1 Albrecht Dürer and Nuremberg

Material Connections and Emotional Resonances

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In the years around 1500, the imperial city of Nuremberg was one of the most important political, economic, and cultural centres in Europe. It was also home to Albrecht Dürer (1471–1528), a leading artist of the Renaissance. Dürer was not a solitary figure, but part of a network of skilled craftspeople and artists, humanists, entrepreneurs, and civic and religious leaders across the city. Nuremberg's status was underpinned by its geographical location at the heart of western Europe, its burgeoning economy, strong patrician form of government, and special status in the Holy Roman Empire. The city had particularly capitalised on the so-called "print revolution" that had developed since the 1450s.[1] Printed artworks by Albrecht Dürer, alongside his paintings and drawings, were among the most important and technically sophisticated objects created in the city. Yet the interconnection of these prints and Dürer's other artworks with the wide range of highly skilled arts, crafts, material objects, and technical developments in the city remains little understood. This book explores how Dürer's art was entangled with the vibrant material and cultural world of Nuremberg (Figure 1.1).

Albrecht Dürer's artworks reveal his inventiveness and unparalleled technical skill. They are also rich with objects that come from Nuremberg's world of trade, manufacture, and design, and which reveal the large range of materials deployed to make these objects. From armour to weaponry, books to hourglasses, feathers to fabric, Dürer depicted the array of materials and objects that surrounded him with remarkable precision. Dürer has long been an artist known for his sensitive, highly detailed depictions of physical landscapes, plants, and animals. There has, however, been relatively little research on his depictions of the manufactured world and the built environment with their multispecies dimensions, which the artist confronted in his everyday experience. The chapters in this book examine this vibrant world of material encounters and reveal it as fundamental to Dürer's creative practice.

This edited collection aims to direct Dürer research in significant new ways that take seriously the role of materials, objects, spaces, and environments in the enacting of emotional engagement and creativity. We propose that a love of "things" and of the material world of ingenuity were vital to the creation of Dürer's art and its unparalleled appeal. Dürer, and those who appreciated his art, lived in an urban world in which skilfully produced objects and the surrounding material environment helped to stimulate minds, motivate behaviour, and define personal and civic identities. As the latest scholarship in the history of emotions and objects argues, "things" and our emotional relationships with them help us to negotiate the world.[2] Objects allowed the people of Nuremberg to express creativity, develop identities, and participate in social, political, and religious

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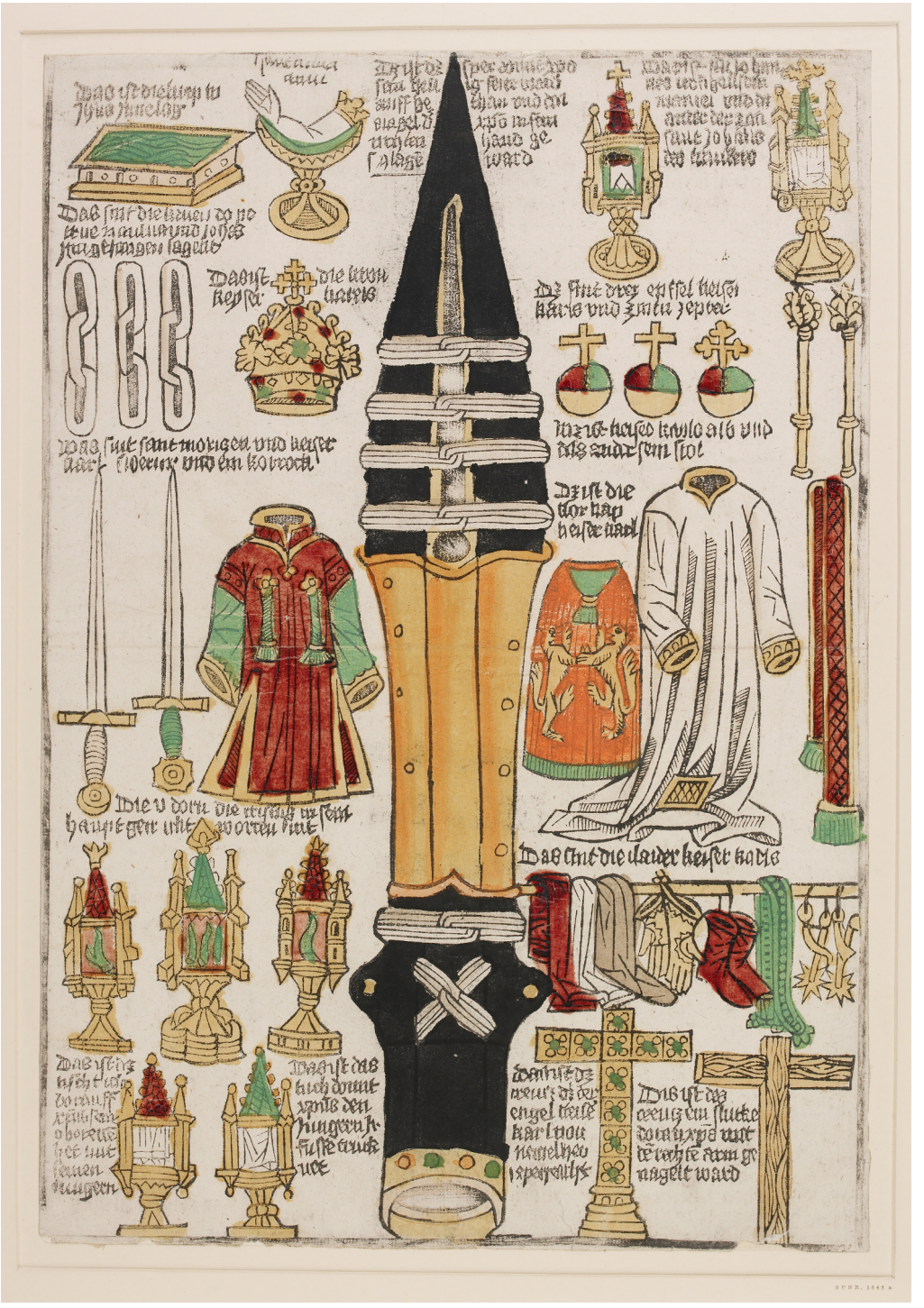


Figure 1.1 Unknown artist, *The Relics, Vestments, and Insignia of the Holy Roman Empire*, c. 1470–80, woodcut with hand-colouring, The British Museum, London, 1933,0102.1. Image © The Trustees of the British Museum.

rituals—and objects, in turn, took on their own independent lives as they passed through different hands and different settings across time and space. This book explores the feeling for "things" manifested by Dürer, his friends and colleagues, and the residents of Nuremberg. It unpacks the embodied and emotionally rich practices of making, owning, using, displaying, and encountering objects, artworks, plant, and animal species in civic, religious, artisanal, and household settings. Our contributors also examine Dürer's engagement with Nuremberg's surrounding countryside and the international locations to which the artist journeyed. Dürer's love of "things" and the existence of a vibrant world of material culture in Nuremberg are topics that have received attention in the past, as the essays in this collection clearly show. But the range and variety of such "things" have rarely been juxtaposed or examined in sustained depth. This book therefore aims to set a new agenda for scholarship on Dürer and his art, material culture, and the history of emotions—addressing an era when skilled entrepreneurial, technological, and manufacturing transformations emerged in parallel with new ideas about personal identity and creativity.

The intersection between material culture and emotions in the historical past has been significantly developed in recent years by focusing on the ways materials and objects carry emotional investments and attachments and are used to negotiate relationships among humans, institutions, and broader physical and supernatural worlds. Our analysis of Dürer's artworks and writings, alongside related objects and artworks by fellow artists and craftspeople, demonstrate how feelings for things and the values invested in particular materials, objects, and environments were used to engage viewers in quite different ways, such as strengthening civic identity or creating opportunities to acquire, develop, and reflect on new technologies. The material culture and emotions to be addressed encompass what we characterise as Dürer's lifeworld—the overlapping and interdependent set of material, ecological, and social relationships that constituted the artist's quotidian experiences of the places through which he moved during his lifetime.[3]

The material world was an arena of delight, pleasure, professional satisfaction, and occasionally some anxiety for Dürer. He made his living by translating into physical form the "inner ideas" that would "pour forth in his work".[4] While Dürer fretted at times about his status and finances, the voluminous records that he left behind tell us that he tallied up the objects that surrounded him with some satisfaction.[5] These included the "more than 100 Rhenish gulden worth of good artist's colours" in the list of household and professional items that he had "earned through the toil of his hands", recorded around 1506 after returning from Venice.[6] They also encompass the extraordinary catalogue of objects from Europe and the wider world seen, bought, worn, tasted, gifted, and traded, as described in the 1520/21 diary of his travels to the Netherlands.[7]

Travel, and especially Dürer's encounters with Italian painting, was undoubtedly crucial to his development as an artist and to the sense of his own place in the world; but so too was the fact that he spent most of his life in the city of Nuremberg. The city had developed in important ways in the generations before Dürer's mother, Barbara Holper, had married his father, an immigrant goldsmith from Hungary, in the summer of 1455. The couple had eighteen children, although only three survived to adulthood. Albrecht the Elder had settled in Nuremberg because it had well-established connections with the imperial court and—with no formal guild structure, and crafts instead overseen by the patrician council—it was open to skilled outsiders. While the city's primary natural resource was timber, it developed the infrastructure to become a leading producer of metalwork, including armour and scientific measuring instruments, and cloth. It also

became a base for merchants trading across Europe and into the near East, as well as scholars in religious institutions and private households.[8] The city was particularly favoured in the Holy Roman Empire, safeguarding and displaying the imperial relics and regalia annually from 1424 and privileged to hold the first Diet, or imperial meeting, after the election of a new emperor.[9] This was a richly material source of pride and identity for the city, as woodcuts vividly demonstrate (Figure 1.1). Metal and jewels sparkle, rich fabrics drape as though still worn by Charlemagne, and that sharp point of the lance thrust into Christ's side cuts through and dominates the image, evoking a range of emotions for Nuremberg's visitors and residents.

The creative networks of individuals in the city within and across professions and crafts fostered Dürer's career and shaped his sense of self. He labelled himself "Albertus Durerus Noricus" (Albrecht Dürer of Nuremberg) in the famous self-portrait of 1500, in which he caresses the fur lapel of his coat and confidently faces the viewer in a Christ-like pose (Figure 1.2). These networks included the city's leading artist, Michael Wolgemut, who trained Dürer after he convinced his parents to let him abandon goldsmithing for painting in 1486. They also included his godfather, Anton Koberger, a goldsmith who set up one of northern Europe's most successful printing houses. Dürer developed fruitful collaborations with humanists including Conrad Celtis and his closest friend Willibald Pirckheimer, and patronage networks that included Elector Friedrich the Wise of Saxony and, eventually, Holy Roman Emperor Maximilian I. He cemented his business with the help of his wife Agnes, daughter of a coppersmith and lutemaker, who was instrumental in maintaining highly successful sales outlets for the artist's prints.[10] A rich material world mediated by significant relationships underpinned Dürer's artistic achievements.

Dürer is inextricably linked with the city of Nuremberg, which has built a significant tourist industry around the artist as well as a hub for research. Nuremberg functions as a laboratory for new ways of presenting material culture *in situ*. These include the Dürer-Haus as well as the Kaiserburg, or imperial castle, and the Germanisches Nationalmuseum, which displays significant examples of Dürer's art alongside some of the objects and materials that were created in his lifetime by other skilled makers.[11] This volume emerges partly from a close engagement by contributors with the physical setting of Nuremberg and the places that were important to the artist (Figure 1.3). The city has been the subject of multiple studies and exhibitions examining its cultural and technological achievements.[12] The present volume emerges from the project "Albrecht Dürer's Material World", which has used exhibition projects in Manchester and Melbourne to argue that Dürer's works did not just depict material culture in great detail; they also helped to constitute it.[13]

Recent biographical studies of Dürer reflect ongoing attempts to set the artist's work within a discrete historical context.[14] These also reflect (and form part of) a shift towards examining Dürer in his wider historical context. Scholars from different fields have found Dürer an entry point to important early modern themes. One recent study embeds a narrative about Dürer's difficult relationship with one patron, and his subsequent shift away from altar painting, within an argument about mercantile identities. Crucial to this shift are changing conceptions of culture as a resource to be utilised and the emotional relationships between artists and their various networks.[15] Others have taken Dürer's fascination with the nude, and in particular with his own body, as a central topic that opens up the sensory world of late medieval and early modern Nuremberg. Scholars have also explored Dürer's connection to religious reform and have argued for the therapeutic value of Dürer's most famous print, *Melencolia I*.[16] Collectively, scholarship on Dürer has moved in the direction of setting the artist firmly within the larger culture which he inhabited and examining him from a cross-disciplinary perspective.[17]



Figure 1.2 Albrecht Dürer, *Self Portrait with Fur-Trimmed Robe*, 1500, painting on limewood, Bayerische Staatsgemäldesammlungen, Alte Pinakothek, Munich, 537. Image: bpk/ Bayerische Staatsgemäldesammlungen.



Figure 1.3 Michael Wolgemut and Wilhelm Pleydenwurff, Nuremberg, coloured woodcut, in Hartmann Schedel, Weltchronik [Nuremberg Chronicle] (Nuremberg: Anton Koberger, 1493), Germanisches Nationalmuseum, Nuremberg, Inc. 2° 266, fols.99v–100r.

This volume builds on such interdisciplinary scholarship to address artworks by Dürer in different media and across different contexts. It casts new light on the networks, spaces, relationships, material objects, creatures, and environments that made Dürer's art and the city of Nuremberg such crucial sites of creativity. It argues that these many different forms of material culture need also to be understood as intrinsically connected to the emotional dynamics of Dürer's world as he navigated the spheres of piety, masculine sociability, family life, and professional identity that constituted his daily life and were woven through his creative processes.

This book is a material microhistory of Albrecht Dürer and the lifeworld that enveloped him, primarily within the imperial city of Nuremberg but also during his journeys to Venice and the Netherlands. Our contributors reveal this dense web of material, ecological, and social relationships and argue that it shaped Dürer's embodied experience of the world, his social and professional relationships, and his creative practice. By grounding Dürer and his work within precise and proximate material contexts, our volume moves away from historiographical approaches that spotlight the artist's otherworldly virtuosity whilst also rooting the potentially nebulous concept of lifeworld within a defined historical and material context. Our authors acknowledge Dürer's supreme artistic skill and technical innovation but ground it within the environment of Nuremberg and the material creativity and ingenuity for which the city was renowned during the era of the "material Renaissance".[18] This term was originally coined to describe the impact of new consumer goods that flooded European markets in the sixteenth and seventeenth centuries but has since expanded to capture the lively processes of material observation, experimentation,

and valuation that unfolded across diverse sites, from domestic households and sovereign or princely courts to artisanal workshops.[19] In Albrecht Dürer's lifetime, Nuremberg was a celebrated hub of metalwork expertise, printing, pottery, textile manufacture, featherwork, and much more besides. The records of the city's most important charitable institutions, the Housebooks of the Mendel and Landau *Zwölfbrüderstiftungen* (Twelve Brethren Foundations), chronicle the remarkable range of artisanal expertise that could be found within Nuremberg.[20] In this volume, we argue that Dürer's art offers a powerful representation of the city's creativity during this pivotal period of material observation and transformation.

Our book takes a micro-historical approach to the material Renaissance by examining the diverse material encounters experienced and staged by a single individual across his lifetime. This scale of enquiry allows us to centre Albrecht Dürer and his lifeworld and to trace the rich assortment of materials, objects, and beings that he encountered, embraced, and represented within his lifetime. Our approach allows us to see Dürer's art from a new perspective and it also permits a more personal and inclusive vision of the material Renaissance by bringing into view the exceptionally wide range of sites, agents, and materials that influenced Dürer's creative practice. His art, in turn, reflected and shaped the multisensory material worlds of the people that commissioned, purchased, or beheld his artwork. Our authors consider the material vibrancy and significance of seemingly ordinary things like pillows within Nuremberg's households through to the exquisite clothing, foodstuffs, sculptures, and precious ornaments that Dürer wore, acquired, or encountered. The sights, sounds, and textures of the artist's home city also emerge strongly in this volume, which reflect Dürer's intense meditation upon them in his art, and our efforts to represent the situated material knowledge that his prints and paintings evoke. Early modern European bodies were, after all, judged to thrive in habituated settings to which their bodies had become accustomed over time.[21]

The iconography of important civic and ecclesiastical structures within the imperial city of Nuremberg looms large, but so do the fluttering wings and melodic songs of the blue roller birds that inhabited forests within Nuremberg's imperial territory. Such sensory perceptions formed part of Albrecht Dürer's daily experience of the city and its environs. These quotidian and often intimate experiences of Nuremberg's material environment offered inspiration for artistic innovation and new modes of expression. Our volume thus pushes beyond an anthropocentric model of material literacy to account for the impact of shifting ecological and multispecies relationships that characterised Dürer's lifeworld and emerged in dialogue with his art.[22] In so doing, we take seriously the principle of embodied codependence between human bodies and their material entanglements with non-human entities that are characteristic of new and neo-materialist histories.[23] Our authors allow us to see how Albrecht Dürer navigated and was inspired by Nuremberg's diverse and expanding material world.

Some of the key insights driving the arguments and analyses in this book relate to the way emotions have become central to historical analysis in recent decades. Emotions have helped to create links between humans, animals, and particular environments, social relationships and practices, sensory experiences, and individual and collective actions.[24] This has in turn resulted in new attention being given to materials and material objects as encoding and giving expression to human emotions, recognising these objects as "things" through which relationships are forged or broken, identity is fashioned, prestige and power consolidated, and new networks and communities formed.[25]

Emotions have always played a role in the making and reception of highly complex constructed artefacts such as art objects. But from the time of Giotto in the early fourteenth century, European artists developed conscious strategies to stimulate emotions in viewers so that they were moved to experience grief, desire, compassion, joy, or sorrow, for instance—and these strategies subsequently made their way into artistic theory.[26] Such affects (*affectus* in Latin, *affetti* in Italian) were not simply cognitive in nature; they were expressed through bodily gesture, facial expression, the flow of tears, the surface of skin, and frenzied movement, as well as through colour and depictions of nature.

Albrecht Dürer sits firmly within this tradition, and he was widely considered to be a master in making emotions visible. This is especially evident in his religious prints—events in the life of the Virgin Mary and the sufferings of Christ's Passion. Here Dürer drew on a tradition which is critical to much recent scholarship on the history of late medieval religious writing and practice. Sarah McNamer, for one, has demonstrated how late medieval affective meditations on the Passion, associated with works like Pseudo-Bonaventure's *Meditations on the Life of Christ*, effectively became "emotion scripts" for modelling compassion.[27] From the fifteenth century onwards, the visual modelling of compassion became fixed in the numerous representations of the suffering Virgin holding the dead body of her son in images of the *Pietà*, *The Descent from the Cross*, and *The Lamentation of Christ*.[28] As portable prints, these images could now be held, looked at, contemplated, conversed with, caressed, or kissed in all manner of spaces including the home, arousing emotion and intensifying fervour.

The anthropologist and historian Monique Scheer has recently helped deepen our understanding of religious devotion by reconceptualising emotions as mindful forms of practice.[29] Rather than something we simply have or experience, she has argued that emotions are something we do, intertwined with our bodily acts of speaking, gesturing, remembering, and manipulating objects. This is how we perform emotions, how we make them visible. Given that much of late medieval and Renaissance communal life and social structures more generally have been understood and defined through ritual practices, we need also to discern and understand the emotional performances which underpin those rituals. In Dürer's Nuremberg, the rituals performed within its streets, churches, workshops, studios, and homes, as well as those experienced and brought back from study trips, journeymen travels, business, diplomacy, or pilgrimage further afield, all expanded and modified the affective as well as the material, cultural, and intellectual lifeworld of the city.

The conscious aim of this book, to ground Dürer and his work in his historical and material environment, benefits from and reflects insights from recent emotions research on community and space. Barbara Rosenwein's work on emotional communities rests upon the notion of shared emotional norms (which emotions are prized, simply accepted, or rejected by a community), and how these norms change through generations by accretion, removal, or adaptation—a process others have explored as "emotions lost and found."[30] But in making the link between emotions and community, other historians have also demonstrated that "community" requires careful definition.[31] In different social and physical spaces, different arenas of political or cultural activity, in different media, and within multispecies conceptions of community, emotions will be differently expressed and understood. Comprehending Dürer's artistic skill and creativity requires consideration of such material and affective environments together with the artistic and intellectual traditions and networks and the social and economic conditions in which his work was conceived and created.

This book brings together a range of preeminent international art historians and historians, including leading museum professionals who oversee important Dürer collections. The volume addresses diverse material sources, physical environments within and beyond Nuremberg, and many different people who formed part of Dürer's community. Key topics examined in the volume include economic activity, artistic skill and monumental sculpture, as well as the sensory worlds of music and sound, the experiences of celestial and supercelestial vision, affective devotion and ritual, encounters with other species, the daily use of textiles, garments and other household objects, and the personally emotional and collaborative investments of art making.

Across fourteen chapters positioned loosely under three thematic headings, our authors collectively argue for the importance—and the rewards—of paying attention to material culture and emotions in Dürer's Nuremberg. Part I, "Nuremberg's Material Creativity", particularly focuses on materials, craft objects, and bird species that were closely linked to the city's manufacturing cultures, including silver cups and table fountains, pillows, textiles, feathers, and sounding objects, and their wider sensory and emotional resonances. Part II, "Engendering Communities", expands beyond Dürer to explicitly consider the range of artist and craft networks, friendship and family groups, and the wider European communities of merchants and patrons that constituted the social, cultural, and economic world with which Dürer and other contemporary artists had to engage—as well as marginals like Jews, whose othering was critical in shaping the cultural identity of Dürer's city. The third and final part, "Reshaping Visual Culture", examines Dürer's art in material terms, addressing the interplay of technique and skill in his handling of materials, his deeply personal recordings of supernatural scenes, the intertwining of knowledge and practice in his views of perception and proportion, the paired economic and emotional drivers of his business practices, and the long history of artistic engagement with Dürer's most iconic print: *Melencolia I*.

Each of these sections is attentive to the emotional resonances in the lives of the city's artists, their relationships, art making, and surrounding environments, as well as the material practices, production, and broader urban culture in which they practised their craft. Chapters map out the networks that Dürer inhabited, the people and places that mattered to him, and the many different types of material culture that shaped his world and his sense of identity for much of his professional career. The chapters in this volume also span the many environments that shaped the artist's daily experiences during his lifetime. Nuremberg and the surrounding German lands saw massive changes during Dürer's lifetime. These included the expulsion of the city's Jewish population in 1499, the apocalyptic year of 1500, the social and religious unrest related to the evangelical reform movement in the early 1520s, culminating in the Peasants' War of 1524/25 that impacted the city and Dürer in significant ways, and the formal adoption of Luther's Reformation by the city in 1525. The chapters in this book also engage with the historical nuances of this period, its importance for shaping modern forms of creativity, manufacturing and craft, and the opportunities it provides to explore the emotional as well social, religious, and political worlds of late medieval and early modern Germany. As the 500th anniversary of Dürer's death approaches in 2028, this book offers a pivotal reassessment of the significance of Dürer and his lifeworld.

Notes

1 Elizabeth L. Eisenstein, *The Printing Revolution in Early Modern Europe*, 3rd ed. (Cambridge: Cambridge University Press, 2012).
2 For especially important interventions, see Susanna Burghartz, Lucas Burkart, Christine Göttler, and Ulinka Rublack, eds., *Materialized Identities in Early Modern Culture, 1450–70: Objects, Affects, Effects* (Amsterdam: Amsterdam University Press, 2021); Stephanie Downes, Sally Holloway, and Sarah Randles, eds., *Feeling Things: Objects and Emotions Through History* (Oxford: Oxford University Press, 2015).
3 Our definition of "lifeworld" is influenced by Timothy Ingold, "Materials against Materiality," *Archaeological Dialogues* 14, no. 1 (2007): 1–16.
4 Jeffrey Ashcroft, *Albrecht Dürer: Documentary Biography*, 2 vols. (New Haven: Yale University Press, 2017), 1:368. This is from a passage on artistic creativity in his theoretical writings.
5 On Dürer's financial anxieties, see Chapter 14 in this volume.
6 Ashcroft, *Albrecht Dürer*, 1:191.
7 Ashcroft, *Albrecht Dürer*, 1:551–89. See also Chapter 10 in this volume.
8 See in particular the material on Nuremberg in Johannes Cochlaeus's *Brief Description of Germany*, translated in Ashcroft, *Albrecht Dürer*, 1:352–60.
9 See especially *Gothic and Renaissance Art in Nuremberg 1300–1550*, exh. cat., Metropolitan Museum of Art and Germanisches Nationalmuseum (New York; Munich: Metropolitan Museum of Art; Prestel-Verlag, 1986).
10 Sebastian Gulden, "An Ideal Neighbourhood: The Physical Environment of the Early Dürer as a Space of Experience," in Daniel Hess and Thomas Eser, eds., *The Early Dürer*, exh. cat. (Nuremberg: Germanisches Nationalmuseum, 2012), 29–38.
11 Dürer's paintings, for example, are displayed near key works that combine technological developments, shifts in ways of seeing the world, and skilled craftwork. These include the famous terrestrial globe or *Erdapfel* created by Martin Behaim in 1490. See https://www.gnm.de/your-museum-in-nuremberg/collections/behaim-globe, accessed 22 April 2025.
12 On Nuremberg, see especially *Gothic and Renaissance Art in Nuremberg 1300–1550*; Matthias Mende, ed., *Albrecht Dürer: ein Künstler in seiner Stadt* (Nuremberg: W. Tümmels, 2000); Hermann Maué, Thomas Eser, Sven Hauschke et al., *Quasi Centrum Europæ: Europa kauft in Nürnberg 1400–1800* (Nuremberg: Germanisches Nationalmuseum, 2002). For recent exhibitions, see especially Hess and Eser, *The Early Dürer*; Christof Metzger, ed., *Albrecht Dürer*, exh. cat., Vienna, Albertina (Munich: Prestel, 2019); Jochen Sander, ed., *Albrecht Dürer: His Art in Context*, exh. cat., Städel Museum Frankfurt (Munich: Prestel, 2013); Peter von den Brink, ed., *Dürer war hier: eine Reise wird Legende*, exh. cat. (Aachen: Michael Imhof Verlag, 2021); published in a shortened English version as Susan Foister and Peter van den Brink, eds., *Dürer's Journeys: Travels of a Renaissance Artist* (London: National Gallery, 2021); Edward H. Wouk and Jennifer Spinks, eds., *Albrecht Dürer's Material World*, exh. cat. (Manchester: Manchester University Press, 2023); Benno Baumbauer, Marie-Therese Feist, and Sven Jakstat, eds., *Nürnberg Global 1300–1600*, exh. cat. (Berlin: Deutscher Kunstverlag, 2025).
13 "Albrecht Dürer's Material World – in Melbourne, Manchester and Nuremberg," Australian Research Council Discovery Project DP210101623, 2021–2025, https://www.duerersmaterialworld.org. For the catalogue published to accompany the Manchester exhibition, *Albrecht Dürer's Material World*, Whitworth Gallery, 30 June 2023 to 10 March 2024, see Wouk and Spinks, *Albrecht Dürer's Material World*; and for the recreated virtual exhibition, https://www.whitworth.manchester.ac.uk/whats-on/digital/albrechtdurervirtualtour/. The 2024 Melbourne exhibition, *Albrecht Dürer's Material Renaissance*, held in the Arts West Gallery, University of Melbourne, 22 July to 29 November 2024, is also accessible as a virtual exhibition, https://discover.matterport.com/space/Fp8Bg7rsJAm
14 The new University of Heidelberg-hosted website forms a key aggregator site for Dürer scholarship and project news, https://sempub.ub.uni-heidelberg.de/duerer.online/
15 Ulinka Rublack, *Dürer's Lost Masterpiece: Art and Society at the Dawn of a Global World* (Oxford: Oxford University Press, 2023).

16 Christine Demele, *Dürers Nacktheit: das Weimarer Selbstbildnis* (Münster: Rhema, 2012); Thomas Schauerte, *Dürer als Zeitzeuge der Reformation: neuer Geist und neuer Glaube* (Nuremberg: Museen der Stadt Nürnberg, 2017); Mitchell Merback, *Perfection's Therapy: An Essay on Albrecht Dürer's Melencolia I* (New York: Zone Books, 2017).
17 See Gulden, "An Ideal Neighbourhood"; Behaim, *Erdapfel* (terrestrial globe); also Dagmar Eichberger and Charles Zika, eds., *Dürer and His Culture* (Cambridge: Cambridge University Press, 1998).
18 Alexander Marr, "Ingenuity in Nuremberg: Dürer and Stabius's Instrument Prints," *Art Bulletin* 100, no. 3 (2018): 48–79.
19 Michelle O'Malley and Evelyn Welch, eds., *The Material Renaissance* (Manchester: Manchester University Press, 2007); Evelyn Welch, *Shopping in the Renaissance: Consumer Cultures in Italy, 1400–1600* (New Haven; London: Yale University Press, 2005); Ulinka Rublack, "Matter in the Material Renaissance," *Past & Present* 219 (2013): 41–85; Pamela H. Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago: Chicago University Press, 2004); Pamela H. Smith, *From Lived Experience to the Written Word: Reconstructing Practical Knowledge in the Early Modern World* (Chicago: Chicago University Press, 2022); Burghartz et al., *Materialized Identities*; Stefan Hanß, "Gendering the Material Renaissance: Women, Industriousness and the Female Body at the Court of Württemberg," *German History* 41, no. 3 (2023): 367–99.
20 Christine Sauer and Elisabeth Sträter, eds., *Die Nürnberger Hausbücher: die schönsten Handwerkerbilder aus dem Mittelalter* (Darmstadt: Primus, 2012). The more than 1,300 depictions of manufacturing and products are now accessible online in the Nuremberg City Library Collections at https://online-service.nuernberg.de/viewer/hausbuecher/
21 Andrew Wear, "Place, Health, and Disease: The Airs, Waters, Places Tradition in Early Modern England and North America," *The Journal of Medieval and Early Modern Studies* 38, no. 3 (2009): 443–65.
22 Christy Anderson, Anne Dunlop, and Pamela H. Smith, eds., *The Matter of Art: Materials, Practices, Cultural Logics, c. 1250–1750* (Manchester: Manchester University Press, 2015).
23 Timothy J. LeCain, *The Matter of History: How Things Create the Past* (Cambridge: Cambridge University Press, 2017).
24 Some key introductory works: Rob Boddice, *The History of Emotions*, 2nd ed. (Manchester: Manchester University Press, 2023); Jan Plamper, *The History of Emotions* (Oxford: Oxford University Press, 2015); Susan Matt and Peter Stearns, eds., *Doing Emotions History* (Urbana: University of Illinois Press, 2014); William Reddy, *The Navigation of Feeling: A Framework for the History of Emotions* (New York: Cambridge University Press, 2001).
25 Downes et al., *Feeling Things*; Stephanie Trigg and Anna Welch, eds., *Objects, Material Culture and the History of Emotions in Medieval and Early Modern Europe*, Special Issue of *Emotions: History, Culture, Society* 7, no. 1 (2023).
26 Patricia Simons and Charles Zika, "The Visual Arts," in Andrew Lynch and Susan Broomhall, eds., *A Cultural History of the Emotions in the Late Medieval, Reformation, and Renaissance Age* (London: Bloomsbury, 2019), 85–106.
27 Sarah McNamer, *Affective Meditation and the Invention of Medieval Compassion* (Philadelphia: University of Pennsylvania Press, 2010); also, Susan Karant-Nunn, *The Reformation of Feeling: Shaping the Religious Emotions in Early Modern Germany* (Oxford: Oxford University Press, 2010).
28 Felix Thürlemann, "The Paradoxical Rhetoric of Tears: Looking at the Madrid *Descent from the* Cross," in Elina Gertsmann, ed., *Crying in the Middle Ages: Tears of History* (New York: Routledge, 2012), 53–75; Lorne Campbell, "The New Pictorial Language of Roger van der Weyden," in Lorne Campbell and Jan van der Stock, eds., *Rogier van der Weyden 1400–1464: Master of Passions*, exh. cat. (Zwolle: Waanders; Leuven: Davidsfonds, 2009), 32–47; David Areford, *The Art of Empathy: The Mother of Sorrows in Northern Renaissance Art and Devotion* (Lewes: Giles, 2014). More generally on compassion, see Katie Barclay, "Compassion as an Agent of Historical Change," *American Historical Review* 127, no. 4 (2022): 175–285.

29 Monique Scheer, "Are Emotions a Kind of Practice (and Is That What Makes Them Have a History)? A Bourdieuan Approach to Understanding Emotion," *History and Theory* 51, no. 2 (2012): 193–220.

30 Barbara Rosenwein, *Emotional Communities in the Early Middle Ages* (Ithaca: Cornell University Press, 2006); Barbara Rosenwein, *Generations of Feeling: A History of Emotions, 600–1700* (Cambridge: Cambridge University Press, 2016); Ute Frevert, *Emotions in History: Lost and Found* (Budapest: Central European University, 2011).

31 Mark Seymour, *Emotional Arenas: Life, Love, and Death in 1870s Italy* (Oxford: Oxford University Press, 2020); Benno Gammerl, "Emotional Styles – Concepts and Challenges," *Rethinking History* 16, no. 2 (2012): 161–75; Sasha Handley, "Lusty Sack Possets, Nuptial Affections and the Material Communities of Early Modern Weddings," *Environment and History* 28 (2022): 375–95.