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Paint, Painters, and the Dramatic Records
Jon Terry Wade

In the tenth year of the reign of Henry VI (1431), under Mayor Thomas Snaudon, Robert

Michell received the freedom of the City of York. As terse as the entry in the register is, it says a

number of things about "Robertus Michell, payntour."[1] First, Michell must have had financial

resources. Dues were substantial, and the costs of setting up a workshop often prohibitive.[2] It is

unlikely too that his father was either a painter by trade, or a freeman of the City, for otherwise

Robert Michell's liberty would have been granted *per patres*—that is, through or by means of his

father, by which sons of York freemen were admitted to the freedom of the city at a reduced

rate.[3] Nevertheless, for Robert Michell the freedom must have appeared advantageous with view

to employment in the city. To be sure, he may have supplemented his income with various

religious commissions, which would not have required freeman status, but twenty years later his

commercial work in the city is documented. The prestigious Mercers' company's Corpus Christi

Doomsday wagon wanted repainting, and Michell was commissioned to paint it. The entry from

the York Mercers' account rolls (1451–52) reads: "Item to Robert Michell for payntyng of þe

said pagient newe . . . xxiij s iiij d."[4] For painting the wagon "newe" Michell was paid a sizable

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[1] Francis Collins, ed., *The Register of the Freemen of the City of York*, 2 vols., Surtees Society 96, 102 (Durham: Andrews, 1896–1900), 1:145.

[2] See, for example, Lorne Campbell, "The Early Netherlandish Painters and Their Workshops," in Dominique Hollanders-Favart and Roger van Schoute, eds., *Le Dessin sous-jacent dans la peinture: le problème Maitre de Flémalle-van der Weyden* (Louvain-la-Neuve: College Erasme, 1981), 48.

[3] *Per patres* entries list both the names and the occupations of both father and son. Not all sons granted their freedom followed their fathers' line of work. Some had apprenticed in different vocations, and hence this was not regarded as a prerequisite for admission.

[4] Alexandra F. Johnston and Margaret Rogerson, eds., *Records of Early English Drama: York*, 2 vols.

sum, but we are not sure what this amount involved. It may have included the cost of the paint.

Painters were usually expected to provide their own materials, except in some cases where gold

leaf was required and was included in the total cost.[5]

From the Mercers' 1433 indenture we know that the Judgment wagon had red "damaske"

hangings at the back and the sides of the wagon to enclose the playing area, with gilded stars, red

and blue clouds, and strings of gold-leafed angels on pulleys to grace the wagon's "firmament."[6]

If Michell followed tradition, he may have used gold leaf and vermilion, both expensive items, to

paint the wagon "newe." As an experienced painter, he may have employed assistants, and he

may have had the help of apprentices. The sum he received for the job would have included the

costs of their labor, since paying a master craftsman for the wages of his assistants operated

fairly consistently throughout England at this time.[7] Speculation aside, this paper attempts to

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(Toronto: University of Toronto Press, 1979), 1:82 (hereafter *REED: York*). In quoting from records, abbreviations are silently expanded in my text.

[5] A. Caiger-Smith, *English Medieval Mural Paintings* (Oxford: Clarendon Press, 1963), 125, herein also citing one of the few documented records setting out a painter's purchase of materials. In 1504, Henry Marshall was paid 12*s* 6*d* for "diuers Stuff for payntyng of ye pagiant" (*REED: York*, 1:200). This sounds like pigment, but it may be other supplies. In the Dyers' Accounts, Coventry 1496, there is a similar entry that might suggest that the painters supplied their own pigments, and added that cost to their fee: "It[em] payd to John Herll for the bryngyn of they deyers Arms, of London, that byn peyntyd in the same stremers, viii. d"; "It[em] payd to Harre peynter for hys costs, of peyntyng, xxx. s" (R. W. Ingram, ed., *Records of Early English Drama: Coventry* (Toronto: University of Toronto Press, 1981), 86. The Canterbury City Chamberlains' Accounts (1521–22) appear to go against convention, for they list pigments, prices, and painters' names in some detail; see James M. Gibson, ed., *Records of Early English Drama: Kent, Diocese of Canterbury*, 3 vols. (London: British Library, 2002), 1:126–27, and below.

[6] *REED: York*, 1:55–56; Alexandra F. Johnston and Margaret Dorrell, "The York Mercers and their Pageant of Doomsday, 1433–1526," *Leeds Studies in English*, n.s. 6 (1972): 15. For a detailed description of the 1433 York pageant wagon, see Clifford Davidson, *Technology, Guilds, and Early English Drama*, Early Drama, Art, and Music Monograph Series 23 (Kalamazoo: Medieval Institute Publications,1997), 29–31.

[7] Donald Woodward, "Wage Rates and Living Standards in Pre-Industrial England," *Past and Present* 91 (1981): 32.

describe what kinds of work painters were hired to do, how they might have performed it, and what types of pigment they may have used.

It is commonplace to think of the medieval guild as a precursor to the modern union, where every master craftsman wishing to work would take out the freedom of the city,[8] not only to have the right to buy and sell retail, but to trade free of the city's tolls.[9] As a freeman, he was admitted into a guild, at which time he agreed to abide by its charter and the regulations that governed that guild. Charters were enacted to ensure the quality of workmanship, to prevent an oversupply of labor by restricting non-citizens from practicing their trade within the city walls, and to ensure the guild's participation in civic ceremonies. Painters' guilds, or amalgamated guilds that formally included painters, functioned in a number of larger provincial centers.[10] The city of York, for instance, encouraged the proliferation of smaller and smaller guilds. Norwich allied smaller craft guilds to larger ones to make the system easier to manage.[11] Likewise, a painter's company had been established in Chester since 1430, but when a charter was enacted in 1536, the painters were joined with the glaziers, embroiderers, and stationers.[12]

In London, the Painters and the Stainers' guilds were historically separate, but merged in

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[8] Heather Swanson, *Building Craftsmen in Late Medieval York* (York: University of York, 1983), 5.

[9] Heather Swanson, "Artisans in the Urban Economy: The Documentary Evidence from York," in Penelope J. Cornfield and Derek Keene, eds., *Work in Towns, 850–1850* (Leicester: Leicester University Press, 1990), 45.

[10] Robert Tittler, *Portraits, Painters, and Publics in Provincial England, 1540–1640* (Oxford: Oxford University Press, 2012), 60.

[11] Swanson, "Artisans in the Urban Economy," 47.

[12] Tittler, *Portraits, Painters, and Publics*, 60.

1502 when distinctions between the trades had become ambiguous.[13] Even within this

association and armed with a new degree of authority and recognition, the Painters-Stainers

complained about their inability to control the number of foreign painters in the City of London

and the quality of the work done.[14] In 1575 they successfully petitioned the Queen and in 1581

were granted a royal charter which forbade anyone "English or stranger, denizen or not, freeman

or foreign" to do any work connected with painting in any form unless they were known to be

skillful and approved.[15] The charter also provided that dues had to be paid by all those who lived

within a four-mile radius of the City. Limitations were placed on the number of apprentices a

master painter could take on, and stipulations demanded that those same apprentices be presented

to their guild's Master and Wardens within a given amount of time under pain of a fine.[16]

Regulations, however, could be evaded.

   In Norwich, between 1450 and 1530, there was a pronounced shortage of painters

registered as freemen,[17] but there was no lack of artistic activity during this period. In fact,

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[13] Lucy Wrapson, "East Anglian Rood Screens: The Practicalities of Production," in Paul Binski and Elizabeth Anne New, eds., *Patrons and Professionals in the Middle Ages*, Proceedings of the 2010 Harlaxton Symposium (Donington: Shaun Tyas, 2010), 390. Practically speaking, a painter painted on wood, panels, sculpture, while stainers painted cloth, with the same or similar pigments.

[14] Jo Kirby, "The Painter's Trade in the Seventeenth Century: Theory and Practice," *National Gallery Technical Bulletin* 20 (1999): 8 <http://www.nationalgallery.org.ul/technical-bulletin/kirby1999>.

[15] Ibid., 8. London is a good example since many provincial guilds modeled their respective charters on the charters of the metropolis's guilds. See Brigitte Corley, "Historical Links and Artistic Reflections: England and Northern Germany in the Late Middle Ages," in John Mitchell and Matthew Moran, eds., *England and the Continent in the Middle Ages: Studies in Memory of Andrew Martindale*, Proceedings of the 1996 Harlaxton Conference (Stamford: Shaun Tyas, 2000), 202.

[16] Kirby, "The Painter's Trade in the Seventeenth Century," 8.

[17] Wrapson, "East Anglian Rood Screens," 391.

outside the metropolitan center of Norwich, there was a construction boom in the parishes of East Anglia. Such was the vogue for new building, and the economic prosperity that must have funded it, that not a single pre-fifteenth century roodscreen survives in the region.[18] Lucy Wrapson argues that, since the wealth of development happened outside Norwich, it follows that those workers who were likely to work on those projects outside the city limits would not have been required to enroll as freemen and, as a result, were simply not recorded.[19] John Mitchell marshals evidence to suggest that tradesmen, organized as a workshop, must have traveled outside the city for commissions, taking model books, sketches of stock patterns, and a basic repertoire of ornamental schemes.[20] This may account for the fact that some screens in East Anglia share a certain affinity of imagery and style of decoration. Motifs on the cloth depicted on the saints' cloaks are identical in some cases, the fabric designs themselves copied from imported late fourteenth- and early fifteenth-century Italian silks. There is little documentation of the screens and the craftsmen who produced them, however: dating relies on bequests made towards their construction and embellishment in the wills of the period.[21]

Artisans seldom restricted themselves to one branch of manufacture—a diversity that disappears in official records. In the York Register of Freemen (1301–50), for example, only 25% of entrants were listed without a trade ascription. In the years 1431–1500 that percentage

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[18] John Mitchell, "Painting in East Anglia around 1500," in Mitchell and Moran, eds., *England and the Continent in the Middle Ages*, 367.

[19] Wrapson, "East Anglian Rood Screens," 391.

[20] Mitchell, "Painting in East Anglia," 391.

[21] Ibid., 367, 369.

had fallen to 2%. This trend was encouraged by the Statute of Additions (1413), which decreed

that each person named in a writ was required to have his trade or occupation listed as well.[22]

Such precise categorization can be misleading. Town or city registers were administrative

documents, not economic ones. They included those persons with status in society and, as a

result, piece-workers, women, and those who worked outside the city's jurisdiction in the

liberties were largely left off lists. Often the register records only one trade or occupation. Craft

ascriptions varied often from location to location.[23] Out of context, therefore, written records

obscure the multiplicity of tasks done and the inherent fluidity of guilds and guild members.[24]

      Here is a case in point. In 1607, a defamation case in the Star Chamber arose involving

members of the Hammermen's Company at Wells—a diverse guild made up of carpenters,

joiners, coopers, masons, tilers, and blacksmiths. One, Walter Smythe, was asked to devise a

rude "holing game," which court records describe as a piece of carpentry. During the trial

witnesses identified its maker as a joiner and as a carpenter. On the stand, Smythe declared

himself a painter.[25] Pamela Tudor-Craig suggests that the craftsmen who carved smaller wooden

sculptures or crucifixes probably painted them as well.[26] This seems particularly evident in

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[22] Heather Swanson, *Medieval Artisans: An Urban Class in Late Medieval England* (Oxford: Basil Blackwell, 1989), 4, citing Collins, ed., *Register of the Freemen of the City of York.*

[23] Swanson, "Artisans in the Urban Economy," 44.

[24] Swanson, *Medieval Artisans*, 4.

[25] James Stokes, ed., *Records of Early English Drama: Somerset*, 2 vols. (Toronto: University of Toronto Press, 1996), 2:727.

[26] See Pamela Tudor-Craig, "Panel Painting," in Jonathan Alexander and Paul Binski, eds., *Age of Chivalry: Art in Plantagenet England, 1200–1400* (London: Royal Academy of Art, in association with Weidenfeld and Nicolson, 1987), 121.

image makers, as in the case of Edward Hilton, a Nottingham alabaster carver who was cited in legal records, where he is called an "*imagemaker*" in 1488. However, in 1483, negotiating on behalf of the city in a legal dispute, presumably the same person was identified as a "*peynter*." In 1503, acting as a guarantor for a man who was taking out the freedom of the city, he was again described as an "*imagemaker*."[27] This "overlap of trades," as Francis Cheetham attests, is hardly surprising in light of the close connection between carving alabaster panels and painting them.[28] Generally, the craftsman responsible for the carvings also painted them, together with the wooden frameworks and housings, although it is likely that in larger workshops there was some division of labor.[29]

Diversification was a necessity for most painters: there were very real threats to their livelihood otherwise.[30] In his study of Chester painters, Robert Tittler traces the plight of students who left their masters before completing their often rigorous years of apprenticeship, hence unqualified and itinerant, exerting pressure on young journeymen of the trade in the struggle for work. Foreign painters, exercising influence from the major capitals of Europe, along with the influx of commercial prints and engravings, increased competition for their jobs.[31]

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[27] W. H. Stevens et al., eds, *Records of the Borough of Nottingham*, 9 vols. (London: Quaritch, 1882–1956), 3:16, 2:193, 3:86; cited by Francis Cheetham, *English Medieval Alabasters, with a Catalogue of the Collection in the Victoria and Albert Museum* (Oxford: Phaidon and Christie's, 1984), 14.

[28] Cheetham, *English Medieval Alabasters*, 14. John Harvey observes that the accounts "show the cost of painting a statue was much greater than that of carving it; it was the materials, not the labour of painting, which were so expensive" (*Medieval Craftsmen* [London: Batsford, 1975], 164).

[29] Cheetham, *English Medieval Alabasters*, 27.

[30] Tittler, *Portraits, Painters, and Publics*, 78.

[31] Ibid., 69, 76.

It was a routine practice of Continental workshops to encourage senior apprentices and journeymen to travel, thus possibly alleviating a glut of accomplished artisans from competing for gainful commissions at home.[32] It may have been similar in England. Guilds waged constant battles not only with foreign painters, but with members of other guilds encroaching on their trade, for example, with the plasterers or the heralds, who carried out similar work.[33] Simply put, a painter could not afford to specialize.

In that climate, painters were expected to paint whatever was required, whether it was a detailed altarpiece or a wall. Churchwardens' accounts (1536–37) from St. Andrews, Ashburton, record 46*s* 4*d* paid "vnto the paynters ffor a rewarde payntyn of The northe Syde of the Church [20*s*] & payntyn of The playyn Clothys [10*s*] to them ffor other payntyn [10*s*] & ffor payntyng of ij ymagys of The Churche [6*s* 4*d*]."[34] What the side of the church involved is not clear, but it could have been exterior work or, more likely, an interior wallpainting of the type that adorned so many medieval churches; on the other hand, "playing clothes" surely were costumes for use in a play, as verified by another reference in accounts for 1534–35: "Et de xxiiij s iiij d paid to the

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[32] Campbell, "Early Netherlandish Painters and The Workshops," 48.

[33] Kirby, "The Painter's Trade in the Seventeenth Century," 8. Randle Holme I was a member of the Painters' company, and the first of a long line of heralds in Chester, all named Randle Holme. Not only did he produce genealogical records, but he figures prominently (and often) in the Chester records, preparing, repairing, and storing the guilds' standards for the Midsummer Watch. The Bowyers, Fletchers, Coopers, and Stringers' Accounts of 1617–18, for example, record payment "vnto mr hoolmes painter for keepinge and new tryminge of our staffe which beares our flagg   iii s" (Lawrence M. Clopper, David Mills, and Elizabeth Baldwin, eds., *Records of Early English Drama: Cheshire including Chester*, 2 vols. [Toronto: University of Toronto Press, 2007],1:425). According to Tittler, this is exactly what a herald painter would have been required to do as his trade (*Portraits, Painters, and Publics*, 85).

[34] John Wasson, ed., *Records of Early English Drama: Devon* (Toronto: University of Toronto Press, 1986), 24.

stenar for payntyng of the . . . playying clothes & gold skynnys. . . ."[35] Assumptions aside, the

lowly parish painters carried out a great variety of work, but Tudor-Craig reminds us that even

panel painters at the top of their vocation might be appointed a similar range of jobs. Gilbert

Prince, painter to Richard II, worked on elaborate altarpieces but was also expected to paint the

royal barge with a picture of a white hart, and make banners and standards of the king's arms and

those of Edward the Confessor, the king's patron saint.[36] Suffice to say, perhaps, that the

surviving records of the provincial guilds contain a good deal of what Swanson calls "wishful

thinking."[37] In practice, evidence from wills, court documents and account records reveal a

constantly changing society: individuals took whatever work came to hand to supplement their

income.

Only economics restricted the medieval palette: if it could be afforded, it could be used.

Some colors were used on vellum, on wood, on stone, on plaster walls as well as on processional

banners and the like, but the pigments available for all classes of painting, from formal

portraiture to ephemeral decorations, from miniatures to wall painting, were drawn from the

same range as those used internationally. Availability did not differ greatly from one center of

Europe to another. In fact, many pigments were readily accessible in England alone: verdigris,

lead white, and red lead were available where lead industries were well established in modern

Derbyshire. Green and blue verdier were byproducts of the process for refining silver. Requiring

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[35] Ibid., 23.

[36] Tudor-Craig, "Panel Painting," 131.

[37] Heather Swanson, "The Illusion of Economic Structure: Craft Guilds in Late Medieval English Towns," *Past and Present* 121 (1988): 45.

more specialized manufacturing, lead-tin yellow and smalt were at hand with the technology

associated with the manufacture of glass and ceramic glazes. From the Continent, orpiment,

malachite, azurite, ultramarine, as well as less permanent dyestuffs of indigo and red and yellow

lakes, were imported through Antwerp and the ports of the Hanseatic League. In the 1500s, for

example, Antwerp was famous for its vermilion; Venice, for its finely ground lead white, known

as "vennys cereuse"; and England was an exporter of red ochre.[38]

Robert Michell's fee to paint the Mercers' Doomsday pageant wagon "newe" was

considerable, but it may have been impractical for him to use a pigment as costly as vermilion.

Granted vermilion (mercuric sulphide) (14d per pound)[39] and cinnabar, vermilion in its mineral

form, would have been readily available and widely used during the later Middle Ages in both

the decorative schemes of parish churches and households,[40] but another choice, red ochre (at

1/3d per pound) was cheap, stable, and locally sourced. Due to mineral impurities, this pigment

ranges in color from a brown to a crimson. Slightly more expensive, and ubiquitous, red lead (2d

per pound) varies from brick red to bright orange in color and was often used on walls; the

Boar's Head Inn on King Street in Westminster had its interiors painted with 8s 4d worth of red

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[38] Jo Kirby, "Trade in Painters' Materials in Sixteenth-Century London," in *Trade in Artists' Materials: Markets and Commerce in Europe to 1700*, ed. Jo Kirby and Susie Nash (London: Archetype, 2010), 341–42.

[39] For the sake of comparison, I include (in parentheses) pigment prices per pound, taken from accounts for Westminster Palace in 1532, as listed in Louis F. Salzman, *Building in England, Down to 1540: A Documentary History* (Oxford: Oxford University Press, 1952), 168. Kirby, "Trade in Painters' Materials in Sixteenth-Century London," 347, presents a chart of prices from different projects and dates. See also Jo Kirby Atkinson, "Artists' Materials in Sixteenth-Century England: Import and Retail Trade," <www.npg.org.uk/research/programmes/making-art-in-tudor-britain/workshops/workshop-2-abstract-6>. To be sure, the prices of pigments were not always stable throughout the late Middle Ages, but amounts paid nevertheless give us a good sense of their relative value and hence are useful for comparison.

[40] Helen Howard, *Pigments of English Medieval Wall Painting* (London: Archetype, 2003), 101.

lead worked with oil and size, and spattered with gilt motifs provided by four dozen lead stencils and gold dust at 16*d* per stencil.[41] Red lead was commonly used as part of a mordant or "preparatory" layer beneath gold and silver leaf to enhance its warm tone. While vermilion was more costly than red lead, they were frequently used in conjunction with each other: panel paintings often used red lead underpinning with the more expensive and brighter-hued vermilion on top. Similarly in Canterbury, city accounts for 1529–30 record expenses of painter John Hay for restoring the pageant of St. Thomas Becket, with "Byce," "tyn foyle & golde foyle," one pound of "rede lede," ten "owences of vermyl*i*on," and "paynters oyle."[42] In a very practical way, red lead made expensive pigments go further, with equal visual impact. Again for economy, it was often used on the backs of screens, whereas vermilion had been used on the front.

Vermilion was "by no means the cheapest red pigment available," but "it was certainly less expensive than red lake." The Exeter Cathedral rolls in 1320–21 record costs of 4*s* 9*d* for three-quarters of a pound for red lake (cinople)—that is, perhaps approximately six and a half times the cost of vermilion.[43] And although scientific analysis tells us it was used on the

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[41] Lorne Campbell, Susan Foister, and Ashok Roy, eds., "The Methods and Materials of Northern European Painting, 1450–1550," in *Early Northern European Painting*, National Gallery Technical Bulletin 18 (London: National Gallery Publications, 1997), 38. Cut from lead sheeting, and inexpensive, stencils were widely used in varying patterns and sizes as a background pattern on panels, or screens, or domestically as instant wallpaper. Norfolk screens from Thompson and Edingthorpe are typical fourteenth-century examples, decorated with large stylized pomegranates and fleur-de-lis (Anna Hulbert, "Notes on Techniques of English Medieval Polychromy on Church Furnishings," in James Black, ed., *Recent Advances in the Conservation and Analysis of Artifacts* [London: Summer Schools Press, 1987], 277).

[42] Gibson, ed., *Records of Early English Drama: Kent, Diocese of Canterbury*, 1:137–38. The "paynters oyle" in the list of materials billed by painter John Hay probably was linseed oil.

[43] Audrey M. Erskine, ed., *The Accounts of the Fabric of Exeter Cathedral*, 2 vols. (Exeter: Devon and Cornwall Record Society, 1981–83), 1:134, as quoted by Howard, *Pigments of English Medieval Wall Painting*, 98–99.

figurative panels which make up the decorative scheme on the Westminster retable, its presence

is not apparent from the accounts.[44] (Like gold leaf, expensive pigments were often billed

separately.) Here, it was mixed with ultramarine to create the purple of St. John's cloak.[45] Prized

for its translucency, and often used as a glaze over red lead or vermilion to lend a greater depth

of color, red lake is derived from a substance called "kermes." The insect, native to the

Mediterranean and the Middle East, exudes a red dyestuff which is then ground into pigment.

Another related insect, Kerria Lacca Kerr, native to southeast Asia and India, secretes a resin-

like matter which was introduced into Spain and southern France as early as 1220 for dying

cloth. But terminology describing red lake can be confusing. In the medieval England it was

known as "vermilion" and "vermeil," the latter term also used in France; in Italy, it was referred

to as "grains," reflecting the shape of the small rice-like particles before they were ground. In the

same family of insect, Polish cochineal was known in the Middle Ages; in England it was often

referred to as "St. John's blood." In the accounts of St. Stephen's Chapel, Westminster Palace

(1351–54), red lake is the most expensive of the pigments listed, one pound of "cynople" (again

variously termed cynopre, cinopel, cynople, synople, and synapolake and not to be confused with

red earth, i.e., red iron oxide, called sinoper) was priced at 30*s*, whereas two pounds of vermilion

cost 3*s* 4*d*.[46]

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[44] Spike Bucklow, "Material, Wages, and Painting of the Westminster Retable," in Paul Binski and Ann Massing, eds., *The Westminster Retable: History, Technique, Conservation* (Cambridge: Hamilton Kerr Institute; London: Harvey Miller, 2009), 345.

[45] Marie Louise Sauerberg et al., "Materials and Techniques," in Binski and Massing, eds., *The Westminster Retable*, 243.

[46] Howard, *Pigments of English Medieval Wall Painting*, 112–13, 141. Vermilion was not as expensive as previously supposed. Exeter Cathedral records from 1320–21 list a purchase for four pounds of "vermilioun" for 2*s* 8*d*, which is approximately 8*d* per pound. By mid-century, at Ely Cathedral (Sacrist's Rolls for 1341–42), the pigment is 10*d* per pound (ibid., 98) In Canterbury, 1529–30, "10 ownces" of

In cost comparable to vermilion, verdigris (12*d* per pound) was a pigment manufactured from a crust that forms on elemental copper when exposed to acid solutions. There were drawbacks to its use, however. The pigment changed over time from a blue-green to its typical green color, and further had a tendency to react with the fatty acid compounds of oil glazes that were frequently used over it.[47] Another green mineral was malachite (copper ore). However, it was often more expensive that azurite, to which it is chemically related, and once ground into a pigment could be weak in tone.[48] Green earth was cheap, but had a limited color range from dull-sage green to bluer tones. During the thirteenth and early fourteenth centuries, it seems that there was a great vogue for green rooms; the Louvre and the papal palace at Avignon had them. Green must have been a favorite of Henry III as well, as Louis Salzman somewhat exasperatedly documents: "Perhaps some psychologist will explain the significance of Henry's devotion to this green and gold color scheme."[49] In 1233, his private chapel in Kennington was to be painted with histories or subject pictures "so that the field [background] shall be a green color spangled with gold stars." In 1252, two chapels and the king's chamber at Geddington were to be painted green, as were the royal chambers at Windsor ten years later.[50] These "greens" were likely derived from earth green, rather than verdigris, however. Helen Howard suggests that the softer

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"vermylion" cost 10*d* (Gibson, ed., *Records of Early English Drama: Kent, Diocese of Canterbury*, 1:137. The cost is certainly comparable to verdigris.

[47] Campbell et al., "The Methods and Materials of Northern European Painting," 39.

[48] David Bomford, *Italian Painting before 1400* (Exhibition Catalogue; London: National Gallery, 1989), 41.

[49] Salzman, *Building in England*, 159.

[50] Ibid., 160.

green earth tones were more suited to Romanesque tastes, rather than the somewhat brash blue-green of unmitigated verdigris, which instead appealed to the Gothic palette.[51]

Ceruse or lead white (lead carbonate) is manufactured in a similar fashion to verdigris, using lead rather than elemental copper. It was an opaque white, and its grind determined its value. Widely used, the Exeter Cathedral accounts price lead white at 3*d* per pound, about three times less expensive than verdigris or vermilion.[52] By virtue of its availability and low cost, it was often used as a ground for paint, or mixed with glue size for texture or raised sculptural effects. Calcium sulphate, or gypsum (in its mineral form, alabaster) could also be combined with animal glues to make a primer, gesso, used as a preparatory layer on wood, linen, or stone. In Canterbury, the City Chamberlains' accounts for 1521–22 reflect repairs undertaken by tradesmen in anticipation of the pageant of St. Thomas "marytr": "It*e*m paied for the burnyng of the playster of parys for the same Crosse viii d."[53] Heating the gypsum was a necessary stage in the creation of plaster of paris, an extremely versatile material. When the residue from the burnt gypsum was mixed with water, it could be sculpted, and would set up quickly. Here, the plaster of paris may have been necessary to prepare the surface of the cross for painting or the addition of decorative elements. Account entries for all white pigments can be misleading. Often purchased in such large amounts, it is difficult to determine whether a pigment was used for painting or building. Chalk, for example, might be used as a color, or may have been bound with

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[51] Howard, *Pigments of English Medieval Wall Painting*, 67.

[52] Erskine, ed., *Accounts of the Fabric of Exeter Cathedral*, 1:134, as cited in Howard, *Pigments of English Medieval Wall Painting*, 176.

[53] Gibson, ed., *Records of Early English Drama: Kent, Diocese of Canterbury*, 1:126.

size or skim milk and used to "whitewash" walls.[54]

Often pigments were combined with others to enhance a color or to improve its luminosity or colorfastness. In this way yellow ochre, an earth-based yellow, was not thought strong enough for panel painting, but added to yellow lakes such as the indigenous arzica (Reseda luteola, a pale yellow weld plant), it worked well. Orpiment (trisulfide of arsenic) was first documented in the accounts of Westminster Palace in 1265, when two pounds of "orpiment and ochre" were purchased by William Page.[55] An intense but pale yellow pigment, often it was charged with mica flecks (a byproduct of the mining process of arsenic), thus ideally suited to imitate gold.[56] It is frequently found on polychromed sculpture from the medieval period, but Howard finds no instance of its use on walls.[57] It was employed, however, on the façade of Exeter Cathedral specifically to pick out details such as crowns or hats "for reasons of economy" rather than gold leaf.[58] Another yellow listed in the 1532 Westminster accounts was masticote. More costly than orpiment, it is now recognized as lead-tin yellow. A bright opaque yellow, masticote was artificially produced by a compound of lead and tin, and its invention is credited

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[54] Erskine, ed., *Accounts of the Fabric of Exeter Cathedral*, 1:146–47, and Salzman, *Building in England*, 157, as cited in Howard, *Pigments of English Medieval Wall Painting*, 165, 171.

[55] Ibid., 153

[56] Ibid., 153. In the fourteenth century orpiment was similar in price to other synthetically-produced pigments such as lead white. Great Wardrobe accounts of 1350–52 list fifteen pounds of "orpyment" at 6*d* per pound, whereas lead white is 8*d* per pound. This was used for cloth banners for Edward III (ibid., 154).

[57] Ibid., 155.

[58] Eddie Sinclair, "The Polychromy of Exeter and Salisbury Cathedrals: A Preliminary Comparison," in Arie Wallert, Erma Hermens, and Marja Peek, eds., *Historical Techniques, Materials, and Studio Practice: Preprints of a Symposium, University of Leiden, The Netherlands, 26–29 June 1995* (Marina del Rey, CA: Getty Conservation Institute, 1995), 109.

to the glassmaking industry.[59] An early recipe from a Bolognese manuscript from the first half of

the fifteenth century describes how to color glass rosary beads yellow. In Italian sources it was

known as "giallorino." Richard Haycock, who published the Milanese painter Lomazzo's treatise

on color in English in 1598, translated "giallorino" as "massicot."[60]

As costly as gold, and "prohibitively expensive for most large-scale painting,"[61]

ultramarine (lapis lazuli) was clearly out of the price range for painting a wagon (£1 7*s* 8*d* per

pound). And again, terminology used for the blue pigment makes it difficult to decipher which

pigment was actually present. From chemical analysis, it is clear that ultramarine was used in St.

Stephen's Chapel, Westminster, but the building accounts list only "azure," implying the color

"blue" in general. Since commonly lapis lazuli was referred to as "azure," this causes confusion

with another blue pigment, cheaper and sourced throughout Europe, azurite (copper carbonate).

In the fourteenth century Germany was well known for its azurite (azorrum almaneum).[62] Its

color and price were linked to its intensity. In England, William Page is noted in 1265 to have

procured such a blue pigment, which is listed as "azure," but Spike Bucklow, examining the

accounts for   the palace at Westminster in 1292–97, notes that there are two types of blue listed,

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[59] See Bomford, *Italian Painting before 1400*, 31–43, for a detailed, concise explanation of medieval pigments, with anecdotes, and color plates. This work also has an extensive bibliography on all aspects included in the catalogue: patronage, contracts, workshops, panel construction, pigments and color, etc. Appendix IV, Table of Pigment Prices, is useful for comparison, but refers to Italian sources only (ibid., 201).

[60] Giovanni Paolo Lomazzo, *A Tract Concerning the Artes of Curious Paintinge* (Oxford, 1598), as cited in Ashok Roy, ed., *Artists' Pigments: A Handbook of Their History and Characteristics*, 4 vols. (New York and London: Oxford University Press, 1993), 2:83.

[61] Howard, *Pigments of English Medieval Wall Painting*, 48.

[62] Ibid., 41.

an "azure" and an "azure bys."[63] "Bys," "bis," "byce" (adj.) would signify "dark," thus "azure

bys" simply meant "dark blue"; however, from the fifteenth century and particularly in England,

"bice" became a noun meaning "blue" in general and, as a result, a wide variety of blue pigments

may have been signified by this term.[64] Here, in the Westminster accounts, the cheaper of the

two blues may have been azurite; the more expensive one, ultramarine. The Canterbury City

Chamberlains' Accounts (1521–22) list further reparations needed to stage the pageant of St.

Thomas Becket:

> Item paied for C of golde bought of Mais*ter* Rutland for gyldyng   vi s. viii d.
> Item paied to Anthony knyght for a nother C of gold for the
> same workes   vi s
>
>   . . .
>
> Item paied to M*r* Rutland for i li. of byce   vi s.
> Item paied to ffloraunce the Paynter by the grete for the workmanship
> therof he fyndyng all maner stuf for the payntyng of the Crosse/
> except gold & byce to the same & gyldyng of the starres   lviii s.
> viii d.[65]

The "Crosse," once prepared with a "skim" coat of plaster of paris, was gilded with gold leaf and

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[63] Bucklow, "Material, Wages, and Painting of the Westminster Retable," 345.

[64] Daniel V. Thompson, *The Materials and Techniques of Medieval Painting* (New York: Dover, 1956), 152, as cited in Howard, *Pigments of English Medieval Wall Painting*, 48.

[65] Gibson, ed., *Records of Early English Drama: Kent, Diocese of Canterbury*, 1:126–27. Floraunce the painter did not source the gold leaf and the "byce" himself: this may have been a carry-over from an Italian practice. Often in Italian panel painting gold and ultramarine were supplied by a patron, or were detailed in a separate bill and payment (Howard, *Pigments of English Medieval Wall Painting*, 27). William Rutland in 1521–22 was an alderman of the city of Canterbury, perhaps a grocer, a mercer, or apothecary by trade, and must have had an affiliation with the pageant. It seems that he also sold ten pounds of gunpowder to the pageant in 1506–07 (Gibson, *Records of Early English Drama, Kent, Diocese of Canterbury*, 3:1066).

painted by "Floraunce" the painter with one pound of "byce." At a cost of 6*s* per pound, it may

have been azurite.

A sharp rise in the price of ultramarine in the early thirteenth century throughout Europe,

and the difficulty in obtaining it, prompted new "alchemical" innovations to find new sources of

azure. One such solution employed synthetic copper blues (copper acetate). Another process

mixed charcoal black and a white (or laid the black over a white ground) to produce a cool blue-

gray color. This "false blue" was an ideal technique for covering large-scale areas for walls (or

pageant wagons) inexpensively. One could enhance its effect by using orange as a

complementary color against it: in other words, it made the blue appear more blue. It was an easy

alternative to azurite or more expensive blues, and commonly was used in the second half of the

thirteenth century for more modest decorative schemes in parish churches and the like.[66] Yet

again, by the middle of the 1600s a scarcity of azurite led to an increased use of other blues such

as indigo and smalt.[67] Once imported from southern Asia, indigo (indigofera tinctoria) was

primarily used for dying textiles, but it was also used as a pigment. Exeter Cathedral accounts

(1320–21) list one pound of "ynde baudas" (indigo of Baghdad) at 18*d*.[68]

In all likelihood, indigo's origins were not from Baghdad (the name was probably

intended to summon up somewhere "east of Europe," or else the trade route which made its last

port-of-call there). Perhaps more accurately labeled, York Minster accounts record a pigment

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[66] Howard, *Pigments of English Medieval Wall Painting*, 189, 50.

[67] Kirby, "The Painter's Trade in the Seventeenth Century," 35.

[68] Erskine, *Accounts of the Fabric of Exeter Cathedral*, 1:134, as cited by Howard, *Pigments of English Medieval Wall Painting*, 58.

called "blew ynde" in the fifteenth century: it was probably indigo.[69] Smalt (cobalt oxide) was

less expensive that azurite, but its production must have been lucrative: a patent was awarded for

twenty-one years to manufacture smalt in London in 1605. It did, however, generate some

controversy for its patent holders William Twynyho, Abraham Baker, and John Artogh. The

Dutch were also making smalt, and their pigment was "aggressively marketed."[70] Like indigo,

smalt becomes pale and grayish in tone when exposed to light. Similarly, it was often mixed with

white lead to remedy its loss of color.[71]

In the fifteenth and early sixteenth centuries, paint was used to imitate more expensive

decorative elements. Not only on frames of panel paintings but on the backs of those panels,

screens, and altarpieces, marbling was a popular method of breaking up an unmodulated surface.

A number of early Netherlandish and German panel paintings in the collection of the National

Gallery, London, retain traces of marbling on their obverse sides. One portrait (NG 1232)

(c.1530–40), for example, preserves a dark green and pale greenish-white pattern. The backs of

the wings of a triptych (NG 1085), which would be seen when the altarpiece was closed, is

marbled in black and vermilion.[72] Even the most costly of commissions relied on imitation stone

effects. On the reverse of the Westminster retable (c.1270–90?), for instance, yellow splatters

over a "false blue" ground created the appearance of Egyptian porphory and served both to

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[69] James Raine, ed., *The Fabric Rolls of York Minster*, Surtees Soc. 35 (Durham, 1859), 77, as cited by Howard, *Pigments of English Medieval Wall Painting*, 58.

[70] Kirby, "The Painter's Trade in the Seventeenth Century," 31.

[71] Roy, ed., *Artists' Pigments: A Handbook*, 2:116.

[72] Campbell, "The Methods and Materials of Northern European Painting," 20.

preserve the panel and to prevent its wood from warping. Technicians examining the back of the

retable discovered unexpectedly that the obverse must have been painted in an upright position,

for there are drips of yellow paint which indicate that orientation.[73] Architectural details too were

picked out in faux marble. In Norfolk, door sills and screens use gray and black and white to

reproduce fossil marble common to that part of East Anglia. In Devon, painted window sills

masquerade as red marble. The church in Nymet Rowland, Devon, had painted wooden columns

to look like granite.[74]

The medieval eye delighted in polychromy, the play of color against color and light

against dark. Even on the west façade of Salisbury Cathedral, thirteenth-century paint samples

reveal a complex polychromatic scheme, with architectural elements picked out in color, and

layer upon layer attest to its frequent repainting with red and yellow ochre. On the central porch

a typical, if more costly palette was made up of vermilion, verdigris, copper resinate green, lamp

black, red and white lead, indigo, yellow and red ochre, and gold leaf. The skill of the medieval

painter was to use his craft not merely to paint the carved form, but to embellish and further

enhance it. At the time, this must have entailed repainting obscured details by redefining

highlights and shadows to carved hair.[75] To paint an object one solid color, be it rood screen or

piece of household furniture, would have been an anathema.[76] Flat surfaces of chests, tables, and

chairs were broken up with carving and color decoration. Occasionally colors, even walls, were

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[73] Sauerberg et al., "Materials and Methods," in Binski and Massing, eds., *The Westminster Retable*, 246.

[74] Hulbert, "Notes on Techniques of English Medieval Polychrome," 278.

[75] Sinclair, "The Polychromy of Exeter and Salisbury Cathedrals," 108.

[76] Hulbert, "Notes on Techniques of English Medieval Polychromy," 277.

varnished to heighten their appeal. Even purely functional objects such as textile or book chests

preserve traces of pigment. Red and green appear to have been favorites, but inventory lists also

cite items in white, yellow, and black.[77] The 1463 will of John Baret of Bury records "a lityl

grene coffre for kerchys, stondyng in my stodye."[78] An inventory of goods from the Château des

Baux itemizes a "coffre rouge ferré a quoy a xx rommans."[79]

In the York Mercers' Account Rolls from 1461, there is an entry for 20*d* "for pantyng of

ye pagent."[80] Here there is no mention of Robert Michell, and whether he or his workshop was

involved in this modest refurbishment, we have no way of knowing. By 1501–02, however, it

was evident that the Mercers Guild was anxious to create an entirely new pageant wagon for

Corpus Christi. A carver by trade and a member of the Joiners' Guild, Thomas Drawswerd

negotiated his way into the "broderheid of the fraternite of the holy trinite in ffossegate" as a

partial payment for making the "pagiant of the dome . . . newe substancialie."[81] In addition as

payment, he received the Mercers' old pageant wagon and seven marcs. While the new wagon's

appearance is difficult to visualize from a later inventory in their account rolls for 1526,[82]

[77] Léopold Delisle, *Actes Normands de la Chambre des Comptes sous Philippe de Valois* (Rouen, 1871), 113, as cited by Penelope Eames, *Furniture in England, France, and the Netherlands* (London: Victoria and Albert Museum, 1977), 128.

[78] Samuel Timms, ed., *Wills and Inventories from the Registers of the Commissary of Bury St. Edmunds and the Archdeacon of Sudbury*, Camden Society 49 (London: J. B. Nichols and Sons, 1850), 33.

[79] A. de Barthélemy, "Inventaire du Château des Baux en 1426," *Révue des Sociétés Savantes*, 6th ser. (1877): 137, 139, as quoted by Eames, *Furniture in England*, 128.

[80] *REED: York, 1:92.*

[81] Ibid., 1:189.

[82] Ibid., 1:241–42 ; Johnston and Dorrell, "The York Mercers and Their Pageant of Doomsday," 20.

Drawswerd was an exceptional carver. The sole extant work attributed to him and his workshop

is an alabaster rood screen produced for "one of the grandest parish churches in England," St.

Mary Magdalene, in Newark, Nottinghamshire, in 1508.[83] The new Mercers' wagon, no less

impressive than its fifteenth-century predecessor in its heyday, must have had many features of

painted alabaster. As well as a talented artisan, Thomas Drawswerd must have been a successful

businessman: he became mayor of the city of York in 1515, and again in 1527. Drawswerd's

wagon was still impressive in 1541 when it was pressed into service for a royal entry.[84]

The plays at York must have been held in high regard by the citizens who produced them:

even after their suppression in 1569, some guilds continued to maintain their pageant wagon

houses for storage of the wagons and properties for many years.[85] The plays had been, in Jeremy

Goldberg's words, "a collective work of mercy," a community effort at once religious and at the

same time a mark of civic identity.[86] Stubbornly silent, however, account records reveal no

precise indication of what "diuers Stuff for payntyng of ye pagiant"[87] might have entailed. The

Oxford English Dictionary suggests that "Stuff" in this context means "materials or requisites for

a piece of work, especially building materials." This is apt. But a broader definition also suggests

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[83] Nikolaus Pevsner, *Nottinghamshire*, The Buildings of England (Harmondsworth: Penguin, 1951), 187.

[84] Johnston and Dorrell, "The York Mercers and Their Pageant of Doomsday," 20.

[85] See, e.g., the Bridgemasters' account rolls for 1591, quoted in *REED: York*, 1:446, but reference in fragmentary account rolls to pageant house rentals did not entirely cease until 1642; see ibid., 1:xxii.

[86] Jeremy Goldberg, "Craft Guilds, the Corpus Christi Play and Civic Governement," in *The Government of Medieval York: Essays in Commemoration of the 1396 Royal Charter*, ed. Sarah Rees Jones, Borthwick Studies in History, 3 (York: Borthwick Institute, University of York, 1997), 152.

[87] *REED: York*, 1:200.

materials necessary to the task.[88] For the uninitiated, the pigments the artisans used must have been arcane, even mysterious, and their ability to create a vibrancy and life to an object was often marvelous. Certainly color must have played a vital role in the production of drama in England. The initial color scheme of the Mercers' Judgment wagon of red and gold, with clouds of blue and red, must have been dazzling. In this effort, the present study has been unable to define what pigments specifically were used by Robert Michell in repainting the Mercers' wagon in 1451–52, but through the extant records of contracts, civic documents, and other documentation we are able to discover what "Stuff" was actually available for use in painting the "pagient newe."

Reprinted, with extensive revisions, from The Early Drama, Art, and Music *Review 23 (2001): 83-99. The author was a producer and board member for the University of Toronto-based Poculi Ludique Societas from 1989 to 1995. She has been active in organizing sessions at academic conferences and is preparing an edition of Thomas Garter's* The Virtuous and Godly Susanna.

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[88] *Oxford English Dictionary* (on-line edition) (Oxford University Press, 2013), s.v. 'stuff' (n[1], II.2a–b).