), who undertook over one thousand scientific illustrations for their father's publication *Historiae Conchyliorum* while in York.⁶⁹⁷

If the young Gyles was indeed working as a drawing and limning tutor, could the original treatise *Some Rules* have been written for another student who then made their own copy? Given the personal investment in writing *Some Rules*, Gyles most likely wrote it for someone connected to the York virtuosi. Amongst the drawings on the last folio is the name 'John', written in a juvenile hand (a different juvenile hand from the main treatise). [Fig. 40] The title page of Gyles' variant copy of Norgate's *Miniatura* records

⁶⁹² For example, Griffiths, *The Print in Stuart Britain*, 133-4.

⁶⁹³ For biographical information, see Sloan, "Sir Hans Sloane's Pictures": 402-412.

⁶⁹⁴ Sloan. "Sir Hans Sloane's Pictures": 405. Power family memorandum, BL, MS Sloane 1353, fol. 17.

⁶⁹⁵ Sloan. "Sir Hans Sloane's Pictures": 405. Power family memorandum, BL, MS Sloane 1358, fols. 58, 68v.

⁶⁹⁶ Sloan. "Sir Hans Sloane's Pictures": 405.

⁶⁹⁷ Christoffer Basse Eriksen and Xinyi Wen's, 'Colouring Flowers: Books, Art, and Experiment in the Household of Margery and Henry Power', *British Journal for the History of Science*, 56:1 (2023): 31. Also see, Roos, *Web of Nature*:10 and Roos' *Martin Lister and his Remarkable Daughters*, (2019).

that it was lent to Sir John Middleton in 1702, when he would have been twenty-four.⁶⁹⁸ John Middleton was the son of Sir William Middleton (1625-1690) and his second wife, Elizabeth.⁶⁹⁹ So, ‘Madam’ in *Some Rules* could be Elizabeth Middleton and ‘John’ her son (bap. 1678) of Belsay Castle, Northumberland. John could have copied *Some Rules* in c. 1688 when aged about ten as a writing exercise. To support this theory, researchers discovered a heraldic panel painted by Gyles in 2011 at Belsay Hall in Northumberland. [Fig. 41] Although now a ruin, Belsay Castle, where the window would have been located originally, was the Middleton family seat until they moved into Belsay Hall in 1817. The panel depicts the arms of Sir John Middleton, 2nd Baronet (1678-1717), who married Frances Lambert (1675-1712) of Calton, Kirby Malham, on 15 June 1699. Frances was the niece of John Lambert, the York virtuosi artist and friend of Gyles.⁷⁰⁰ The Middleton family were also present in Bishophill, close to Micklegate. They were connected to St. Mary’s Bishop-hill, and in 1659, Ann Middleton, the Sheriff’s wife, and Peter Middleton founded an alms-house there.⁷⁰¹ [Fig. 3] There is another possibility that *Some Rules*... may have been written by Gyles’ daughter Rebecca (born 1682) to retain the information before the original was sent to the anonymous ‘Madam’. If written by Rebecca, or perhaps even Gyles’ wife Hannah, the original may have remained in possession of the Gyles family until his death. If this were the case, then Ralph Thoresby would have acquired it, and it would have been recorded in his *Ducatus Leodiensis*... There is no evidence, however, that Thoresby owned *Some Rules*.

To establish whether Gyles’ *Some Rules* was a copy of another treatise or publication, what its potential date of writing may have been, or whether it is an original work, the treatise was compared to all known published and unpublished treatises. Although there are similarities in methodology and content with other descriptions of the process, *Some Rules* is different and, in some respects, original. Although now lost, Gyles’

⁶⁹⁸ Middleton baronets of Belsay Castle, Northumberland, Sir John Middleton, 2nd Baronet (1678-1717) born 1690, died 1717, age 39. *Leigh Rayment’s list of baronets*, www.leighrayment.com/baronetage.htm, accessed 14 September 2019.

⁶⁹⁹ Genealogy of Sir William Middleton, accessed 15th September 2019, <https://historicengland.org.uk/images-books/publications/eh-properties-1600-1830-slavery-connections/eh-properties-slavery-connections-vol1/> also, <http://www.parish-council.com/belsayparish/index.asp?pageid=407977>, accessed 15th September 2019.

⁷⁰⁰ John Hodgson, *A History of Northumberland: In Three Parts* (Newcastle-Upon-Tyne: Edw, Walker, 1827), 355. Sir John de Middleton of Belsay Castle hart. Bap. at Bolam 17 March 1678, buried at Bolam 29 October 1717. Also, see Dungworth and Harrison, “Belsay Castle”, *Vidimus* 80.

⁷⁰¹ Drake, *Eboracum*, 266. 271.

treatise is potentially earlier than the first English printed treatise on glass prints, *Albert Dürer revived* (1679) and the first European publication, Johannes Kunckel's *ars vitriaris experimentalis* (1679). If Gyles owned any treatise on glass prints, it would most likely have been *Albert Dürer's* (1679). As no glass prints by Gyles are known to have survived, and as Gyles recommended mezzotints by Abraham Blooteling for making glass prints, an example is included to illustrate the imagery Gyles used. [Fig. 42] For a transcript of *Some Rules*, see Appendix 2. To read the full analysis, which attributes the treatise to Gyles and establishes its likely date of authorship, and where the treatise sits within the broader European canon, see Appendices 3 and 4. For this author's investigation into the technical aspects of Gyles' painting of glass prints, see Appendix 5.

The making of glass prints was not just a commercial activity, but one also pursued by the Royal Society from c.1679-1680, as noted by Birch, so Gyles' activities appear to be either ahead of or contemporary with their discussions:

Mr. Houghton presented the society with several prints of the line of the Norfolk family, as also the copper plate itself, whereon it was ingraven, and a pane of glass, on which the picture of the first duke of Norfolk was drawn; all which Mr. Houghton had procured from his uncle, Mr. Silvanus Morgan.⁷⁰²

This was the apothecary John Houghton (1645-1705), FRS from 1680, and, importantly, this record identifies Silvanus Morgan as his uncle. As already discussed, Morgan was a close friend of Gyles, based in London, possibly his drawing tutor and supplier of heraldic drawings. Significantly, this record suggests that Morgan was also involved in making glass prints.

Although Gyles wrote about making glass prints in *Some Rules*, the first indication that he made them himself was not until 1690. Whether this activity was undertaken in collaboration with Place is uncertain but given that Place was living with Gyles and

⁷⁰² Birch, *The History of the Royal Society*, 4, 11.

undertaking printing activities in Gyles' workshop, Place would have been present during the making of glass prints. Gyles writes to Geldart:

Mother Mary^{es} picture is painted as large as y^e life by Mr. Lumley (Mr. Places man) who says he will also do it in Mezzo Tint; as soone as he gets a Copper plate, when done I will purchase one for you and paint it, but have long since given over y^r foolishoray, will do one also for Mr. Cornell, if he please to accept of it; but we must first of all see y^e print publisht which will be of 12^d price.⁷⁰³

Gyles' reference to 'your foolishness' indicates a complex and even whimsical process undertaken for some time on behalf of Geldart, and certainly more than simple painted prints. Gyles' glass prints could be seen as a form of 'large miniature', suggesting this activity and his writing of *Some Rules*... was also informed by his ownership of *Miniatura*.

2.3 *Some Rules* and *Miniatura*

By c.1676-80, when *Some Rules* was written, Gyles had not only absorbed the content of Norgate's *Miniatura*, but also the additional notes by Hoskins. Although Norgate asserted that '*Landscape* behind pictures' were 'very excellent', Hoskins had taken landscape painting one step further, by 'enlarging both the size of his miniatures and their scope' and in pioneering the use of landscape and sky as backgrounds.⁷⁰⁴ These large miniatures represented a high point in British seventeenth-century art and continued Hilliard's influence in placing sitters in naturalistic settings.⁷⁰⁵ To illustrate the influence of *Miniatura*, Folio 9 of *Some Rules* states that:

Those prints that have the greatest varities is the best for this kind of painting as where there is figurs of men and Beasts Trees and Temples or stone work in one print or the very fine soft messo Tinto prints of fair Ladys look very finely if

⁷⁰³ Gyles to Geldart, (24 September 1690), add. 78684, 15r-v f.2.

⁷⁰⁴ Norgate, *Miniatura*, 77.

⁷⁰⁵ Murdoch, "Hoskins, John", *ODNB*.

skillfully painted, but more particular derictions for Blootelings prints are the best Landskapes.

In making these recommendations, *Some Rules* is referencing *Miniatura* and the use of Dutch *petit genre* scenes. It also describes how to paint landscapes, houses, figures, etc., technically ‘with as much exactness and Curiosity as if you wear to paint by the life’, a comment which *Miniatura* reinforces no fewer than six times.⁷⁰⁶ Gyles’ method for painting glass prints was evidently similar to his method for glass painting. *Miniatura* describes the technical mixing of water and oil colours, and, as water does not mix with oil, how one can be applied over the other.⁷⁰⁷ For glass prints, Gyles used watercolour overpainted with nut oil.⁷⁰⁸ He also stresses the importance of not letting the colours bleed into each other, in having a hard edge between each colour:

If the landskapes have figures collour them first, and the Houses, also, the Trees, which being dry you may put in the ground, with much more ease and it will lye more naturall being carried on amongst the figures without inter-upting the collour and patching it in as it must bee done if painted all together...⁷⁰⁹

As a means of painting on glass, this method had been known of from the Renaissance as described by the Italian painter and author Cennino Cennini (c. 1360-before 1427).⁷¹⁰ One further difference worth mentioning is the use of silver. *Miniatura* suggests using the precious metal as a background for the setting of jewels.⁷¹¹ Whereas *Some Rules* recommends using it for the eyes within portraits.⁷¹² This use of silver suggests that Gyles was familiar with European reverse glass painting. The significance of this one detail reveals how Gyles intended his glass prints to be displayed and relates to a previous discussion in chapter 2 about enhancing surfaces to make them reflective.

⁷⁰⁶ Gyles, “*Some Rules*”, Cambridge Add.4024. f.7.

⁷⁰⁷ *Henry Gyles Booke*, Harley MS 6376 f.86.

⁷⁰⁸ Gyles, *Some Rules*, Cambridge Add.4024, f.13.

⁷⁰⁹ Gyles, *Some Rules*, Cambridge Add.4024, f.7.

⁷¹⁰ Cennino Cennini, *Il libro dell’arte*, first published in Rome in 1821 by Giuseppe Tambroni, translated by Christina J. Herringham (London: George Allen & Unwin, Ltd, 1922), 154. Thought to have been written around the turn of the fifteenth century, *Il libro dell’arte* discusses painting on glass in oil.

⁷¹¹ Norgate, *Miniatura*, 154.

⁷¹² Gyles, *Some Rules*, Cambridge Add.4024, f.17.

This comparison between treatises illustrates how Gyles deliberately used *Miniatura* as a model for *Some Rules*, aligning himself with the courtly practice of writing ‘how-to’ manuals and promoting his own ambitions for liberal artist status.⁷¹³ If we think of Gyles’ glass prints as large, coloured miniatures building on Hoskins, then he did not just create something new; he changed how large miniatures were viewed and consumed. Like his large painted glass miniatures, these glass prints were not just a development of courtly miniature painting but an enhancement. As wall-hung pictures set in Japanned frames, created to mimic actual painted limnings, Gyles’ glass prints would have been a significant addition to any connoisseur’s collection. This deliberate deception was noted at the time, in Stalker and Parker’s ‘how-to’ manual, which stated:

Tis a pleasant, insinuating Art; which under a pretty disguise betrays us into a mistake: We think a piece of Limning lies before us, but more strict enquires will evidence, that tis Mezzo-tinto at the bottom; Who can be displeased to be so innocently deluded, and enamoured at the same time?⁷¹⁴

The quote tells us that this ‘insinuating Art’ was so beautiful that the viewer became besotted with it, drawn by its special aesthetic qualities. Like limning, glass prints had a brilliance of colour and the power of illumination. This mimicking of actual limning also reveals the purchaser’s motivations. Gyles selected his mezzotint imagery from both the Italian and Dutch Old Masters, with subjects ranging from classical allegory to pastoral scenes set in either Italianate or Dutch landscapes. In doing so, he was clearly making glass prints for a connoisseur audience. Their display bestowed upon their owners a veneer of cultured legitimacy that could only have been improved by ownership of the original limning.⁷¹⁵ At the same time, from 1674/5, Gyles may have extended his making of glass prints beyond that of wall-mounted pictures to include a highly novel, and speculative ‘window glass print’ to compete with other forms of painted and printed window decoration.

⁷¹³ Gyles’ *Some Rules* is written in a similar mode of instruction as Norgate’s *Miniatura* and Peacham’s the *Excellency of the Pen and Pencil*. As both were written within the orbit of Arundel’s courtly circle, anyone associated with the court or familiar with these and other treatises would have recognised Gyles’ treatise as referencing these courtly ‘how-to’ manuals as discussed in chapter 1.

⁷¹⁴ Stalker and Parker, *Treatise of Japanning and Varnishing*, 69.

⁷¹⁵ Blackett-Ord, “Early Mezzotints: 10, citing R. De Piles, *The Art of Painting* 3rd ed., London: Thomas Payne, 1754, 44-60.

2.4 Painted and printed window ‘sashes’, curtains and blinds

From the 1680s, new types of windows with astragals, containing larger panes of clear glass rather than small leaded panes, began to be introduced into England, further increasing demand for window screens called ‘sashes’ or privacy screens.⁷¹⁶ These paper, cloth, or sarsnet sashes, held in a timber frame and placed inside the window against the glazing, contained not only hand-painted but also printed designs. Interior window sashes had been in use from the late sixteenth century. Painted by amateur artists like Sir Hugh Pratt to mimic glass painting, these images on parchment were treated with nut oil to make them transparent, so that ‘anie personage, beast, tree, flower or cote armour ‘could be realised.’⁷¹⁷ [Fig. 43] In the seventeenth century, however, the painted window sashe, and variants of it, were taken up by professional Painter-Stainers and court artists like Oliver and Greenbury, to the extent that Greenbury took out a patent in 1636 for *Painting with Oil colours upon Woollen cloath, Kerseys and Stuffles per for hangings and alsoe with the said Cullors upon Silke for Windowes*.⁷¹⁸ [Fig. 44] That Greenbury was also a glass painter is no coincidence, as the patent refers to the painting of silk for windows to mimic glass painting. This comment about the use of silk points to the increased trade from the Orient, where luxury commodities were being sold in London for use as window sashes. In confirmation, Evelyn records seeing a collection of items from Japan and China ‘rarely painted on some sort of gumm’d Calico transparent as glasse’ in 1664.⁷¹⁹ Moreover, and relating back to previous comments, the fashion for painted sashes led to the appearance of ‘how-to’ manuals in Europe and England, notably Emery’s 1684 publication *Recueil de Curiositez* and John Smith’s *Art of Painting in Oil* in 1687.⁷²⁰ In the latter, Smith recommends the sashe as a means of light diffusion:

If any are troubled with weak eyes, and cannot indure [sic] a bright light, this varnish [fixed to] paper windows, or sarsnet [is] very comfortable to the sight, and of great benefit to such as love not too much brightness: a note of good use,

⁷¹⁶ Louw, ‘The Origin of the Sash-Window’: 62.

⁷¹⁷ Sir Hugh Pratt, *The Jewel House of Art and Nature* (London: Elizabeth Alsop, 1593), 72-73.

⁷¹⁸ Coombs, *The Portrait Miniature in England*, 46. ‘*The Goddess Diana* - this possible transparency is now laid on a thin panel of lime tree’. Also see, English Patent no. 99.

⁷¹⁹ *John Evelyn Diary*, 3, ed., E. S de Beer (Oxford: University Press, 1955), 373-74.

⁷²⁰ Smith, *The Art of Painting in Oil*, 97-100. Chapter on *The Manner of Painting Cloth, or Sarsnet Shash Windows*.

especially to all great students, whose sight is often much impaired and weakened by pouring too much upon their books...⁷²¹ [Fig. 45]

This brightness, as Smith notes, resulted from improved English crown glass manufactured from 1684.⁷²² With the introduction of the window tax in 1696, glass became even thinner, exacerbating the problem of glare.⁷²³ Glass painting was affected by glare, and as discussed in chapter 1, white enamel was used more extensively in the painting of heraldic armorials from c.1550, particularly in France, to moderate light and reduce halation around painted areas.⁷²⁴ With this greater use of white enamel, it could be argued that painted glass, even in domestic armorials, began to mimic painted sashes, with the effect of turning glass into a ‘canvas’, which brought glass painting closer in appearance to the work of Painter-Stainers. [Fig. 51] Unfortunately, no examples of painted sashes survive. Ayres, however, in his *Art, Artisans & Apprentices* documents wall hangings depicting naïve folk-art landscapes with distinct Oriental influences that could be considered comparable design exemplars. These designs reference ‘Indian Tree’ motifs first seen in East Indian trade objects, such as porcelain and jappanned wares from the mid-seventeenth century and later influenced landscape painting and decoration in Coromandel and crewelwork.⁷²⁵

⁷²¹ Smith, *The Art of Painting in Oil*, 97-100. Chapter-The Manner of Painting Cloth, or Sarfnet Safh Windows.

⁷²² Louw, “Window-Glass Making in Britain”: 48.

⁷²³ “William III, An Act for granting to His Majesty severall Rates or Duties upon Houses for making good the Deficiency of the clipped Money”, *British History Online, Statutes of the Realm*: 7: 1695-1701, [Chapter 18. Rot. Parl. 7&8 Guil. 3. p. 5. n. 4’, (1820), 5. accessed September 2017 URL: <http://www.british-history.ac.uk/report.aspx?compid=46825#s1>. Glass became thinner because the window tax was charged on the volume of liquid glass in a pot before the glass was made into sheets, thus creating an incentive for the glass maker to make as many sheets as possible from a fixed amount of liquid glass.

⁷²⁴ Pierre Le Vieil, *L’ Art de la Peinture sur Verre et de la Vitrierie* (Paris : L.F. Delatour, 1774), 110. 133. 235. Translated from the French, Le Vieil states that Dom Perneti wrote ‘that employ(er)s [used] white paint on the glass, both because glass colors appear(ed) opaque white (and) because the glass appears white when it is between the light & the viewer. It is nevertheless essential [...] to paint the white glass e.g. in arms colors & I will give the recipe for the composition of the white rank(ed) enamels that are currently in use in the Glass Painting. (The best) 16th century glaziers painters saw the white & have usefully employed (it).’ Also, Le Vieil cites M. Taunai about the windows of the Chapel of the Château d’ Anet; works overseen by Philibert Delorme, [...] who states that the “windows are the first painted in this way that we have seen in France”. Philibert De l’ Orme undertook these works from 1547 to 1552. If correct, this is the earliest reference to the use of white enamel in France. Also see, History of the château; www.chateaudanet.com/ahistorique.htm. Further, Le Vieil states that in Lyon’s silk manufactories, paper was preferred to glass because it created a more uniform light to work by. Also, see Nicole Blondel, *Le Vitrail* (Paris: Imprimerie Nationale Éditions, 1993), 69. Blondel, citing Jérôme Durand, regarding work in the City Hall in Lyon, states that “The quality of lighting is recommended for certain professions”. In commercial buildings, oil cloths sometimes also had painted patterns.

⁷²⁵ John Fleming & Hugh Honour, *The Penguin Dictionary of Decorative Arts* (London: Viking, 1989), 216. 227. Indian Tree pattern.

Another form of window decoration was in competition with the painted window sash in the way it mimicked glass painting, the painted curtain or hanging cloth. The purpose of these window curtains was to reduce sunlight.⁷²⁶ In 1674, Kirke wrote to Gyles regarding a house he had visited with Addinall:

I carried Mr. Addinall into a roome hung with Canvase with drawings on it in flocks like cloth, enquire of him and he will satisfy you about it, here they use window curtains painted with transparent colours and when they are drawne and it look like painted glass.⁷²⁷

Thornton notes that curtains, for both bed and windows, were hung from rings of iron or horn running along iron rods.⁷²⁸ In 1682, Gyles' London relative, Smith, sends him 'horne Rings you may fit yourself...' suggesting that Gyles perhaps painted window hangings, although the rings may equally have been for 'Bedstead Curtains' as recorded in Sarah Gyles' 1686 will and inventory.⁷²⁹ These sashes and curtains, painted to mimic glass painting, were direct competition for Gyles and glass painting. Further competition arrived in the form of the printed window blinds and window sashes, which were sold commercially from c.1676.⁷³⁰ Confirmation of this is found in *Albert Durer revived* (1679), in which the London print seller John Garrett (1669-1718) advertised printed paper window sashes:

Eleven several Pictures of pleasant and delightful Landskips, and sea-pieces, for sashes, to be set before windows, printed on Royal Paper. Price uncoloured 6d. per Picture.⁷³¹

⁷²⁶ Thornton, *Authentic Décor*, 57.

⁷²⁷ Kirke to Gyles, (20th June 1674), Stowe Ms. 745, f. 78, Hake, "Some Contemporary Records": 61-63.

⁷²⁸ Thornton, *Authentic Décor*, 14.

Thornton, *Authentic Décor*, 24.

⁷²⁹ Smith to Henry Gyles, (1682), Stowe Ms. 746, f. 59. Knowles, "Henry Gyles": 64-65. Also see, BIA23242486_Will_Inv_Sarah_Gyles_Yorke_Sep_1686, BIA.

⁷³⁰ Felicity Henderson, "Robert Hooke and the visual world of the early Royal Society", in *Perspectives on Science*, 27, no. 3 (2019): 416.

⁷³¹ Thomas Jenner or John Garrett, *Albert Durer revived: or, a book of drawing, limning, washing, or colouring of maps and prints: and the art of painting, with the names and mixtures of colours used by the picture-drawers. With directions how to lay and paint pictures upon glass*, (London, John Garrett, 1679), 17-18, 22.

By 1680, these items had become a common feature in London, being sold through ‘publick Out-cry’ sales.⁷³² Printmaking on cloth was also a point of discussion within the Royal Society as early as 1672. Felicity Henderson notes that Hooke had discussed staining calico with Thomas Hewk and Edmund Wylde, both Fellows. At the same time as Tempest was printing window blinds in 1676, Hooke was collaborating with Sherwin, recording in his diary that he ‘Saw Sherwins new invented way of staining calico’, and how he engaged with Patrick Barrett to develop printing on cloth.⁷³³ In response to these new forms of window decoration, Gyles may have developed his own.

2.5 The window glass print

Evidence suggests that, instead of wall-mounting the print, Gyles made glass prints to be fixed into windows, so they would be backlit like a glass painting. In a letter to Thoresby, he writes: ‘I have sent you your armes which I hope will please you, and when you place them up in your window give your glazier a caution not to lay any oyle or plaister upon them the armes 10 s and the box 6d’, the box was simply for carriage to protect the glass.⁷³⁴ This note of caution to Thoresby suggests that oil and plaster would damage the visual effect in some way and make a ‘scaramouche’ or clownish mess of it, a word of caution reminiscent of Place’s comment to Gyles, warning against the varnishing of a ‘flower piece’ in 1683 for Mr Wilkinson, previously discussed. The pricing indicates that these arms were a glass print rather than a glass painting: Gyles charged £3.00 for painting arms at Ripon Minster in 1662 and at York Minster in 1700, whilst here he charges Thoresby only 10s. As with Gyles’ glass prints, no physical evidence of his making window glass prints survives, which is not surprising given the fragility and ephemeral nature of these items. *Some Rules*, if read at face value, describes how to imitate the luminosity of a limning by applying oil to a print behind glass. Gyles seems to have been using the same process to imitate glass painting, moving the glass print from the wall to the window, but for some reason dispensing with the oil. Importantly, Gyles’ treatise recommends using

⁷³² “News.”, in *True Domestick Intelligence or News Both from City and Country*. 17th and 18th Century Burney Collection.

⁷³³ Henderson, “Robert Hooke and the visual world”: 416.

⁷³⁴ Henry Gyles to Ralph Thoresby, (22 March 1686/7), Ms. 6 f. 84, YAS.

opaque ‘ground glass’ to make a glass print, unlike all other published and unpublished treatises on the subject, which recommend transparent polished glass or crown, previously discussed. When held up to the light, Gyles’ ground glass would have diffused light, subduing glare while allowing the image to be read clearly, similar to oil-painted or printed sashes and blinds. Moreover, natural light may have dispensed with the need for varnish. With a glass print mounted in a window, applying varnish may even have diminished rather than enhanced the image's luminosity, because the stroke marks used to apply it would be visible. The benefits of ground glass for imitation glass painting were later noted by the signwriter William Sutherland, who recommended using the technique to paint faux church windows in the nineteenth century:

The singular property of this class of colouring is that while they show the colour quite distinctly, they have only the same amount of transparency of the ground glass itself, and are left unvarnished...Of course all tints, whether varnished or not are flat...Ground glass on account of its roughness has the property of retaining a portion of the oil which may be put upon it, and however much it may be wiped off again, it will still retain a portion.⁷³⁵

Only glass painters and possibly painter-stainers would have known of this benefit of painting upon a prepared ground to hold the oil and retain illuminated colour. Gyles, as we have seen, also used white enamel in his glass painting, which would not have had the same effect.

Mezzotint glass prints, crafted by gentleman artist printmakers like Place, enhanced tonal modelling and chiaroscuro. Collectors prized these glass prints for their naturalistic interpretation of Old Master allegorical ‘landskips’. By creating an early form of printed window transparency, Gyles not only drew on the humanist qualities already valued by connoisseur collectors but enhanced them with transmitted light. The idea for Gyles’ mezzotint window-glass prints can be traced to his ownership of Norgate’s *Miniatura* and his study of how landscape painting ‘as a subject’ could be enhanced by naturalist lighting effects. Norgate was informed about lighting effects in landscape painting through his

⁷³⁵ William Sutherland, *The Art and Craft of Sign Writing* (London: Omega Books, 1987), 32. First published in 1854.

friend, the Flemish painter and printmaker Paul Bril (1554-1626), whose work Arundel also collected. Gyles' variant copy records Norgate's comments on how Bril created depth within the landscape by illuminating shadow:

Of ye most excellent master of his kind Paulo Brill, his observation is only this yt a good workman must be sure even to paint light against dark and dark against light, his meaning was yt your only way to remove the ground and to extend the prospect afar of was by apprising light to shadowes yet so as over they must look therefore and vigor as they remove from the eye...⁷³⁶

Of course, Bril was referring to painting in lighting effects, by 'apprising light to shadowes'. With Gyles' experience in glass painting, illuminating mezzotint prints on ground glass with real light to create a heightened illusion of depth would have been the obvious choice for him. If we accept the idea that *Some Rules* is ambiguous and could be interpreted as describing the making of a glass print for a wall or window, then Gyles' instruction in *Some Rules* to place 'lights against darks and darks against lights' (literally to produce contrasting areas of light and dark), highlights what he learned from *Miniatura*.⁷³⁷ As previously discussed, mezzotint mimicked the tonal qualities of a painting, and when mounted in a window, the unprinted areas transmitted real light, amplifying the contrast of light and dark and the image's naturalism.

In combining the secret 'black art' of mezzotinting with the advantages of a glass-mounted image, Gyles may well have created a new way to view, display, and further enhance the tonal qualities of a mezzotint. As no examples of window glass prints survive from the seventeenth century, an example of how one would appear in transmitted light is shown in Fig. 46. This glass print, by William Edward Shinton (print publisher in 1808), has been recently conserved by this author and is used to demonstrate the comparative effect between face light and transmitted light, which is quite striking, in that when backlit the colour and brightness are enhanced. Also, with the backing paper still in place, it is obvious that removing it, as Gyles instructed, would make the glass print clearer. Further,

⁷³⁶ Henry Gyles Booke, Harley MS 6376 f. 68.

⁷³⁷ Gyles, *Some Rules*, Cambridge Add.4024, f. 11.

the disadvantages of the varnish in transmitted light become apparent. In face-light, the varnish creates an evenness of tone, as in an oil painting, particularly across areas of white, such as the clouds, and enhances the modelling of the faces. In transmitted light, the varnish appears as brown muddy streaks creating a ‘scaramouche’; this brown effect may not have been noticeable when the varnish was first applied. To return to Gyles and printing, however, what evidence is there for him being a maker and not just a user of prints?

3.0 GYLES, A PRINTMAKER'S ASSISTANT: 1683-1690?

When Lister left York in 1683, the York Virtuosi lost their intellectual drive and their symbiotic relationship with the Royal Society, a situation compounded by Kirke's spending more time in London. With the arrival of the antiquarian and collector Thoresby in 1685/6, however, the York virtuosi gained a new focal point. To what extent Thoresby's presence influenced the artists within the circle is unclear, but their activities shifted from Lister's scientific illustrations back to topographical subjects and prospects.⁷³⁸ Around this time, Gyles' role and status within the virtuosi are difficult to determine. Although the artists regarded him as their friend and professional equal, he still performed a more subservient role as steward, providing accommodation for Lodge, Place, and Lambert after their drawing excursions.⁷³⁹ An undated letter (probably c. 1680) from Lambert to Gyles shows that Gyles went so far as to construct a coach house to accommodate their coach and horses over winter:

I have yours and heare by yem you have recd. mine. I am glad Cos. Lodge

⁷³⁸ Hunter, *The Diary of Ralph Thoresby*, 1, 166. (Diary entry 1683) Thoresby had met Lister in 1683 before Lister left London.

Gyles to Thoresby, (22 March 1686/7), Ms. 6 f. 84. Also see, Tyler, *Francis Place*, 9.

⁷³⁹ William Lodge to Henry Gyles (19 Feb 1682/3), Thoresby Ms- 3/98, YAS. As transcribed in Brighton, “Enamel Glass Painters”, 3, 659. Instructed Gyles to ‘gett my desk new covered with green Baze and redd inke and put up the plate of Leeds so carefully that to ye best of youre judgement it shall not come to any injury’. Also, in 1683, Place instructed Gyles ‘to send things from his house from York including the hen coop and the kitchen jack, and his wife asked for a web of cloth from their steward’.

is so zealous may it continue and that Frank Place designs for Yorke. If it be not to great a trouble and charge as you mention in making a coach house I will contribute willingly. Therefore make what haste you will. Also we will observe the contents of yours about plate etc. I designe, God willing to be with you either Saturday ye 19th instant or ye Tuesday following. I designe to keep 3 or 4 horses in ye house all winter.

As a footnote, Lambert writes, ‘All coach wheels are of a like wideness. Therefore, need send no measurmts. etc. for hyght mine is a low coach’. ⁷⁴⁰ The nature, purpose and focus of these sketching tours were the acquisition and display of knowledge through topographical and scientific illustrations, by ‘recording and categorising... knowledge in visual terms’. ⁷⁴¹ As noted by Carol Gibson-Wood, it was the tendency of the virtuosi to “stress the importance of pictures for their contribution to empirical, not humanistic, knowledge”. ⁷⁴² Gyles’ surviving sketch of Stonehenge, evidently a page from a sketchbook, may be evidence that he joined them on some of these excursions. ⁷⁴³ [Fig. 47] Although no drawings of Stonehenge have been identified by Lodge, Place or Lambert, given that Stonehenge is near Salisbury, not even near the York Road to London, raises the question of why Gyles would have visited if not on a sketching tour with his friends.

Returning to the letter above, the phrase ‘we will observe the contents of yours about plate etc...’ suggests that Gyles had been given the task of preparing copper plates for printing while they were away on a sketching trip and that they were excited to see the results. When in York, Place lodged with Gyles, probably until about c.1680, until he married Mrs Ann Wintringham, with whom he had one daughter, Elizabeth. ⁷⁴⁴ A letter from Place to Gyles in 1683, however, is potentially revealing about printing materials. Place reminds Gyles to look after his printing oils: ‘I pray at the retorne of ye Dr [Lister] let him not have my Oyle for Printing for it is a thing I sett greate valeu upon’. ⁷⁴⁵

⁷⁴⁰ John Lambert to Henry Gyles (undated), Stowe Ms. 746, f-37, BL. Brighton, “Enamel Glass Painters”, 3, 663. ‘I designe to keep 3 or 4 horses in ye house all winter...All coach wheels are of a like wideness.

⁷⁴¹ Pierce, “This Ingenious young Gent”: 314.

⁷⁴² Carol Gibson-Wood, *Jonathan Richardson: Art Theorists of the English Enlightenment*, (New Haven and London: Yale University Press, 2000), 13.

⁷⁴³ Henry Gyles, *Stonehenge*, (date unknown), ref. T08901, Tate, London.

⁷⁴⁴ Nurse, “Place, Francis, *ODNB*.”

⁷⁴⁵ Place to Gyles (1683), Stowe 746, f. 70, BL. Also, see Hake, “Some Contemporary Records”: 65.

Although the phrase could be read as Place not wanting Lister to use up his own artistic supplies for printing, that Gyles was simply looking after them on Place's behalf, given the context of their working relationship around their making of glass prints, it is more probable that Place was still using Gyles' premises to undertake printing activities, with Gyles sourcing the necessary materials and equipment. Gyles was also still sourcing materials for Lister for printmaking even though he was now living in London: 'I prey get Mr. Massanger to make me 6 etching sticks as formerly and putt good and fine needles in yem, neatly after his fashion and send yem by ye carrier'.⁷⁴⁶ These 'etching sticks' would have been for Lister's daughters, who, as Roos has discussed, engraved plates for their father. After his marriage, Place moved to the King's Manor in York, which instigated a change in artistic direction confirmed by Gyles' letter to Geldart:

Mr. Place does now with his wife and family live in y^e Mannor and is set up for [face] painting, has done two large pictures of Mr. Gil: Metcalfes children and is to do there owne and severall others this Winter, he paints very fine and after an exterordinary way, but had few spectators y^t either understanding it or Valleurs to its worth.⁷⁴⁷

The Metcalfe family worshipped at St. Martin-cum-Gregory Church in Micklegate, so would have been Gyles' neighbours. Gilbert Metcalfe died on 25 April 1689 and was buried at St. Martin's. Curiously, he was also baptised into the Anglican Church just before his death.⁷⁴⁸ Therefore, the portraits of his children that Gyles refers to may have represented a re-engagement with wider society following their father's death. As Tyler notes, 'Place undertook portraiture in three media, mezzotint, oil and crayon'. Tyler then says that the only oil-painted portrait known to have been painted by Place is a self-portrait, although he may have painted others.⁷⁴⁹ This letter confirms that Place painted many other portraits yet to be discovered. In the same year, further correspondence between Gyles and Geldart suggests Gyles was dealing in prints, buying them from Place, and possibly other local printmakers, and selling them on:

⁷⁴⁶ Martin Lister to Henry Gyles, (1685), Stowe Ms. 746, f. 97, BL. Also, see Hake, "Some Contemporary Records", 67.

⁷⁴⁷ Gyles to Geldart, (York: 24th September 1690), add. 78684, 15r-v f.2

⁷⁴⁸ Gilbert Metcalfe d. 25 April 1689, Find My Past website.

⁷⁴⁹ Tyler, Francis Place, 19.

I have sent you a present of 10 papers by Jo: Bacon, but I suppose he is still at Hull, one of them is a K: William of Mr. Places doeing cost me 2 shill, y^e rest you will pleasure y^r yorke acquaintance with all, and have some times been sold for 2 shill 6d and 2 shill per peir, I have 18 or 20 of those still by me which I bestow now and y^u uppon y^e worthy authors – acquaintance... pray give Mr. Swan one of y^e veiwes of York and one of my pictures... ⁷⁵⁰

This quote reveals that Gyles sent Geldart ten prints or ‘papers’ by someone called Bacon, who was delayed in Hull; one was a portrait of King William engraved by Place, while the others were views of York, which appear to be by Gyles, and he is now sending more. ⁷⁵¹ [Fig. 33] The reference to ‘one of my pictures’ suggests that his ‘present’ included prints by himself, and as discussed above, the phrase ‘one of my pictures’ also played a part in Geldart’s important negotiations on Gyles’ behalf with the London glass maker, a Mr Swan. While Gyles’ letter to Geldart does not prove anything, it is highly suggestive of his practical involvement in printmaking, which he would have learned from Place and Lambert. Although Gyles was a competent draughtsman, as illustrated by his sketch of Stonehenge, there is no surviving physical or written evidence of him as a printmaker. ⁷⁵² While text was printed with a letterpress, using raised (in relief) metal type, images, whether etched or engraved into a copper plate, were produced using an intaglio process that required a rolling press. So, might Gyles have had access to one?

Early printers in York, such as White, Thomas, and Alice Broad (from whom John White acquired his printing equipment through marriage), Stephen Bulkley (the King’s printer), and Robert Barker, were printing texts, sometimes with basic relief-printed decoration. There is no evidence that these printers owned a rolling press, which would have been an expensive and likely unprofitable endeavour for these provincial printers, who would have been producing books, pamphlets, and ballads. ⁷⁵³ This is why, as

⁷⁵⁰ Gyles to Geldart, (24th September 1690), add. 78684, 15r-v f.1.

⁷⁵¹ *York from the Windmill*, ref. YORAG: R1811, *Clifford’s Tower*, ref. YORAG: R2643, York Museums Trust, York.

⁷⁵² Richard Gough, *British topography. Or, an historical account of what has been done for illustrating the topographical antiquities of Great Britain and Ireland* (London: T. Payne and Son and J. Nichols), 780.

⁷⁵³ Kaley Kramer, “York’s first female printer: Alice Broad, 1661-1680”, in *The People of Print: Seventeenth-Century England*, eds., Kaley Kramer, Rachel Stenner, and Adams James Smith, (Cambridge University Press, 2023), 53.

previously discussed, etchings by Lodge and Place for Lister's publications *Historiae animalium*..., and *Johannes Geodartius*..., published under the auspices of the Royal Society, were printed in London by the printer to the RS, John Martyn.⁷⁵⁴ It is, however, a feasible thought that in their earlier work for Lister, Place and Lodge may have used some form of rudimentary rolling press to proof and check the design being developed on the printing plate, perhaps fabricated in Smith's foundry at the top of Micklegate. Moreover, although Place and Lodge are known to have published mainly through the printer-publisher Pierce Tempest in London, this does not mean Tempest or other London publishers printed all their work.⁷⁵⁵ Place's intimate mezzotint portrait of his friend Lodge, after 1675 and now in the British Museum (Registration number 1838,0420.124), like Gyles' trade card, would hardly have been worth sending to London and was probably printed locally. The relationship between Gyles and Place, however, may shed some light on whether Gyles had access to a rolling press.

Place lodged with Gyles on various occasions. In 1690, their friendship broke down, and Place moved out, only to return following the death of his wife, Ann Wintringham, in c.1691/2, before the two fell out again, with Place seemingly having offended Gyles.⁷⁵⁶ Moses Ashenden wrote to Kirke that:

M^r. Place is still with M^r. Gyles, though very unhappy. Harry and he are not so kinde and friendly as formerly I suppose the same that disoblidged George Marshrother, gave some offence to Harry & since other accidentally has happend to both sides, w^{ch} gives jelousies & disforbarance to both. I have had several complaints from both Parties & indeavor to moderate their complaints: but Frank seems resolved to remove as soon as conveniently he can.⁷⁵⁷

By 1693, Place had moved back to King's Manor with his new wife Ann Wilkinson, where he remained until he died in 1728. During this period, Place must have felt more

⁷⁵⁴ Charles. A Rivington, "Early Printers to the Royal Society 1663-1708", in *Notes Rec. R. Soc. Lond.* 39, (1984), 1.

⁷⁵⁵ Antony Griffiths, "Early Mezzotint Published in England-II Peter Lely, Tompson and Browne", *Print Quarterly*, 7, no.2 (June 1990): 137.

⁷⁵⁶ Nurse, "Place, Francis, *ODNB*. Place remarried in 1693.

⁷⁵⁷ Moses Ashenden to Thomas Kirk, (30 January 1693), Ms 3 f. 2, YAS.

comfortable teaching the mezzotint process to his Yorkshire friends, such as Sir Ralph Cole and George Lumley, brother-in-law to Thoresby, to whom he eventually gave his equipment.⁷⁵⁸ Relevant is that Place had set up a rolling press in the King's Manor, York. Thoresby's diary entry for 4 June 1711 records that:

With Sir Henry Piers to visit Dr. Birbeck and his ingenious contrivance about his bees: then at printing-press, and after at the rolling-press at Mr. Place's, where Cousin Lumley [likely Place's neighbour George Lumley] printed me off my ten Scocheons.⁷⁵⁹

It is certainly possible that the rolling press in King's Manor was originally located in Gyles' workshop when Place lived with Gyles and was only moved to King's Manor in 1693, after the pair fell out. Other evidence suggests Gyles was involved in printing.

When Lodge was engraving plates for Lister, Gyles was making printer's ink. Printers made their own inks, and Kirke and Gyles corresponded in 1674 about the method of making ink cakes with mixed results, as the cakes seemed to have 'crackled'.⁷⁶⁰ Kirke knew of a sort of superior ink cake stamped 'Laboris Merces' [Wages of Labour], and Lodge obtained cakes of similar quality in Italy. As will be discussed later, Lister experimented with making plant-based printing ink as early as 1671. This correspondence between Kirke and Gyles shows that Gyles was making printing inks for the York virtuosi:

In your Postscript you mention ye dish of Blew for astericks which I find crackled but I have used your way to remedy it & it is not yet thoroughly dry find ye astrick with Laboris merces written under it and I will endeavour to procure some of like

⁷⁵⁸ Tyler, *Francis Place*, 71-88.

⁷⁵⁹ Ralf Thoresby, *The Diary of Ralph Thoresby*, F.R.S, Author of the *Topography of Leeds*, 1677-1724, edited by Joseph Hunter, vol. 2 (London: Henry Colburn and Richard Bentley, 1830), 79. With thanks to Helen Pierce for bringing this reference to my attention.

⁷⁶⁰ Ink cakes or Inksticks are a type of solid ink used traditionally in several Chinese and East Asian art forms, such as calligraphy and brush painting.

sort: when Mr Lodge comes to Towne I will reminde him to send you astrick from his painting which hee copied at Venice etc. ⁷⁶¹

According to the OED, when used as a verb from 1631, ‘astrick’ meant to bind, and when used as an adjective, it meant to be compressed. ⁷⁶² According to the Dictionaries of the Scots language (DSL), the verb also meant ‘to bind,’ but normally in a legal context. ⁷⁶³ Gyles’ use of ‘astrick’ as a term may therefore refer to the use of something like boiled oil as a binder to make printing ink more viscous. These explanations may explain Kirke’s mention of ‘cracking’. Therefore, ‘astericks’ in Kirke’s letter most likely refers to the making of ink cake (also known as Inksticks). At its simplest, printing ink combines a carbon pigment (lamp black from burnt oil, vine black from burnt vegetable matter, or ivory black made from burnt bones) and a binding oil (usually boiled linseed or nut oil), technically referred to as a varnish. Ink manufacture was always a trade secret. Printers either made their own ink or bought it in solid cakes, which they ground into a powder for use. The preparation of the printing ink, mixing the right grade of carbon powder with the right viscosity of boiled oil, was a highly skilled activity and was always carried out by the printers themselves. ⁷⁶⁴

Regarding Kirke’s comment about ‘ye dish of Blew for astericks’, which could simply mean that the dish containing the astericks was blue. Lambert’s use of the term, however, implies something else, the use of blue as a colour, when writing to Gyles, ‘I also desire to know what prooffe was made of the Blew either by Doctor Lister or Fra. Place’. ⁷⁶⁵ Coloured inks had been used from the sixteenth century, particularly in Catholic countries, for the trade in religious images. Generally, black-to-brown combinations were used to give the impression of a coloured drawing. Printing in multiple colours, however, began at the end of the seventeenth century, either by using multiple plates or by inking a single plate with more than one colour. English printers are known to have inked single plates with multiple colours to provide a continuous tone over mezzotint plates in the

⁷⁶¹ Thomas Kirk to Henry Gyles, (1674), Stowe Ms. 745, f.78. BL. Also see, Hake, “Some Contemporary Records”, 61-63.

⁷⁶² OED <https://www.oed.com/search/dictionary/?scope=Entries&q=astrick&tl=true>

⁷⁶³ <https://dsl.ac.uk/entry/dost/astrick>

⁷⁶⁴ Antony Griffiths, *The Print Before Photography* (Italy: The British Museum, 2016), 32-33.

⁷⁶⁵ Lambert to Gyles (October: 29-1680), Stowe 746, f- 34, in Hake, “Some Contemporary Records”, 64.

eighteenth century.⁷⁶⁶ Both these techniques required a very high level of skill and were consequently expensive connoisseur items. Although no prints in blue ink have been found by Lodge or Place, Kirke's letter does suggest that Gyles was making blue printing ink at the same time as Lodge was engraving plates for Lister in 1674.⁷⁶⁷ Either way, this illustrates the centrality of Gyles and his workshop to the development of early scientific print culture in York pre-1680. Further circumstantial evidence of Gyles' involvement in printing appears in a 1692 letter, in which the Welsh naturalist and botanist Edward Lhwyd (1660-1709) wrote to Lister to thank him for having Gyles send buccina (mollusc shells). Although the correspondence does not specify the form in which Lhwyd received the buccina, they were most likely prints. If Gyles simply sent spare copies, it begs the question why Lister did not have them himself, which further suggests that Gyles either printed new ones or was trading in the spares, recalling Gyles' previous correspondence with Geldart and his trading in prints from Hull.⁷⁶⁸

This drawing together of new and old letters between Gyles and Place, along with further circumstantial evidence, points to an alternative narrative about emerging print culture in York and Gyles' place within it. The letters show that Place and Gyles collaborated on producing and marketing prints, including glass prints. While it is difficult to quantify Gyles' role, his commitment to the virtuosi's artistic community cannot be questioned. For a very short period, this artistic community was more than the sum of its parts; it became a culture, collectively invested in visual imagery that spanned various fields of artistic interest, from recording and communicating natural knowledge to antiquarian scholarship. It also became a culture that connected artistic activity to the reinvention of York as a national historical monument, reflecting a new civic identity. In reframing York as Eboracum, the city became a destination for antiquarian enquiry, which encouraged artists and writers to capture the architectural spirit of the place – a role readily adopted by the virtuosi, as evidenced by their pictorial records of ancient monuments,

⁷⁶⁶ Antony Griffiths, *The Print Before Photography* (Italy: The British Museum, 2016), 33, 160-161.

⁷⁶⁷ Lodge to Lister, (21 Aug 1674) Bodl. MS Lister 34, fols 169-170. As transcribed by Roos, *The Correspondence of Dr. Martin Lister*, 715.

⁷⁶⁸ Edward Lhwyd to Martin Lister, (22 Aug 1692) Bodl. Shelfmark: MS Lister 36, 035-036. Alternative shelfmark (MS Lister): (18). 'I reciev'd from M^r Giles y^e Buccina you were pleas'd to send us...' EMLO URL: tinyurl.com/yd468p8j

townscapes, and prospects.⁷⁶⁹ Although the contributions of Place and Lodge have been recognised in capturing this historical legacy, the activities of Gyles as a facilitator of printmaking in York, a distributor of prints made by members of the York virtuosi, and even a possible printmaker himself, have not. By c.1688, Gyles was promoting a new type of glass, ‘China Glass’, which he tried to sell through his friend Thoresby. What China glass was, and how Gyles probably utilised Lister’s research into dyes and Prince Rupert’s Royal Society enquiries into printing on marble, is now discussed.

3.1 Gyles and the making of ‘China Glass’

Even though Gyles had given up making glass prints by the late-1680s, a letter to Thoresby of 1688 suggests he had not given up trying to create new and novel forms of image making: ‘You desire to know the price of ye China Glasse; which is halfe a crowne, and 3 shill pr. Foote, if in small squares the glafs price, if Larger ye 2d’.⁷⁷⁰ Some ten years later, in 1698-1699, he further writes: ‘Sr, I desire your endeavour to help me of(f) with some china glass; the conveniency of it you will see on the back of my picture inclos’d’. Clearly, sales were not going well.⁷⁷¹ The enclosed picture would have been one of Gyles’ trade cards, with his written message on the verso. Significantly, this letter was written only one year after Thoresby was elected to the Royal Society. It seems, therefore, that Gyles was trying to sell his ‘China Glass’ to other members of the Royal Society by using Thoresby as a go-between. Gyles may also have been trying to gain access to Thoresby’s other connections; for example, he was also a member of the Town-end Club, a drinking club in Leeds.⁷⁷² Although Gyles called his new product ‘China Glass’, no decorative items with this name have been identified, suggesting it was a local trade name. [Fig. 48] Whether Gyles’ making of China Glass could have been a response to Places’ experimenting with ceramics, which may also have contributed to the breakdown of their friendship around 1692, is unknown; no evidence of any discussion between Gyles and Place has been found

⁷⁶⁹ Akehurst, “Tis Risen Again”: 31-34. Akehurst records that in the 1670s William Lodge evoked a ‘siege view’ of York as seen from York’s gun emplacements, while Place’s ‘panoramic views and streetscapes... populated with gothic imagery provided a contrast, and perhaps a deliberate comparison to London with the construction of St Paul’s and other new classical buildings after the Great Fire of 1666’.

⁷⁷⁰ Henry Gyles to Ralph Thoresby, (no date c.1688), ref. no. 1995. f. 39, YML.

⁷⁷¹ Gyles to Thoresby (1698/9), Ms. 7, f. 78, in *Letters addressed to Ralph Thoresby*, 68-69.

⁷⁷² Clark, *British Clubs and Societies*, 67.

concerning China Glass.⁷⁷³ In the late seventeenth century, the term ‘China’ or ‘China-Ware’ described hand-painted porcelain imported from China.⁷⁷⁴ Porcelain was remarkable for becoming translucent when held up to the light, making it highly sought after.⁷⁷⁵ Although the first advertisement promoting the sale of painted China from the East appeared in 1687, the East India Company had been importing Chinese ware from c.1672.⁷⁷⁶ So, by the time Gyles launched his ‘China Glass’ in 1688, there was already an existing, well-established market for porcelain products with ‘China’/‘Japan’ like decoration. Further, as previously mentioned, the use of ‘Japan’ decoration had become a popular home pastime to imitate ‘China’.⁷⁷⁷ While this contextualising of Gyles’ new product locates his invention chronologically, it requires further technical explanation. What informed the materiality of ‘China Glass’?

Correspondence between Lister and Oldenburg at the Royal Society reveals that Gyles’ China Glass may have been informed by Lister’s earlier discovery of a plant-based black, which he called ‘English Black’, and the activities of Prince Rupert regarding image making on marble.⁷⁷⁸ Responding to a request from Oldenburgh, Lister sent samples for Prince Rupert to trial in 1671. Replying to this request, Lister comments:

If the Prince for whom he much desired it, vouchsafes to make any Tryal with it to imitate the black-China-Varnish (to which Mandelslo saies none in Europe could ever yet arrive) I should be glad to have an account of the successe; for ‘tis the only instance known to me of a Vegetable resin naturally black’.⁷⁷⁹

⁷⁷³ A proposition recently suggested to this author by Helen Pierce.

⁷⁷⁴ John Kersey, *Dictionarium Anglo-Britannicum* (London: Wilde, 1708) unpaginated-China=Ware, as ‘a fine sort of earthen Ware made from those parts’. Nathan Bailey, *Dictionarium Anglo-Britannicum* (London: Cox, 1730), unpaginated - Porcelain, ‘the chalky earth of which china-ware is made’.

⁷⁷⁵ “A to Z of Ceramics”, *V&A*, <https://www.vam.ac.uk/articles/a-z-of-ceramics>, accessed 20.9.2019.

⁷⁷⁶ “Advertisements and Notices”, *London Gazette*, 14 April 1687-18 April 1687. 17th and 18th Century Burney Collection.

⁷⁷⁷ Peele, *The Method of Learning to Draw*, 49. Directions for imitating China, Purslane-ware, upon Tea-tables, Tea-boards, & C., upon Gold or Silver Grounds... ‘paste paper over the area, draw design, then watercolour the picture, then cover with gold or silver-size. When nearly dry lay your leaf-gold or silver. When dry, varnish over with white varnish, and it will become transparent’.

⁷⁷⁸ Martin Lister to Henry Oldenburg, (York, 4 March 1670/1), RS EL / L 5/27 and RS Letter Book, 4, 224–225, transcribed by Roos, *The Correspondence of Dr. Martin Lister*, 334.

‘As to the particular of English-black, I say although I am exceeding cautious not to impose upon my selfe and others, yet you will oblige mee wth a singular favour to further the Expt by exposing it to the most rigid Tryalls of practised men in that Art. to this purpos I shall as soon as the season of the yeare will afford fit leaves send you a quantitie of the Colour & likewise some parcells...’

⁷⁷⁹ Martin Lister to Henry Oldenburg (York, 11 November 1671) RS EL /L5/41 and RS Letter Book, 5, 42–43, in Roos, *The Correspondence of Dr. Martin Lister*, 404.

Johan Albrecht de Mandelslo (1616-1644) was a seventeenth-century German gentleman-adventurer who wrote about his travels through Persia and the Indies. That Lister is quoting Mandelslo suggests they had been in communication about his discovery, further implying that he had been discussing its printing properties more broadly in Europe, not just with the Royal Society in London.⁷⁸⁰ What this black vegetable resin was is unknown, because, although repeatedly asked, Lister refused to reveal the plant's name. As steward for the York virtuosi and one who worked closely with Lister, Gyles would certainly have been aware of Lister's 'English Black', and it may even have formed part of the experiments with 'Astrick' or inkstick used for printing within the York virtuosi circle. Lister's comment about Rupert imitating 'black -China-Varnish' is, however, the first terminological connection we have with Gyles' reference to 'China Glass'. The term 'black China-Varnish' recalls Japanned lacquer, perhaps even Evelyn and Boyle's version of lacquer, the so-called 'English varnish'. It takes five years for Prince Rupert to trial Lister's 'English black', with Oldenburg reporting in 1676:

Prince Rupert sent to the Society a specimen of Marble that he had several pictures of boys and Trees painted upon it/according to his Highnes's direction/ in such a manner, that all the outlines of those pictures were perfectly defined without any spreading or flowing of the colours, and the colors so fixed by fire, and afterwards so polish't, that they be permanent, as long as the marble lasts'.⁷⁸¹

So, Rupert's pictures were painted onto marble and fired in a kiln/furnace to make them permanent, though it is unclear at what temperature. When Oldenburg asked about the properties of 'English black', Lister explained: 'upon the question of the usefulness of it as to its dye, whilst liquid it is a most exquisite black and staines according anything it touches; and neither Fire nor a strong Lye of pot-ashes does in the least, that I can discern, alter it'.⁷⁸² Prince Rupert's process, therefore, was remarkably like glass painting. This

⁷⁸⁰ Adam Olearius, *The Voyages and Travels of the Ambassadors from the Duke of Holstein ... Whereto are Added the Travels of J. Albert de Mandelslo ... into the East-Indies*, tr. John Davies (London: Dring and Starkey, 1642), Preface.

⁷⁸¹ Henry Oldenburg to Martin Lister (London, 10 June 1676) Bodl. MS Lister 34, fol. 195-196, transcribed by Roos, *The Correspondence of Dr. Martin Lister*, 839.

⁷⁸² Martin Lister to Henry Oldenburg (York, 8 April 1671) RS EL / L 5/29 and RS Letter Book, 4, 268-271, transcribed by Roos, *The Correspondence of Dr. Martin Lister*, 349.

epistolary knowledge exchange between the York virtuosi and the Royal Society would have been vital to prompting Gyles' commercial opportunism.

The other element of Rupert's experiment was the substrate - marble. Painting on marble had been a subject of Royal Society discussion from 1665, when Oldenburg's transcription of a letter from an unnamed Jesuit priest was published in *Transactions*.⁷⁸³ The letter is in three parts: the first discusses an 'experiment' undertaken by the Jesuit scholar Athanasius Kircher with others, as documented in his publication *Mundus subterraneus* about the secret of marble painting with the 'most lively Pictures' painted 'threw the whole substance'; the second section recounts the processes, materials and vehicles required to achieve success, 'by which you can 'paint what Pictures you please upon white Marble'; while the third proceeds to tell of a 'stone-cutter in Oxford, Mr. Bird', who also demonstrated that he too could undertake the painting of white marble in which the colour penetrated all the way through it.⁷⁸⁴ This connection to the Jesuits probably relates to Lady Arundel's visit to the new Jesuit church under construction in Antwerp in 1620 while on her way to Italy, an event which she reported to Inigo Jones, England's surveyor-general for royal buildings. Described as 'the marble temple', the new Italian-style church with its marble veneer was considered one of the 'most splendid buildings erected by the Jesuits north of the Alps'.⁷⁸⁵ In addition to the marble veneer, the Jesuits also initiated a new form of painting that integrated the marble's natural veining into the subject. They used this to create the eight Marian scenes that framed the altar. Undertaken by the celebrated Antwerp Baroque painter and stained-glass designer Hendrick van Balen (1573/5-1632), this type of painting was a sensational 'event' because of the way in which it bridged art, sculpture and architecture.⁷⁸⁶ The use of marble or stone as an alternative support for panel and canvas painting began in late sixteenth-century Italy when artists became interested in manipulating the accidental patterns in stone to enhance the effects of painting. Balen learnt this technique in Italy.⁷⁸⁷ Balen also produced small-scale

⁷⁸³ Jesuit priest, "An experiment of a way of preparing a liquer that shall sink into, and colour the whole body of marble causing a picture, drawn on a surface, to appear also in the inmost parts of the stone", *TRHS* 1, issue 7, (04 Dec 1665): 125 to 127.

⁷⁸⁴ This is the same Athanasius Kircher previously discussed regarding magic lanterns. Published in 1665, *Mundus subterraneus* is a scientific textbook with textual descriptions of geography.

⁷⁸⁵ Anna Knaap, "Marvels and Marbles in the Antwerp Jesuit Church: Hendrick van Balen's Stone Painting on the Life of the Virgin (1621)", in *Jesuit Image Theory*, eds., Walter S. Melion, Karl A.E. Enenkel, and Wietse de Boer (Bril: Leiden and Boston, 2016): 352.

⁷⁸⁶ Knaap, "Marvels and Marbles": 352-6.

⁷⁸⁷ Knaap, "Marvels and Marbles": 364-9.

cabinet pictures and the artifice of marble painting was, therefore, his entry into the secular ‘world of collecting’ and the connoisseurial culture of the *Kunstammer*.⁷⁸⁸ From the Renaissance, *Kunstammer*, or *Wunderkammer*, also known as Cabinets of Curiosity or Rarities, housed an eclectic array of objects, such as natural marbles and cabinet pictures, to showcase the collector's wide humanist interests and knowledge.⁷⁸⁹ It appears that both Prince Rupert with his marble pictures, and Gyles with his ‘China Glass’, were also seeking new ways of contributing to this secular ‘world of collecting’.

Even though Prince Rupert called the substrate marble, it may, however, have been another material - opalescent glass. In the *Transactions* of the Royal Society for 1665, the letter from the Jesuit priest regarding marble painting is followed by a report entitled *An Imitation of a Way, found in Europe to make China-dishes*. How to make or mimic China had been a point of discussion at the Royal Society from the mid-1660s. The *Transactions* for 1668 include a letter from Leiden by the clergyman and collector Samuel Colepresse (-d.1669) of Plymouth, describing a method of making counterfeit opal.⁷⁹⁰ These discussions eventually led Hooke to develop a new way of imitating China Ware, suggesting that he could make opal glass himself, which exhibited properties like those of porcelain.⁷⁹¹ Given Hooke's involvement in the glass industry, his contribution is unsurprising. A further report in *Transactions* in 1687 from Mons. Justel gave a full account of a ‘substance resembling excellent China-ware’ made by a glasshouse in Paris.⁷⁹² These discussions show that the Royal Society believed the milky properties of opalescent glass were comparable to those of China Ware, and perhaps even to marble. As he was already a glassmaker, Gyles' China Glass was probably made of opalescent glass.⁷⁹³ That he promoted ‘China Glass’ a year later in 1688 suggests that he had access to the

⁷⁸⁸ Knaap, “Marvels and Marbles”: 364, 683.

⁷⁸⁹ Wolfram Koeppe, “Collecting for the *Kunstammer*.” In *Heilbrunn Timeline of Art History*. New York: The Metropolitan Museum of Art, 2000-. http://www.metmuseum.org/toah/hd/kuns/hd_kuns.htm (October 2002).

⁷⁹⁰ Samuel Colepresse, “An extract of a letter lately written by Mr. S. Colepresse, from Leiden, to the Publisher, about the making of counterfeited opal, and the recovery of the art of making red-glass”, *Philosophical. Transactions. Royal. Society*, no. 3, (1668): 743-744.

⁷⁹¹ Robert Hooke, “An intimation of a way found in Europe, to make good China-dishes *TRHS* 1, (30 May 1665): 127.

Birch, *The History of the Royal Society*, 4, 149.

⁷⁹² Birch, *The History of the Royal Society*, 4, 537.

⁷⁹³ There are other possibilities, as discussed previously, Gyles used white enamel from the 1660s, which would have achieved a similar translucent effect to porcelain. Also, as Gyles was buying ‘plate glass’ from London, he may well have ‘ground the surface’ of plate glass to achieve a similar translucent appearance to chinaware. The most likely answer, however, is that Gyles made his own opalescent glass, as pursued by the Royal Society.

Royal Society's *Transactions* through its York virtuosi members. Although Gyles does not mention the actual size of his 'China Glass' objects, he tells us that they are unframed and made in flat sheets to be sold by the square foot.⁷⁹⁴ Given that translucency was a significant characteristic of porcelain or China, they could have been a developed form of Gyles' opaque 'ground glass' window glass print, printed and fired onto opalescent glass, perhaps utilising Lister's secret 'English Black'. As Lister's 'English Black' could bear heat, Gyles' 'China Glass' may have been an early form of kiln-fired transfer printing. If correct, this would be a highly significant token of Gyles' precocious entrepreneurship as the transfer printing process was not developed commercially until c.1756, some eighty years later. The printer John Sadler (1720-1789), a partner in the Liverpool-based firm of Sadler and Green, claimed to have invented the process, using it to print earthenware tiles, and the Worcester Porcelain Company also introduced overglazed transfer printing.⁷⁹⁵ Curiously, Brighton mentions that Peckitt had connections to both Sadler and the English Physician Dr John Wall (1708-1776), who was one of the founders of the Royal Worcester porcelain factory in 1751.⁷⁹⁶ A talented artist, Whall produced cartoons for both Peckitt and the glass painter John Rowell (to be discussed in the concluding chapter).⁷⁹⁷ Sadler's notebook contains enamel recipes for China and tiles, including a 'Good Black for Printing on Glass for Staining', and plate 1 of his notebook reads: "Peckitt of York, Glass Stainer".⁷⁹⁸ Might Sadler have learnt about a 'Good Black for Printing on Glass' from Peckitt, and subsequently, might Peckitt have derived his knowledge from Gyles? Sadler's recipe for a 'Good Black for Printing on Glass for Staining' was made from Zaffer (cobalt oxide), Manganese, Calcined Copper, and Calcined Iron, not a naturally black vegetable resin as Lister described. This did not, however, preclude Gyles experimenting with a 'Good Black' of his own to make his 'China Glass'.⁷⁹⁹

⁷⁹⁴ Antwerp Cabinet (1640-1660) with inset oil-painted panels, museum number: W.61:1 to 3-1923, The Victorian & Albert Museum Collections, London. Glass panel paintings were used to create inset pictures.

⁷⁹⁵ Catherine Beth Lippert, *Eighteenth-century English Porcelain in the Collection of the Indianapolis Museum of Art* (Indianapolis Museum of Art: Indiana University Press, 1987), 172. Also, Peter Hyland, *The Herculanum Pottery, Liverpool's Forgotten Glory* (Slovenia: Liverpool University Press, 2005), 11.

⁷⁹⁶ Brighton, "Enamel Glass Painters", 2, 263. 266. 279. 280.

⁷⁹⁷ Brighton, "Enamel Glass Painters", 3, 419, citing C. H. Grinling, "Ancient Stained Glass in Oxford", in *Oxford Architectural and Historical Proceedings* (1883): 181. - 'Presentation in the Temple' 1767; Oriel College, Oxford, painted by Peckitt, designed by Wall. And S. M. Gold. "John Rowell. "(1965), 47-48. 'Our Saviour's Passion in the Garden', 1744; The Chapel East Window, Hartlebury Castle, Hartlebury, Worcestershire, painted by John Rowell, designed by Wall. Also, see James, Granger, *A Biographical History of England*, (London: Nicholson, 1804), 335.336.

⁷⁹⁸ E. Stanley Price, *John Sadler a Liverpool Pottery Painter* (West Kirby, Cheshire: Self-Published, 1948), 44-46. 83. Memorandum book of John Sadler, Ref. 738 SAD, Liverpool Records Office. Not seen by this author.

⁷⁹⁹ Price, John Sadler, 93.

One reason for Gyles' lack of success with his China-glass was its evident cost. In response to a letter from Thoresby about his 'China Glass', Gyles expresses his annoyance that an unknown critic (to us) had described his 'China Glass' objects as 'intolerably' expensive 'baubles' (showy trinkets).⁸⁰⁰ He further writes, 'I pray, Sir, set my box by in some dark corner, and let it never be seen more unless asked for; it may be, it may come once more to light'.⁸⁰¹ Thoresby has evidently been promoting Gyles' China-glass to another practitioner who did not appreciate the skill involved, as he goes on to write:

I took notice in your letter of your being browbeat so disingenuously, by such persons as ought not to have done it. I wish one of them (God forgive me!) had no other way to get his bread than by my employment; provide notwithstanding, he were as expert as myself, it would humble him to the dust; he would not then say baubles, intolerably dear, &c'.⁸⁰²

Gyles' China Glass is another example of how he tried to expand into a connoisseurial market by reinventing glass painting and perhaps creating a novel form of printed picture window. From 1690, however, ill health was to significantly affect his ability to work.

4.0 GYLES' DECLINING YEARS: 1690 - 1709

By c.1691/2, Gyles' health had become chronic, and he was finding it difficult to work. Facing financial hardship, he was offered a post in local government and a house by his friend, the merchant and former Lord Mayor of York, William Ramsden (1675-1676). Gyles, however, declined, replying that he 'wou'd never give over ye Art I proffess'.⁸⁰³ By 1693, we discover that he is suffering from rheumatic and urinary ailments, to such an extent that by the following year, he was incapable of working and required financial

⁸⁰⁰ *Oxford English Dictionary*, seventeenth century understanding of the word Bauble (noun) - An ornament, trinket, or toy - that is showy or attractive but typically inexpensive or of little value, a trinket, a knick-knack.

⁸⁰¹ Henry Gyles to Ralph Thoresby, (September 1703), Ms. 12 f. 73, YAS.

⁸⁰² Henry Gyles to Ralph Thoresby, 1703, transcribed by Hunter, *Letters of Eminent men*, 34.

⁸⁰³ Gyles to Geldart, (York: 24 September 1690), add. 78684, 15r-v f.3. Also, Henry Gyles to Thomas Kike (York: 10 Feb 1691/2), MS. 3 fol. 62, YAS.

assistance from his local church; Gyles was given a modest 6.s 8d.⁸⁰⁴ In a further letter to Lister in 1696, he states that ‘I am in my 51st year...altogether broken with ye infirmities of ye Goute and Stone [...] the best of my time is gon so am not to be long in ys world’. As previously mentioned, Gyles completed at least eight other glass-painting commissions between 1690 and 1700, in addition to that for Denton Hall, an output that can only be explained by Gyles having help from other glass painters.⁸⁰⁵ Irrespective of these achievements, however, from 1700 almost every letter Gyles writes to Thoresby relates to his disability and growing poverty, claiming:

mine Arms and leggs, for can neither walk abroad, nor help my self either wth. my Cloths on or off, nor git either hand to my head, nor have been able to sitt to my businesse y^s. 10 months and more, I can you see Write (but wretchedly) and is also very painfull to me’.⁸⁰⁶

These progressive ailments clearly had financial implications for Gyles, and he became desperate for new sources of income. By 1702, he is looking to take in new lodgers and writes to Thoresby, ‘Mr. Nioas Fairfax family are leaving my house, he himself dyeing the last weeke [...] I shall want good lodgers at my house; if you heare of any, I pray to remember me’.⁸⁰⁷ It also appears that the remorseless telling of his circumstances to his friends, not surprisingly, began to drive them away. Although his friends had been very supportive for many years and had often given Gyles money to buy ‘coal and corn’, by 1707, Gyles was almost begging Thoresby to reply:

It is now 2 months since I write to you and shou’d ha’ been glad to have had a line or two from you bye now [...] I pray let me heare from you surely there is something in my last to you y^t. you may answer &c’.⁸⁰⁸

⁸⁰⁴ Gyles to Lister (4 Dec 1693), MS Lister 3 fols. 117-118. Also see, Benson, “St. Martin-cum- Gregory”: 621.

⁸⁰⁵ Brighton, “Enamel Glass Painters”, 1, 139-235.

⁸⁰⁶ Henry Gyles to Ralph Thoresby, (10th May 1706), Ms 8 f. 42, YAS.

⁸⁰⁷ Henry Gyles to Ralph Thoresby (York: 4 Marly [sic] 1702/3), Ms 14 f 42. YAS.

⁸⁰⁸ Henry Gyles to Ralph Thoresby, (1st March 1707/8), Ms 8 f.125, YAS.

In the same letter, Gyles then blames his wife for the distance between himself and his friends:

I am still a languishing pooer man in great paine and trouble and sometimes in great Terreur [terror] wth...I am y^e. saddest man in y^e. world and now no boddy comes at so y^t...She has so much and so often abused all my Friends and acquaintances y^t I am left destitute- I am pooer & desolate'. ⁸⁰⁹

By 1707, there were signs that Gyles had lost hope. Firstly, he tries to sell precious books and prints, the lifeblood of his business. ⁸¹⁰ Then he contemplates selling the family home for as little as £350, when it cost £600. ⁸¹¹ Worst of all, he was imprisoned by the sheriff for ten days to avoid being sent to debtors' prison. In a pitiful begging letter to Lord Fairfax, Gyles writes:

I humbly beg leave to acq^t. you at this sad consideration under a confiem^t. which I never knew in all my Life before, being lately azzisted by a Creditor woud no longer spare me sho^d offere him sufficient security, but nothing would sattisfie but pres^t. monies, w^{ch}. I cannot progresse by any means, and my sad infirmities...I humbly beg y^{or}. Lrd.ships favo^r and compassion to me in Odering w^t. is remanting for y^e. windows at Denton, an account whereof is here inclosed, the remaining being 39^G [sic]: 25:0, which if yo^r Lrd.ship wou^d be graciously pleased to order to me, it would keep me from goeing to Jayle: W^{ch}. If I be laid there am afraid the frost [sic] might well be my Last on this world. M^r. Sherriff Scowsid has been pleasd to make me his Prisner for a weeke or 10 days. ⁸¹²

The previous year, Lodge had covered a debt for which Gyles had been brought to court and had acted as his guarantor. ⁸¹³ Whether this new debt was related to Gyles eventually finding himself in jail is unknown. In the following year, we learn how desperate Gyles' plight is, and how he narrowly avoided jail once again. In writing to Thoresby, he states:

⁸⁰⁹ Henry Gyles to Ralph Thoresby, (1st March 1707/8), Ms 8 f.125.

⁸¹⁰ Gyles to Thoresby, (25th November 1707), Hunter, *Letters of Eminent Men*, 78-79.

⁸¹¹ Gyles to Thoresby, (9th August 1707), Hunter, *Letters of Eminent Men*, 61-63.

⁸¹² Henry Gyles to Lord Fairfax, (7th May 1707), Ms 8 f. 64, YAS.

⁸¹³ Gyles to Thoresby (York, Jan 10 1707-8), Hunter, *Letters of Eminent men*, 91-93. Also, Lodge to Gyles (Leeds: 19 Feb 1682/3), Ms- 3/98, transcribed by Brighton, "Enamel Glass Painters", 3, 659 - 'I spoke to Mr. Baume about ye 9 shillings frome but Mr John Skinner is willing to bee ye paymaster as concerning ye 2 Guinnyes I shall account with you at ye Assises'.

indeed S^r. I have no monies to buy either Coales of Corn for o^r. Winters store, never was so bare in all my life not never in greater straites, I was forced to borrow 60 ^[?] to pay of a debt to an ingrullful fellow or else had gone to jayle; and my Lrd. F: for all he has some times prompts faire yet performes nothing now S^r. I leave it to y^{or}. Prudence w^t. to say to M^r. Plaxton x and indeed M^r. Av..n & M^r. D...y told me plainly my Lrd. p' no boddy...⁸¹⁴

The fact that Parmentier also gave Gyles twenty shillings in the same year demonstrates the deep and protective friendship that existed among the virtuosi artists.⁸¹⁵ Perhaps of most comfort to Gyles, however, was that he became reconciled with Place in c.1705/6 who visited with Dr John Place in June 1708 to drink Lister's health for his publication of *De cochleis*...⁸¹⁶ Henry Gyles died the following year, on 25 October 1709, a penniless artist.

The primary concern of this chapter has been Gyles' association with York's new visual culture, with a focus on his use of prints and his illustrations of humanist themes, natural history, and antiquities. More broadly, however, the chapter situates Gyles' work within a wider range of cultural activity, offering insights into the intersections of art, science, and collaborative experiment at this time, particularly the collective endeavours of the York virtuosi. These case studies not only enhance our understanding of the growing market for, and interest in, the visual arts before and after the Restoration but also reveal the impact of a small yet exceptional community of intellectual virtuosi. The following concluding chapter reviews the existing literature on Gyles' demise and then promotes his legacy.

⁸¹⁴ Henry Gyles to Ralph Thoresby (no date c.1707/8), Ms 10 f. 132, YAS.

⁸¹⁵ Gyles to Thoresby (York, Jan 10 1707-8), Hunter, *Letters of Eminent men*, 91-93.

⁸¹⁶ Gyles to Thoresby (10 May 1706), Ms 8 f. 42. Also, Dr John Place to Martin Lister (9 Jun 1708), MS Lister 37, 121, alternative shelfmark (MS Lister): (54), Bodl.

CHAPTER FOUR

CONCLUSION AND GYLES' LEGACY

This concluding chapter surveys Henry Gyles' legacy by documenting the dispersal of his belongings in the immediate aftermath of his death in late 1709. It then maps the fluctuations in his posthumous reputation before suggesting that his practices were foundational to the development of late Georgian print transparencies (glass prints) and glass painting.

1.0 THE DISPERSAL OF GYLES' COLLECTIONS AND BELONGINGS

Gyles died a broken and impoverished man. On his death, his daughter Rebecca became the sole executor of his will, with her cousins, James and Samuel Smith, appointed as overseers (executors). Gyles' Micklegate house and workshop were eventually sold off to pay outstanding debts, and the remaining monies were divided between his wife, Hannah, and the executors. What goods were left in the property were bequeathed to his daughter.

⁸¹⁷ Curiously, although he was one of Gyles' closest friends, Thoresby's diary reveals that he did not attend the funeral; in fact, it was some nine months before he even made note of Gyles' passing in his diary. ⁸¹⁸ Thoresby met with the Smith brothers on three occasions over the next couple of years, with the principal aim of acquiring items from Gyles' estate. ⁸¹⁹ These items were destined to form part of Thoresby's famed *Musaeum Thoresbyanum*, 'one of the most interesting of the first generation of English museums'. ⁸²⁰ This museum was a physical embodiment of his 1715 urban history of his native town, Leeds, *Ducatus*

⁸¹⁷ Will and Testament of Henry Gyles, 1721/2. [Fig. 15]

⁸¹⁸ Hunter, *The Diary of Ralph Thoresby*, 2, 61.

⁸¹⁹ Hunter, *The Diary of Ralph Thoresby*, 2, 62. (19 July 1710), 78, (1 June 1711): 90, (19 March 1712): 'To see the remains of Mr. Gyles's glass painting.'

⁸²⁰ P. C. D. Brears, "Ralph Thoresby, A Museum Visitor in Stuart England", *Journal of the History of Collections*, 1, issue 2, (1989): 213. <https://doi.org/10.1093/jhc/1.2.213>

Leodiensis. The inventory of his collections describes the purchases he had made from the Gyles estate, under the appropriate headings:

Seals, Impressions, Copper Plates, &c,

The Picture of Mr. Henry Gyles's, the famous Glass Painter at York, wrought in Mezzo-Tinto by the celebrated Mr. Fran. Place when the Art was known to few Others.

and

Curiosities Enamel'd, Gilt; Paintings, &c,

Old Tho. Par, and Mr. Henry Giles, the noted Glass Painter; all these in oil colours upon wood and cloth' and 'Mr. Hen. Gyles's Historical Draught for Windows.⁸²¹

The first item was the mezzotint copper plate Gyles used to print his trade cards made by Francis Place, while the second item was the preliminary drawing. The 'Historical Draught for Windows', a curiously grand title, was probably a theoretical treatise with illustrations reminiscent of Shaftesbury's essays on aesthetics, like Gyles' *Some Rules*, intended as instruction for designing history paintings in windows.

By 1711, the English peer, politician, philosopher, writer, virtuoso, and patron of the arts, Anthony Ashley-Cooper, 3rd Earl of Shaftesbury (1671-1713), had published a collection of six treatises on virtue, morality, and philosophy called *Characteristicks*. Then, while in Naples between 1711 and 1713, he began work on his second edition. The central discussion in volume four of the second edition, published in 1713, is Shaftesbury's treatise: *A Notion of the Historical Draught or Tablature of the Judgment of Hercules*, which detailed the set of instructions Shaftesbury gave to the Italian painter Paolo de Matteis (1662-1728). This treatise provided much of the theoretical foundation for the

⁸²¹ Thoresby *Ducatus Leodiensis* (1715), 492. 496.

advancement of eighteenth-century history painting around the ‘Art, or Science, of Design’.⁸²² For clarity, Shaftsbury also articulated his use of the term ‘Tablature’:

Before we enter on the Examination of our Historical Sketch, it may be proper to remark, that by the word *Tablature* (for which we have yet no name in *English* besides the general one of *Picture*) we denote, according to the original work *Tabula*, a work not only distinct from a mere *Portraiture*, but from all those wilder sorts of Painting which are in a manner absolute and independent; such as Paintings in Fresco upon walls, the Ceiling, the Staircases, the Cupolo’s, and other remarkable places either in Churches or Palaces.⁸²³

A term which could equally embrace glass painting as a ‘wilder’ sort of painting. Shaftsbury’s letters to his cousin Thomas Micklethwayte about the making of a Frontispiece entitled *Triumph of Liberty* for volume two of his second edition of *Characteristicks*, also clarify that ‘Draughts’ meant drawings worked up from an initial design.⁸²⁴ Shaftsbury’s *Historical Draughts* is, therefore, useful in understanding how scrupulous his supervision was of Matteis’ execution of *The Judgement of Hercules*. A point commented on by the British art historian Edgar Wind (1900-1971):

He did not conceive of the artist as a genius responsible only to his own inspiration, but he treated him as a manual executant who carries out in visible material the ideas dictated to him by the philosopher. He himself invented the programme and pattern of all the works of art produced to his order.⁸²⁵

Shaftsbury saw himself as the intellectual inspiration and arbiter of virtuosi connoisseurship behind the created work, and Matteis as a talented practitioner dictated to by him. Gyles adoption of the title *Historical Draughts* suggests that he saw himself more as a philosopher than the ‘manual executant’. This relates back to the question raised at the

⁸²² Sheila O’Connell, “Lord Shaftesbury in Naples: 1711-1713.” Vol. 54 (1988): 152.

⁸²³ Earl of Shaftesbury, Anthony Ashley Cooper, *A notion of the historical draught or tablature of the judgment of Hercules*, (1713), 4. The fourth of seven books bound together as part of Shaftesbury’s second edition of *Characteristicks*, published posthumously in 1732.

⁸²⁴ Sheila O’Connell, “Lord Shaftesbury in Naples: 1711-1713.” Vol. 54 (1988): 150.

⁸²⁵ Edgar Wind, “Shaftesbury as a Patron of Art” *Journal of the Warburg Institute* 2, no. 2 (1938): 185.

start of this thesis: whether Gyles had the necessary intellectual capability for inventive design, or ‘disegno’. When designing a historical window, as at University College, Oxford, he did not merely adapt prints of Old Master works but also drew on his own imagination. Gyles’ *Historical Draughts*, therefore, was probably an illustrated treatise and set of instructions on the ‘Rule of the Unity of Time’, as Shaftesbury called the process, covering discussions of the correct proportion and shape of figures, countenance, and harmony of composition. In effect, a treatise on the art or science of designing historical subjects for windows. Gyles’ treatise is now lost. Whether it was later acquired by the other York glass painter, William Peckitt, and became the basis of his own treatise in c. 1793, entitled *The Principles of Introduction into that Rare but Fine and Elegant Art of Painting and Staining of Glass*, is unknown at this time.⁸²⁶

Returning to *Ducatus Leodiensis*, Thoresby’s topographical survey ranged far beyond Leeds and its environs, aiming to paint a portrait of the wider region, its past and present, not only recording the pedigrees of the local nobility and gentry but also celebrating the county’s industrial and manufacturing power, as well as its recent cultural and philosophical heritage. Indeed, Thoresby’s book was as much a lament as a tribute to the passing of the likes of Gyles and Kirke, a paper monument of sorts to the achievements of the York virtuosi. Thoresby’s text paid explicit homage to Kirke, who had died a couple of years or so prior to Gyles, with a description of the ‘Surprizing Labyrinth’ he had constructed at Cookridge. But the display of Gyles’ portrait and ‘Historical Draught’ in the museum was also an overt acknowledgement of the glass painter’s contribution to their native county’s vibrant cultural life, too. Thoresby’s collection of Gyles-related memorabilia also included autographed letters either received by or sent to the glass painter.⁸²⁷ Thoresby’s autograph collection took the form of an ‘album amicorum’, a book of friends or of memories, popular with antiquaries and scholars since the sixteenth century, in which signatures were assembled with biblical or classical mottos, coats of arms, seals, and drawings.⁸²⁸ Thoresby’s ‘album amicorum’ was a curation of memory, a

⁸²⁶ York Museum Trust catalogue number: YORAG : 2007.1005

⁸²⁷ Brighton, “Enamel Glass Painters”, 3, 686. ‘I have now, sent, yo’ some letters will be worth your preserving. Mr. Bateman’s letter I only desire you (will) return to me because it was the last letter I had from him before his sudden and immature death by the fall from a-horse’.

⁸²⁸ *The Oxford Companion to English Literature*, ed. Dinah Birch (Oxford University Press, 2009), <https://www.oxfordreference.com/view/10.1093/acref/9780192806871.001.0001/acref-9780192806871-e-117>. “Album Amicorum”. Also, Janet Ing. Freeman, “Upcott, William (1779-1845)”, *OBNB*. By the late

celebration of what had passed, commemorating ‘the famousest painter of glass perhaps in the world’ along with a host of other famous luminaries.⁸²⁹

When jotting down his memories of that ‘set of most ingenious virtuoso[es] [who] frequently met at the house of Mr Henry Gyles’, for George Vertue, Thoresby’s recollections were brief and fragmentary, as he thought that many of the group’s activities were ‘too tedious to insert’.⁸³⁰ Invariably, the notes Vertue assembled from such recollections have been the starting point for modern scholars building a picture of virtuosi activity in late seventeenth-century York. They offer valuable insights into the contemporary art world, particularly its current perceptions and prejudices. Vertue makes no mention of Gyles’ involvement with the York virtuosi or his wider achievements. On Vertue’s death, the English writer, art historian, and antiquarian Horace Walpole (1717-1797) acquired the notebooks to aid in the compilation of his sprawling *Anecdotes of Painting in England*, published between 1762 and 1780.⁸³¹ In *Anecdotes*, it appears that Walpole dug a little deeper than Vertue, perhaps revealing new information about Gyles.

2.0 GYLES AND WALPOLE’S ANECDOTES OF PAINTING IN ENGLAND

Following Thoresby’s death in 1725, Walpole bought items from his estate, including a copy of Gyles’ mezzotint trade card. Now in the British Museum, this version of the trade card is inscribed in Walpole’s hand: ‘Mr. Henry Gyles Painter let his Art Dye with him at York’, suggesting that although his art was a thing of the past, it was still an example of

eighteenth century, the filling of these albums had become a celebrity-driven activity, as demonstrated by the purchase of Gyles’ trade card from the Walpole estate by William Upcott (1779-1845). Upcott was an antiquary and autograph collector who lived at Autograph Cottage in Islington, London. As the name of his cottage suggests, Upcott was obsessive about collecting autographs, prints, books, manuscripts, and letters. Due to his autograph-collecting zeal, Upcott inspired others in the pursuit of ‘autographic mania’.

⁸²⁹ Hunter, *The Diary of Ralph Thoresby*, 1, 366.

⁸³⁰ Vertue, “Vertue’s Note Books”: 120.

⁸³¹ Mark Hallett “Through Vertue’s Eyes: Looking Again at British Art and Architecture, 1660-1735”, eds., Mark Hallett, Nigel Llewellyn and Martin Myrone, in *Court, Country, City: British Art and Architecture, 1660-1735* (New Haven: Yale University Press, 2016), 24.

progress in the visual arts over the preceding century.⁸³² The words add a melancholic note, turning the print into a commemorative token, acknowledging that Gyles had no immediate successor: ‘he let his Art Dye with him’. Antiquaries collected portrait heads, like Gyles’ trade card, to study national history. These were arranged according to rank, status and profession and invariably privileged the heads of those ‘who took some remarkable part in historical events’.⁸³³ In *Anecdotes*, Walpole reframed his portrait of Gyles in a very pointed way. [Fig. 49] Walpole’s history was a counter to the plethora of European publications that had appeared since the beginning of the century championing national artistic achievement.⁸³⁴ Walpole’s memoirs of British artists were both timely and necessary, helping to support the country’s growing cultural confidence and promote his father’s ideology of national greatness.⁸³⁵ Gyles’ inclusion in Walpole’s *Anecdotes* makes more sense when viewed in the context of other notable precedents, like Filippo Baldinucci’s (1625-1696) publication, *Notizie de’ professori del disegno da Cimabue in quà* (1681), which refers to artists as a dynasty ‘of professors or teachers’ and the English Antiquarian Sir William Dugdale’s (1606-1686) discussion on ‘naming professors...’. In the 1762 and 1765 editions of *Anecdotes*, Gyles is presented as a professor or teacher, elevated to sit within a ‘hall of fame’. The accompanying plate, however, an adaptation of Place’s original design, has been altered to show Gyles holding an engraved landscape. [Fig. 50] Below and set within a plinth is an image of John Rowell (1689-1756), a plumber/glass painter working in Reading, who appears as if in homage, perhaps even indebted to Gyles as Master. There is no evidence, however, of any connection between the two men.⁸³⁶ The deliberate inclusion of a landscape in Gyles’ portrait identifies him as a connoisseur of the arts and reframes him in line with the new models of artistic sensibility emerging in the eighteenth century.⁸³⁷ It could also be argued, however, that if viewed through the lens of the English painter John Vanderbank’s (1694-1739) portrait of Gyles’ fellow virtuosi and friend Lambert, Gyles’ attribute indicates that he too was a maker, not just a user of prints. [Fig. 51]

⁸³² Henry Gyles’ trade card, registration number 1881,0611.299, British Museum, London.

⁸³³ Tim Clayton, “Heads on Paper”, in *Horace Walpole’s Strawberry Hill*, ed. Michael Snodin (New Haven & London: Yale University Press, 2009), 150-151.

⁸³⁴ Nigel Llewellyn, “The Anecdotes of Painting and Continental European Art History”, in *Horace Walpole’s Strawberry Hill*, ed. Michael Snodin, (New Haven & London: Yale University Press, 2009), 140.

⁸³⁵ Llewellyn, “The Anecdotes of Painting”, 143.

⁸³⁶ Sidney M. Gold, *John Rowell* (Reading: Ranelagh Press, 1965), 19.

⁸³⁷ Johnathan Richardson, *An Essay on the whole Art of Criticism as it relates to Painting* (London: W. Churchill, 1719), 149. ‘A man may be a Good Painter, and a Good Connoisseur...’

By the second half of the eighteenth century, Gyles' contribution to glass painting may have been forgotten. Walpole's retrospective in *Anecdotes* would have been read widely by the cultural elite and brought Gyles back into view, cementing his posthumous reputation. He failed, however, to recognise how Gyles' engagement with courtly modes of painting changed the direction of glass painting from a craft activity restricted to armorials to that of a medium suitable for connoisseur collection. Meanwhile, Walpole's installation of stained glass at Strawberry Hill and his writing of *Anecdotes* played their own part in engendering a national connoisseur marketplace for stained glass, as the medium was then termed.

3.0 LEGACY

Much of the information in this thesis has been pieced together from fragmentary evidence. In subject, scope, and approach, it has built on Trevor Brighton's pioneering, but now forty-year-old, study of *The Enamel Glass Painters of York*. This thesis has sought to reassess Gyles' career and status, to reimagine what it meant to be a 'glass painter', and to examine his pivotal role within the York virtuosi and his engagement with his native city's rich post-Restoration culture. He was fortunate to be born into a period of English social history when the attributes necessary for genteel status were in flux, allowing practitioners like him from the middling classes to move from mechanic to artist status.⁸³⁸ Gyles is therefore emblematic of Enlightenment aspirations in post-Restoration Britain, as he engaged in philosophical inquiry and participated in the emerging capitalist free market, which the English social order widely adopted and integrated into the English constitution in 1688.⁸³⁹

⁸³⁸ Penelope J. Corfield, "The rivals: landed and other gentlemen'," N. B. Harte & Roland Quinault (eds.), *Land and Society in Britain, 1700–1914* (Manchester, 1996): 2. John Brydall, *Ius Imaginis apud Anglos: The Law of England relating to the Nobility and Gentry* (London: John Billinger and Geo. Dawes, 1675), 57-58.

⁸³⁹ Roy Porter, "The Enlightenment in England," Roy Porter & Mikuláš Teich Ed., in *The Enlightenment in National Context* (Cambridge: Cambridge University Press, 1981), 7-8 and 12-14.

In exploring Gyles' patronage networks as well as the intellectual circles and debates that both informed and sustained his practice, this thesis has argued that Gyles had a far more significant role in the wealth of cultural and philosophical activities undertaken by the so-called 'York virtuosi' than previously assumed, activities which were critical to his own professional and Enlightenment pursuits. Gyles and his father Edmund's connection with John Wilkins suggests that both would have quickly recognised the value of strengthening ties to the Restoration's culture of curiosity. While Edmund's interest was perhaps limited to the opportunities for patronage, Henry made a far more substantial artistic and intellectual investment in that world. His involvement in local philosophical activities seemed to be as a steward or 'Curator of Experiments' (in the mould of Robert Hooke) for the York virtuosi, organising and facilitating activities and events. Meanwhile, Gyles was not a mere assistant or passive observer but an active 'experimental inquer' in his own right, notably in printmaking, glass chemistry, and optics. Gyles' Micklegate home and workshop were the main hub of cultural and philosophical endeavours in York and the wider region, a place for nurturing knowledge of art and the new sciences. He hosted meetings and participated in, or even organised, magic lantern displays and phosphorus demonstrations, replicating activities undertaken at the Royal Society in London. With materials and facilities readily to hand, his workshop would have been the ideal venue for collaborative experiments, and it was here that he most likely worked with Lister, making specula for microscopes, and with Place and Lambert, making prints. His association with figures at the forefront of experimental culture and philosophical debates played a crucial role in his own achievements and clearly informed his own investigations. Their membership of the Royal Society alerted him to texts like Merrett's translation of *The Art of Glass*, as well as Hooke's research in glassmaking and printing, Boyle's work with phosphorus, and Prince Rupert's experiments in printing on marble. Gyles' contacts within the York virtuosi enabled him to pursue private patronage and so break free of the guild system. The virtuosi introduced him to a new client base among the local Yorkshire gentry which encouraged his extensive entrepreneurial activities, including making japanned frames for glass prints, sconces, chimneypieces, and pier mirrors. While no material trace of these activities survives, his correspondence offers tantalising glimpses of what Gyles achieved. In multiple ways, this thesis has sought to recover an almost lost world of flickering illuminated surfaces, one that has left only the most fragmentary traces in the form of a passing reference in a letter or a handwritten recipe, which require an imaginative effort on our part to envisage.

As an artist, Gyles' ownership of *Miniatura* relocates him amongst the new breed of native-born artists who emerged following 'the encouragement of the arts' by the English Court after 1660.⁸⁴⁰ Informed and instructed by this, he repurposed a medium conventionally associated with the decoration of ecclesiastical buildings for use in secular settings. While this was a pragmatic response to the changed market conditions of the late seventeenth century, it also reflected Gyles' ambition to style himself as a learned, liberal figure. His use of humanist subjects and allegorical landscapes in large glass miniatures redefined glass painting as an art form suited to a new audience of domestic connoisseurs. His sundial for Fairfax, for example, created a new arrangement of glass painting, informed by literature and science, combining humanist subjects with gnomonic and state-of-nature painting. This reinvention of the medium and his level of cultural ambition effectively separated Gyles from his contemporaries, whose businesses relied largely on producing painted armorials. Gyles' self-redefinition paved the way for later York glass painters, such as Peckitt, to break free of the guild system and present themselves as artists. Although his works were sought after in elite circles beyond York, it is doubtful that Gyles fully realised the artistic status he aspired to.⁸⁴¹ His elevated claims for his art may have been acknowledged by his immediate circle, but that does not mean he was ever part of what Buckeridge termed the 'English School', which contributed to the flowering of the visual arts in the decades after the Restoration.⁸⁴² The truth was that patrons continued to demonstrate a certain preference, informed by an embedded culture of either perceived superiority or political safety, for Dutch and Flemish emigre artists well into the eighteenth century.⁸⁴³ In bringing glass painting closer to fine art, however, Gyles helped foster the cultural climate in which connoisseurs like Walpole eventually came to value glass paintings as part of their broader art collection.⁸⁴⁴

⁸⁴⁰ Hake, "Some Contemporary Records": 39-40.

Hook, *The Baroque Age in England*, 53.

⁸⁴¹ Matthew C. Hunter, "Hook's Figuration: A Figural Drawing Attributed to Robert Hooke", *Notes Rec. Roy. Soc. Lond* 64, (2010): 258. doi:10.1098/rsnr.2009.0060 Published online 24 March 2010. Dr. Hans Sloane (1660-1753), President of the Royal Society, collected and displayed Gyles' work alongside Wenceslaus Hollar, William Kent, and Robert Hooke, which illustrates that he was regarded as an artist of status and worthy of collection.

⁸⁴² Bainbrigg Buckeridge, "Essay towards an English School", in *The Art of Painting and the Lives of the Painter's*, ed. Roger De Piles (London: F. Nutt, 1706): 441.

⁸⁴³ Haynes, *Pictures and Popery*", 5.

⁸⁴⁴ Joseph Hunter, *The Diary of Ralph Thoresby, F.R.S, Author of the Topography of Leeds, (1677-1724)*, 1, (London: Henry Colburn and Richard Bentley, 1830): 366. Thoresby claimed that Gyles was 'the famousst painter of glass perhaps in the world...'

Gyles' brief foray into printmaking shows that the York virtuosi's interests and experiments shaped his practice, and that provincial printing culture was more varied and vibrant than previously assumed. The relatively limited market for the kinds of items he produced obliged Gyles to diversify. He created new genres, blurring the boundaries between glass painting and printing, as evidenced by his use of a mezzotint trade card to promote himself as a glass painter. Not only was he amongst the first in England to work with mezzotints, but he was also, seemingly, among the first in Europe to write on the subject. He was certainly one of the first artists to replicate and enhance fine-art painting as a translucent glass print. Gyles' work, therefore, prefigures later claims by the publisher Edward Orme (1775-1845) who, in competition with another publisher, Rudolph Ackermann (1764-1834), asserted that he had discovered the secret of the glass print by accident. Apparently, he had spilt oil over a print depicting the death of Thomas Chatterton; what could be more apt than the shocking death of a romantic poet to illustrate the theatrical effect of the transparent print?⁸⁴⁵ By this point, glass prints were known as 'transparencies', and Orme explains:

The method of taking off prints upon glass not being generally known, I shall beg leave to introduce it here, in hopes that some of my readers may try the experiment of painting them as transparencies [...] with the effect of the ancient stained glass...

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He then describes the same process Gyles used to create glass prints some one hundred and thirty years earlier.

What Gyles called 'China Glass' was possibly a window-mounted glass print, a simple repositioning of his wall-mounted glass print, but with a light-holding substrate. In backlighting humanist subjects, be it in glass painting or window-mounted glass prints, Gyles created heightened tonal effects which prefigured the achievements of glass painters working in the late eighteenth century, like Thomas Jervais (b. Dublin, d.1799). This form

⁸⁴⁵ Edward Orme, *An Essay on Transparent Prints and on Transparencies in General*, (London: J. G Barnard, 1807), 2. The Death of Chatterton (1792), after Henry Singleton, printed by Edward Orme, The British Museum number 1953,0411.84

⁸⁴⁶ Edward Orme, *An Essay on Transparent Prints and on Transparencies in General*, (London: J. G Barnard, 1807), 43.

of image creation uniquely relied on a ‘peculiarity of light not to be equalled in any other species of painting’ to achieve a heightened sense of naturalism.⁸⁴⁷ Illumination, therefore, elevated the glass print above all other forms of picture-making.

This re-evaluation reframes Gyles not just as an innovative post-Restoration glass painter, refashioning glass painting for a new connoisseur audience, but also as a significant printmaker, entrepreneur, and virtuoso facilitator/contributor, a truly ingenious Enlightenment figure.

⁸⁴⁷ John Imison, *Elements of Science and Art*, 2 (London; F.C and J Bivington, 1822), 409.

ABBREVIATIONS

BHO - British History Online

BIA - Borthwick Institute Archive, York

BL - British Library, London

Bodl - Bodleian Library, Oxford

BJHS - The British Journal for the History of Science

CMoG - Corning Museum of Glass

CVMA - Corpus Vitrearum Medii Aevi

JHI - Journal of the History of Ideas

JBSMGP - Journal of the British Society of Master Glass Painters

JSG – The Journal of Stained Glass

HLQ - Huntington Library Quarterly

N. & Q - Notes and Queries

ODNB – Oxford Dictionary of National Biography

“Philos. Trans. R. Soc.” - Philosophical Transactions, Royal Society, London

“Print Q.” - Print Quarterly

TRHS - Transactions of the Royal Historical Society, London

UL - University Library Cambridge

V&A - Victoria and Albert Museum

“Vol.” – The Volume of the Walpole Society

YAS - Yorkshire Archaeological Society

“YCA” - York City Archives

YCBA - Yale Centre for British Art

YML - York Minster Library

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