

Contents

Albrecht Dürer's material world

Dürer's Nuremberg

The Home

Dürer's connections: friends and patrons *The Pietà* Material comfort, idleness, sin and repentance Domestic settings and objects: *The Life of the Virgin* Domestic piety and emotion: *The Small Passion and the Virgin and Child*

The Workshop

Objects in motion: *Nemesis* Printing the *Apocalypse* Material experimentation: etching Prints, copying and copyright Material experimentation: the nature of lines, textiles and clothing Dürer: the artist author *The Triumphal Arch of Emperor Maximilian*

The Study

The scholar: *Saint Jerome in his Study* The armoured horseman Measure and time Dürer's connections: humanists, artists and collectors *Adam and Eve*

Keywords

Dürer's Printmaking Techniques

Acknowledgements

Albrecht Dürer's material world

Albrecht Dürer (1471–1528) was a leading figure of Europe's artistic revolution in the Renaissance, particularly in the new medium of prints. He was a meticulous observer and recorder of the natural world, deeply interested in artisan manufacture and frequently depicted the objects that he encountered.

As the first major exhibition of the Whitworth's outstanding collection of Dürer's prints in over half a century, *Albrecht Dürer's material world* uses groundbreaking research to reveal how the artist applied his ingenuity and skill to represent the many manufactured and natural objects that filled his art. He interacted with these objects both in the manufacturing and consumer hub of Nuremberg – his home city – and the wider Europe that he saw on his travels in German-speaking territories, Italy, and the Netherlands. During Dürer's lifetime, Europe witnessed a flourishing of material arts and consumer goods: from armour to measuring instruments, liturgical objects to books, hourglasses to the finest clothing. Today, this vast array of objects can be used not only to expand our knowledge of the past but also of Dürer's art. This exhibition brings together Dürer's extraordinary prints and some of the types of objects that he pictured in his work. While his graphic work has been examined from many angles, the lens of material culture offers fresh insights into some of his most celebrated images.

The exhibition presents three thematic spaces of creativity in Renaissance Germany. In this room, The Home shows how Dürer's prints incorporated everyday objects to connect domestic and spiritual life. In the second space, The Workshop explores his involvement in local artisan manufacture and exchange, while The Study focuses on how Dürer's close attention to interiors, artefacts and natural objects related to humanist learning and science. Together, these themes invite us to reconsider how a changing Renaissance material world shaped Dürer's graphic art and sparked creativity and innovation in the production of art and craft in Nuremberg and beyond.

Dürer's Nuremberg

A major trading, religious and cultural centre, Nuremberg was one of the most important cities in late 15th-century Europe. As a free imperial city, it had strong ties to the Holy Roman Emperor and was made up of networks of craftspeople, artists and humanists who were involved in booming arts and trades, all directly overseen by a powerful patrician council.

The Dürer family were closely connected to these networks. Many notable artisans, humanists and patrician families resided on their street. Dürer began his training with his father, a skilled goldsmith originally from Hungary. In 1486, the young Dürer was apprenticed to the neighbouring workshop of the painter and printmaker Michael Wolgemut (1434–1519) and in 1493 his godfather Anton Koberger (1445–1513) published the Nuremberg Chronicle, which became one of the earliest and most influential printed books. By 1495, Dürer had established his own workshop for painting and printmaking.

For much of Dürer's life Nuremberg had been shaped by the sensuous material world of late medieval Catholic devotion. Rosaries, censers, candles and chalices all feature heavily in Dürer's graphic imagination. Shortly before the artist's death, the Nuremberg Council voted to accept Martin Luther's (1483–1546) new religious reform which resulted in the emergence of Protestantism. Although he was only just becoming aware of the way in which the Reformation would change the materiality of the Christian experience, Dürer's prints played a role in a new spirituality. His prints, like the world of goods they represent, were both commodities and objects invested with emotional values.

The Home

Renaissance Nuremberg was made up of tightly knit communities. Homes were certainly places of nurturing, socialising, religious practices and memorialising, but they were also at the centre of the city's social, economic, political and religious networks. Dürer's engraved portraits of his friends and early patrons record some of the important social interactions that he fostered throughout his life.

Though modest in comparison with the city's patrician families, there is little doubt that Dürer and his wife Agnes Frey (1475–1539) lived comfortably. At home they were surrounded by commonplace objects and by innovative and high-status items such as a *Kachelofen* (tiled stove) covered in tiles produced by Nuremberg's artisan potters. Whether ornate or everyday, domestic wares took centre stage in the artist's work, where they were shown in intricate detail and inspired his depiction of highly realistic, personalised and intimate scenes. In *The Birth of the Virgin* for example, ceramic jugs, serving dishes, curtains, candlesticks, knives and leather pouches flood the busy female-centred domestic scene.

Many of Durer's prints were designed as material objects to offer spiritual instruction in the home. Yet, as shown in *The Temptation of the Idler*, certain subjects and household items from Renaissance Nuremberg reveal an unease about the potential moral risk that the unchecked consumption of expensive manufactured goods could bring.

Dürer's connections: friends and patrons

From his home base in Nuremberg, and through his journeys around the German-speaking territories and Switzerland, to Italy and to the Netherlands, Dürer built up a network of friends, colleagues and patrons that sustained his work across four decades. Late in his career, Dürer produced some remarkable printed portraits of luminaries in his humanist community, setting each behind a fictive stone tablet that appears to be carved with their names and dedicatory texts. These inscriptions, engraved in elegant epigraphic lettering, imitate ancient provincial Roman tombstones found at Augsburg and Mainz and known to Dürer through a publication in 1520 by the Augsburg humanist Konrad Peutinger. The two portraits of Dürer are evidence of his continuing international fame after his death in 1528.

The Pietà

Behind you, the large carved and painted *Pietà* and tapestry altar frontal, both made for a church interior, as well as the two visionary woodcuts by Dürer titled *The Mass of Saint Gregory* and *The Trinity*, give some sense of the rich world of late medieval Catholic devotion in Germany.

A form of devotional sculpture, the Pietà became a popular subject among Northern European artists from the end of the 14th century. It depicts a moment after the crucifixion, when the lifeless body of Christ is presented lying across his mother's lap. In Italian, pietà means 'compassion' or 'pity', and this title reflects the suffering the onlooker was meant to experience when viewing such images of grief. Christ's bodily suffering and the emotional pain of his mother Mary were important subjects for personal contemplation and became materialized in artworks like the Pietà.

Dürer himself wrote verses in 1510 on this theme, showing that the appeal of the Pietà was not gender specific but universal. He requested help from the Virgin: 'through the bitter pain you bore with great lamentation when your dead son lay before you, come to my help in my distress'.

Material comfort, idleness, sin and repentance

Dürer's Temptation of the Idler of 1498 pictures a scene in which the warmth afforded by a Nuremberg-made tiled stove, or Kachelofen (plural: Kachelöfen), could lead to idleness, temptation by the Devil and potential sin. Dürer's contemporaries would have understood this to be an image of disordered sleep, indulged in beyond the bedroom and outside approved sleeping hours, as prescribed by Christian teachings and widely held medical advice of the period. The decorative stove tiles on display comprise one with the Nuremberg coat of arms, emphasising the city's reputation for manufacturing Kachelöfen, one picturing a sleeping guard, alluding to the possible dangers of devotion to disordered sleep, and one with an image of Christ, as a reminder of the more virtuous life. The Prodigal Son (1496) shows a moment of repentance in the biblical parable, when a wayward youth decides to return home after a period of riotous living, to seek forgiveness, which is granted to him by his father. The background is dominated by outbuildings of the Nuremberg suburb of Himpelshof, which grounds the parable in a contemporary, localised context.

Domestic settings and objects: The Life of the Virgin

Whether ornate or everyday, the domestic wares of the Dürers' home and of those of their friends and neighbours took centre stage in the artist's work where they were observed in intricate detail and inspired his depiction of highly realistic and intimate scenes, as in *The Life of the Virgin* series. Dürer began work on this cycle around 1500 and published it as a book with a Latin text in 1511, together with the *Small Passion*, *Great Passion* and *Apocalypse*. In *The Life of the Virgin*, Dürer staged key events from the Virgin's life – her birth, the Holy Family's stay in Egypt, and her death – in domestic settings and surrounded by domestic objects. Often ordinary household utensils were invested with meaning through use as well as through the sacred and secular images they bore. The household objects in Dürer's works celebrated the ingenuity of Nuremberg's artisan producers while also sometimes warning of the moral dangers that this new world of material innovation and consumption brought with it.

Domestic piety and emotion: The Small Passion and the Virgin and Child

Dürer's prints relating the biblical stories of Christ and the Virgin Mary became a focus for household religious devotion and education. These works reflected the artist's experience of home not as a mundane dwelling but as a place for communication with the divine, and a dramatic stage for crucial life events such as childbirth and death. Dürer's *Small Passion* (c.1507/9–11) and his emotional images of the Virgin and Child engaged with the profound human events and feelings that could be experienced in a domestic setting.

Dürer's *Small Passion*, comprising thirty-six pages and a frontispiece, pictured a whole range of emotions; not only intimate human feelings, but also the righteous fury of Christ driving the moneylenders out of the Temple. Such scenes soon became intimate devotional images designed to arouse personal piety and compassion in the home. Some prints in the cycle were also used internationally as design sources for domestic objects in more luxurious materials, including Italian maiolica. The three prints depicting the Virgin Mary and Christ on view here, which are not part of the *Small Passion*, offer remarkable emotional insights into the mother and child relationship and possibly Dürer's own closeness to his mother.

The Workshop

As an imperial city, Renaissance Nuremberg enjoyed a favoured status. It attracted many skilled artisans, chiefly metalworkers, printers, textile workers and instrument makers, who were among the finest in Europe. In contrast to other cities, which were dominated by traditional guild structures, Nuremberg's city council organised the city's different occupations and provided close oversight.

Workshops were at the centre of artisanal collaboration and competition driving innovation within Nuremberg. Aided by his wife Agnes Frey (1475–1539), Dürer ran his own successful workshop. His early training as a goldsmith proved invaluable when, in the mid-1490s, he began making prints. His *Apocalypse* series of full-page woodcuts, issued in 1498, demonstrated his revolutionary designs and working practices. Later, he experimented with the new technique of etching, a medium traditionally used for decorating armour.

Dürer's prints frequently included examples of the many types of objects crafted, and the artist's creativity was deeply embedded in the world of textiles and goldsmiths' work. Alongside metalwork, textile production and dyeing were key crafts in Nuremberg. In 1481, the council declared its residents to be obsessed with fashionable 'novelties' such as expensive materials, extravagant designs and foreign clothing. Despite the authority's concerns about God's punishment for such vanity, in the company of his humanist friends, Dürer took pride in owning fashionable clothes and depicting them in his art.

Towards the end of his life, Dürer turned his attention to writing. He completed three treatises on measurement, human proportion and the design of fortifications, seeking to secure his intellectual legacy and to pass on knowledge to a future community of apprentices, artisans and artists.

Objects in motion: Nemesis

One essential truth about crafted and manufactured objects is that they are dynamic and have their own histories. Such objects are not static, but are created, acquired, used, cared for, shared, sometimes altered, and passed on or traded. Dürer's *Nemesis* allowed his viewers to pause and reflect on beautifully crafted objects, to examine them in close detail, and then to envisage them set in motion.

The two most significant objects associated with the figure of Nemesis – the elaborate lidded cup and the bridle – were both typical of high-quality Nuremberg artisan manufacture and alluded to aspects of the crafted, civic, intellectual, and religious worlds of Dürer's home city. Vessels in precious metal were closely associated with rituals of religious and civic life in Nuremberg, and the bridle is an excellent example of the solid craftsmanship in metal and leather that had given the city its unrivalled reputation for high-quality workmanship. The extraordinary image of the goddess flying above the clouds, an Alpine scene below, with her drapery caught by the wind and flowing behind her, dramatizes that these objects were inherently mobile through trade and other forms of cultural exchange.

Printing the Apocalypse

Dürer's *Apocalypse* cycle of fifteen woodcuts, published in its first German and Latin editions in 1498, was revolutionary in several respects. It was the first book in Western art to be both illustrated and published by a major artist. In contrast to the combination of text and small images on one page that was typical for illustrated books at the time, Dürer produced full-page dramatic images with the accompanying text printed on the reverse. He also developed new ways of cutting wood blocks which created complex and dynamic images when printed. Dürer most likely worked with a highly skilled professional block-cutter (Formschneider) to create the blocks. Evidence shows that Dürer printed the *Apocalypse* woodcuts on his own workshop press, then used the typefaces and book printing presses of his godfather, the publisher Anton Koberger (1445-1513), to print the text on the reverse of each sheet. The prints on view here come from the first edition of 1498, with the text printed in German on the back of each sheet. A second Latin printing was published in 1511, with a new frontispiece in a combined edition with Dürer's other large woodcut cycles, the *Life of the Virgin* and *Large Passion*.

The images in Dürer's *Apocalypse* depict many objects made in Nuremberg. These range from candlesticks and vessels, to pikes, spears, and, in the case of *Four Horsemen of the Apocalypse*, a contemporary bow similar to the one in this exhibition. This world of goods helps to ground Dürer's spectacular depictions of the events of end of days, as recorded in the *Revelation of Saint John*, in a contemporary, relatable framework. As the half-millennium of 1500 approached, the faith of many Christians was sustained by the expectation of Christ's imminent second coming. The stories of the Apocalypse in the Book of Revelation were widely known, and these foretold the destruction of the wicked, the overthrow of Satan and the establishment of Christ's kingdom on earth. Many disasters and unexplained events of the day were interpreted as punishments from God on the sinful world. Dürer's woodcut version of the Apocalypse story vividly captured the spirit of the times.

Material experimentation: etching

The success of Dürer's printmaking ventures in woodcut and engraving fed his urge to experiment with new techniques. One of these was etching, which at the time was used chiefly by armourers for decorating unique suits of armour and ornate weaponry but not for creating multiple images on paper. Dürer was among the first artists to experiment with using etching to make prints, exploring its potential in six instances between 1515-8. Etching permitted a freer approach to creating an image than engraving, being more akin to drawing directly on the plate. It also resulted in printed lines being of uniform thickness. In these ways, etching differed fundamentally from the techniques and appearance of woodcuts or engravings, and Dürer actively used etching to experiment with unusual subject matter and novel pictorial effects. With his most ambitious etchings, like Landscape with a Cannon in 1518, he sought to rival not only the excellence of German arms and armour but also the pictorial richness that he had found in his encounters with Italian oil painting in Venice. Dürer's etchings were produced in even smaller print runs than his engravings, possibly because of the technical instabilities of the medium or because the community of viewers were not yet prepared to appreciate their loose, drawing-like appearance.

Prints, copying and copyright

Copying was a common workshop and commercial practice in Renaissance Europe and part of absorbing new techniques and forms of imagery. In these circumstances questions of creative ownership were complex. Dürer sought 'privileges' to protect his printed work and was reported to be infuriated when the Italian engraver Marcantonio Raimondi replicated prints from his innovative *Small Passion* and *Life of the Virgin* series of woodcuts. In the second (1568) edition of his *Lives of the Artists*, Giorgio Vasari told a vivid tale about these prints: Marcantonio saw Dürer's woodcuts for sale in Piazza San Marco in Venice and set about copying them. When Dürer heard of this, he grew so enraged that he travelled from Nuremberg to Venice and brought Marcantonio before the Venetian Senate to try to stop this piracy. 'However,' Vasari concludes, Dürer 'got nothing but the verdict that Marcantonio could no longer add the name or monogram of Albrecht to his works'. This story, if true, would constitute one of the first intellectual property lawsuits in history, involving questions of authorship, authenticity, copying, branding and plagiarism. Vasari's story of the dispute between Dürer and Marcantonio may be largely fictional, but it is evidence of the tensions that the new medium of print introduced into the art world.

Material experimentation: the nature of lines, textiles and clothing

Dürer's intriguing series of six woodcut *Knots* (c.1500–8) emulated engraved designs produced in Italy from drawings by Leonardo da Vinci and rivalled them in technical mastery and conceptual complexity. Dürer's *Knots* animated the humanist debate about whether ingenuity originated in what contemporaries believed was divinely created natural form and line or was created by the skill of the artist. The *Knots* also embodied the fascination with mathematical knowledge that Dürer and Leonardo had in common, although they never met.

Dürer's creativity was also enmeshed with the world of textiles, where making intricate designs involved thinking through complex grids and patterns of lines. Textile production and dyeing, just like the production of metal goods, was one of Nuremberg's key crafts, for which it was known throughout Europe. By 1500, Nuremberg was the most important centre producing cloth in South Germany. In 1481, when Dürer was ten years old, the council declared Nuremberg residents to be obsessed with fashionable 'novelties' such as expensive materials, extravagant designs and foreign clothing. Despite the authority's concerns about God's punishment for such vanity, in the company of his humanist friends, Dürer took pride in owning fashionable clothes, buying them for his wife, Agnes, and depicting them in his art.

Dürer: the artist author

Dürer turned to writing to codify his status and expertise as an artist author, to pass on knowledge to apprentices and to secure his artistic and intellectual legacy. Dürer's *Treatise on Measurement* ... appeared in 1525, with one of its illustrations depicting an artist making a portrait of a sitter using an optical device. His *Treatise on Fortification* ... was published in 1527 and was the first book to appear in German on the subject. His *Four Books* ... on the *Symmetry of the Parts of the Human Body*, also known as *Four Books on Human Proportion*, appeared posthumously in 1528 and was later translated into Latin. These publications reflected his fascination with the application of geometry to the creation of harmonious and beautiful forms, from the human body to snail shells. In Dürer's understanding, these treatises were aimed at 'painters, sculptors in wood, stonemasons, likewise metal casters, goldsmiths, silk embroiderers, [and] potters', demonstrating that, as well as aspiring to raise his status as an artist, he saw himself as a member of a larger community of artisans.

The Triumphal Arch of Emperor Maximilian 1515

Albrecht Dürer 1471–1528; Hans Springinklee c.1490/5–after 1525; Wolf Traut c.1480–1520; and Albrecht Altdorfer c.1492/5–1538 True to size digital projection. Height: 3570 mm x Width 2950 mm

Between 1512–9, Dürer worked on several print related projects commissioned by Maximilian I (1459–1519), the Holy Roman Emperor. These were conceived as novel and effective ways of promoting and preserving his reputation and that of the Habsburg dynasty. *The Arch of Honour* was the only one of these ambitious woodcut projects to be completed during Maximilian's lifetime, and it remains one of the largest prints ever to be produced. Printed from 195 blocks on 36 sheets, it was originally intended to be used as a massive wall decoration in key sites around the empire; some 700 copies were printed within two years of its completion.

The architect and painter Jörg Kölderer (d.1540) designed the overall appearance of the structure and Dürer oversaw the artistic content. Dürer concentrated on designing the prominent ornamental features, including much of the central arch and the right half of the decorative framework. He subcontracted the rest of the designs to his pupils Hans Springinklee and Wolf Traut, and most of the scenes on the outer towers to Albrecht Altdorfer. Dürer engaged a professional block-cutter, Hieronymus Andreae of Nuremberg, to cut the blocks between 1515–7.

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The Study

In Renaissance Europe, the study was a space in the home where humanist scholars, rulers, merchants and senior clerics could withdraw for quiet reading, writing, prayer or learning. Here, collections of books, art and artisan objects were handled, studied, classified and exchanged, alongside natural specimens, such as the parrot that features prominently in Dürer's *Adam and Eve* print. Devices for measuring daily and astronomical time were also present, such as sundials, sand clocks, mechanical clocks and astrolabes. These served as a reminder of the limits of human knowledge and existence in the face of death and eternity.

Dürer's wide-ranging interests connected him to a humanist community that not only provided ideas for his visual imagination but would also collect and promote his art. Though resident in Nuremberg, these humanists were connected, through travel and exchange, to other scholars across Europe. Their interests were broad and included literature, history, science, natural wonders, astronomy and astrology. Dürer, in turn, produced some of the most memorable printed portraits of Nuremberg's celebrated figures including Willibald Pirckheimer (1470–1530), one of his first friends who introduced him to humanist culture. Dürer also actively cultivated connections to fellow artists, either in person or by acquiring their works for his own collection.

The attention and care that Dürer gave to objects in his three spectacular master prints (the so-called *Meisterstiche*), *Saint Jerome in his Study, Knight, Death and the Devil* and *Melencolia I*, demonstrate his deep engagement with the material and natural worlds that he inhabited. At the same time, his prints reveal how works on paper became a driving force behind a range of artistic and intellectual activities in the Renaissance scholar's study. His woodcuts, engravings and etchings complemented the role that had previously been played by illuminated manuscripts and early printed books, and they soon gained status as crucial agents in scientific inquiry, scholarly investigation, artistic exchange and devotional practice.

The scholar: Saint Jerome in his Study

Saint Jerome was one of the four early Fathers of the western Church and was celebrated in the fifteenth and sixteenth centuries as the translator of the Bible from Hebrew and Greek into the Latin Vulgate version. As a young man he had spent four years as a hermit in the Syrian desert. According to a popular fable, while Jerome was living as a hermit, he extracted a thorn from the paw of a lion and the creature then became his constant companion.

Early in his career, Dürer depicted the penitent Jerome, which was a popular subject in Northern Italy, and which Dürer may have encountered on his first visit to Venice in 1494–5. Later, as his contacts with learned humanists like Willibald Pirckheimer developed, Dürer became focused on the saint's intellectual activities. *Saint Jerome in his Study*, one of the so-called *Meisterstiche*, or master prints, was sold or given away by Dürer more frequently than any of his other prints on his trip to the Netherlands during 1520–1. This image, together with the woodcut *Saint Jerome in his Cell* (1511) visualised period ideals of knowledge, erudition and scholarly writing. The interiors of both prints are filled with material objects, most of them of contemporary manufacture, that were necessary for Jerome to fulfil his roles as translator, writer and senior cleric: a crucifix, a rosary, his cardinal's hat, an aspergill for sprinkling holy water, and leather-bound books resembling the copy of Luther's 1522 translation of the bible exhibited here, as well as a wooden chest, folded sheets of paper or letters, a writing quill, an inkwell, scissors, a cleaning brush, a sandglass to measure time, candlesticks, stoppered bottles and cushions for the wooden chairs and bench.

The armoured horseman

High status armour was among the most expensive of all objects in Dürer's lifetime. He was involved in several design projects relating to armour for Emperor Maximilian, such as three of the over life-sized bronze ancestor figures intended for the emperor's tomb. Maximilian avidly pursued horseback combat, tournaments and jousting, and he personally devised a new half-helmet for Rennen, or racing, with sweptback streamlining, like the helmet worn by the knight in Dürer's *Knight, Death and the Devil* (1513) and the contemporary example shown in this exhibition.

Dürer's interest in the representation of the horse pervades much of his work, from *The Four Horsemen of the Apocalypse* of 1498, through *Saint Eustace* of 1501–2, to *The Large Horse* of 1505, in which the animal takes centre stage. The splendid horse in *Knight, Death and the Devil, with* its strong head and neck, striding pose and well-proportioned body, may have been inspired by the massive bronze monument to Bartolomeo Colleoni by Andrea del Verrocchio, which Dürer knew from his visits to Venice, where it was erected outside the Church of Santi Giovanni e Paolo in 1494 and where it remains.

Measure and time

Measurement played a crucial role in Dürer's artisan training with his goldsmith father and in his later career as an artist. In early drafts of his *Treatise on Measurement*, written just before *Melencolia I* was published in 1514, Dürer declared that the artist and artisan must reflect on and engage with 'measure, number and weight . . . for whoever pays attention to these will also find the root' of the art of representation. Measurement and mathematics were also linked to astronomical and astrological knowledge and the production of instruments for measuring time, for which Nuremberg was a major centre. The leading astronomer in the fifteenth century, Johannes Regiomontanus, was resident in Nuremberg between 1471-5; his collection of instruments and books remained accessible in the city during Dürer's lifetime, and the artist and his wife Agnes purchased and moved into the former house of Regiomontanus, with its astronomical observatory, in 1509.

In 1515, Dürer was involved in creating the first printed maps of the celestial spheres with the zodiac as part of his work for Emperor Maximilian. Astrolabes, sundials, sandglasses and bells were all involved in the measurement and recording of astronomical and everyday time, which also enabled the ordering and regulation of working routines and religious observances in Renaissance Nuremberg. Dürer's *Melencolia I*, the third of his so-called master prints (Meisterstiche), reflected on the proliferation of these different forms of time measurement and suggested that a creative artist might potentially be trapped within an increasingly complex web of worldly time.

Dürer's connections: humanists, artists and collectors

Albrecht Dürer was close friend with the Nuremberg humanist Willibald Pirckheimer, who also introduced him to Konrad Celtis. The latter was widely held to have been the greatest German humanist in the Renaissance and was appointed Poet Laureate to the Holy Roman Emperor in 1487, a title he held until his death in 1508. Dürer also had links to other humanists across Europe, including Konrad Peutinger of Augsburg and Erasmus of Rotterdam. The friendship of all these humanists ensured Dürer was supplied with a stream of ideas for his art from literature, history, theology, natural wonders and science; that he had a ready market for his prints; and that his reputation would be promoted. Celtis was the first of many writers to refer to Dürer as 'a second Apelles', comparing him to the most renowned painter of ancient Greece.

Although Dürer never met Martin Schongauer or Andrea Mantegna, he collected their works and studied them closely. Dürer would have met Jacopo de' Barbari in 1500 when the Italian painter, printmaker and theorist was appointed by Emperor Maximilian as court portraitist and miniaturist in Nuremberg. Dürer later related that Barbari 'showed me how to construct man and woman based on measurements'. De' Barbari was reluctant to give Dürer full access to his knowledge of human proportion, and by 1506 Dürer wrote to his friend Pirckheimer that he had lost interest in the work of de' Barbari, and he 'went ahead on my own and read Vitruvius, who describes the proportions of the human body to some extent.' Dürer met the younger Dutch printmaker Lucas van Leyden in Antwerp in 1521, where they exchanged artworks, and the older artist sketched the portrait of the younger. Dürer referred to Lucas in a friendly tone as, 'the engraver, a little chap born in Leiden in Holland, who was here in Antwerp.'

Adam and Eve

Albrecht Dürer 1471-1528 Engraving

More preparatory drawings exist for this print than any other by Dürer. The figures of Adam and Eve were the result of careful measurement and were the visual culmination of Dürer's early study of human proportion, first begun in earnest around 1500.

Adam is posed like the classical sculpture known as the Apollo Belvedere. Eve who recalls classical statues of Venus has broken off a branch from the fig tree (the Tree of Knowledge) and takes the fruit from the snake to offer to Adam. The mountain goat, visible on a high cliff in the distance, was a traditional symbol of lust and damnation and is depicted peering over the edge of an abyss.

Here, Dürer made use of the lines and forms of the natural world and his knowledge of early Renaissance religious and humanist symbolism. The orange-winged Amazon parrot traditionally perceived as wise and benevolent, contrasted with the diabolical snake. The elk (melancholic and pensive), the bull (phlegmatic and calm), the hare (sanguine and sensual) and the cat (choleric and cruel, and with the mouse), represented the 'four humours' that controlled human nature.

Dürer had a particular fondness for parrots and their plumage. In this image, he responded to the parrot's association with the Americas and the idea of paradise-like abundance, suggesting a link between the biblical first man and woman and the idea of a 'New World'. In Brussels in 1520, during his trip to the Low Countries, Dürer saw the treasures from Mexico in the possession of Emperor Charles V (reigned 1519–56), which included American featherwork. Although we now understand these objects within a troubling history of looting and colonial extraction, Dürer's initial response was one of amazement expressed in terms of a deep affinity with their indigenous makers. He wrote: 'I have not seen anything in my whole life which pleased my heart as much. . . I saw in them wonderful artificial things and have been amazed by the subtle ingenuity of the people in foreign lands'.

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Apocalypse

The word 'apocalypse' derives from a Greek word meaning a 'revelation' or 'unveiling'. Apocalyptic books claim to reveal things which are normally hidden or to reveal the future. The 'Book of Revelation', which Dürer used as the basis for his series of woodcuts called the 'Apocalypse' (1498), is the only apocalyptic book in the New Testament of the Bible. As the half-millennium of 1500 approached, the faith of many Christians was sustained by the expectation of Christ's imminent second coming. The prophetic and apocalyptic visions of Saint John in the 'Book of Revelation' were widely known, and foretold the destruction of the wicked, the overthrow of Satan and the establishment of Christ's kingdom on earth. The visions featured figures such as the Four Horsemen, the Seven-headed Dragon, the Serpent, and the Beast. Many disasters and unexplained events of the day were interpreted as punishments from God on the sinful world. Dürer's woodcut version of the Apocalypse story captured the spirit of the times.

Catholic Church

The word 'catholic' comes from a Greek word meaning 'universal', and the Catholic Church claimed universal spiritual authority in Western and central Europe until the Protestant Reformation split western Christianity in the 16th century. It is widely held that the closing years of the 15th century saw a great revival of popular religion in Europe, but the established church was ill equipped to respond effectively. The Papal Schism of 1378-1417, in which bishops residing in Rome and Avignon both claimed to be the true pope, and the materialism and perceived corruption of the Renaissance popes and the higher clergy, discredited the church hierarchy in the eyes of many lay people. This was particularly prevalent in German-speaking territories, where financial and other abuses sparked the revolt of Martin Luther, Huldrych, Zwingli and others.

Christ's Passion

The term 'Passion' comes from the Latin word 'patior', meaning to suffer or endure, and refers to the short final period before the death of Christ, described in the four Gospels and commemorated in Christianity every year during Holy Week, leading up to Easter. The Passion is usually taken to include: Christ's entry into Jerusalem, his cleansing of the Temple, the Last Supper, his arrest and trial, his crucifixion, death, and his burial. Dürer made three long series of prints as well as several single prints dealing with the themes of Christ's Passion.

Humanism

Renaissance humanism is widely associated with a revival of interest in Classical antiquity, at first in Italy and then spreading across Western Europe in the 14th, 15th, and 16th centuries. During the period, the term 'humanist' referred to teachers and students of the humanities, which included the study of Latin and ancient Greek literatures, grammar, rhetoric, ancient history, poetry, and moral philosophy. During the Renaissance period most humanists were Christians, wishing to 'purify and renew Christianity', not to do away with it. Humanists were a small elite who had access to books and education, but their aim was to foster a broader cultural movement to influence all of society. Albrecht Dürer's closest friend was the leading humanist in Nuremberg, the jurist Willibald Pirckheimer. Through Pirckheimer's friendship, Dürer was in touch with many renowned scholars in Germany, Italy and the Low Countries.

Martin Luther 1483-1546

Martin Luther was a German priest, theologian, author, professor and Augustinian friar. He was the seminal figure of the Protestant Reformation, and his theological beliefs form the basis of the religious movement bearing his name. Luther was ordained to the Catholic priesthood in 1507. He came to reject several teachings and practices of the Roman Catholic Church; in particular, following a visit to Rome, where he was dismayed by papal spending on the arts and luxury, he began to dispute the doctrine on indulgences, whereby the Church took money from believers who hoped to reduce their time in Purgatory, being punished for their earthly sins in the afterlife. Luther proposed a discussion of the practice and efficacy of indulgences in his 'Ninety-five Theses' of 1517. When asked to renounce all his writings by Pope Leo X in 1520, Luther refused and was excommunicated by the pope and condemned as an outlaw by Charles V, the Holy Roman Emperor. Dürer's patron, Friedrich the Wise, Elector of Saxony, protected Luther by allowing him to stay in the Wartburg Castle at Eisenach. During his time at the Wartburg, Luther translated the New Testament from Greek into German. Luther's Bible, exhibited here, made scripture accessible to new audiences and was a decisive publication for the spread of literacy in Germany.

Ottoman Empire

The Ottoman Empire, often referred to as the Turkish Empire, controlled much of Southeast Europe, Western Asia and Northern Africa between the 14th and early 20th centuries. In the 15th and 16th centuries, the Ottoman Empire entered a period of expansion, flourishing economically due to its control of the major overland trade routes between Europe and Asia and a series of military victories over the Mamluk empire in the Mediterranean basin. In 1453, the Ottoman ruler Mehmed the Conqueror conquered Constantinople, ending the Byzantine Empire. His successor Suleiman the Magnificent captured Belgrade in 1521, and by 1526, was in control of most of the southern and central parts of the Kingdom of Hungary.

Patrician

In ancient Rome, a patrician was a member of one of the families of original citizens of the city. In the Renaissance period the term referred to a limited number of families with a privileged constitutional position within a city like Nuremberg. The patriciate was a formally defined class of governing wealthy families. Dürer's closest friend, Willibald Pirckheimer, was a member of one of Nuremberg's patrician families.

Protestant Reformation

The Protestant Reformation was a religious reform movement that swept through Europe in the 1500s in opposition to the authority of the Pope and the Catholic Church. The movement originated when Martin Luther published his 'Ninety-five Theses' in 1517 in Wittenberg. The Reformation resulted in the creation of a branch of Christianity called Protestantism, a name used collectively to refer to the many religious groups that separated from the Catholic Church. The spread of Protestant ideas across much of Northern Europe in the 16th century was greatly facilitated by the printing press and the circulation of cheap woodcut prints.

Most 16th-century Protestants believed in three essential doctrines: 1) The Bible as the ultimate religious truth and authority. 2) Through a belief in Jesus Christ and the grace of God, human beings could find salvation. 3) All Christians were viewed as priests and could communicate directly with God.

Renaissance

Renaissance literally means 'rebirth', and the term commonly refers to the revival of European art and literature in the 14th–16th centuries. The period marked the transition from the Middle Ages to modernity and was characterised by an effort to revive and ultimately to surpass the ideas and achievements of classical antiquity. Humanism, which centred on individual experience, was one intellectual basis of the Renaissance, and the new thinking was manifested in art, architecture, politics, science, and literature. The invention of metal movable type and the resulting revolution in printing sped the dissemination of texts and images from the late 15th century.

Transubstantiation

According to the teaching of the Catholic Church, in the celebration of the Eucharistic Mass or Holy Communion, the bread and wine are wholly changed into the body and blood of Christ, only the outward appearance of the bread and wine remaining as before. Martin Luther took issue with this doctrine, arguing instead for consubstantiation; this belief held that the bread and wine remained fully bread and fully wine while also being the body and blood of Christ. The agreed Christian belief was that the rite was instituted by Jesus at the Last Supper, the night before his crucifixion, when he gave his disciples bread and wine.

Four humours of the body

Fifteenth-century physiology taught that the body contained four kinds of fluid, or humours, which determined a person's health and temperament. The organs that secreted the humours were also judged to be subject to planetary influences. Thus, a person's character was 'in their stars'.

The four humours and their associated temperaments were:	
Phlegm	Phlegmatic (cool, calm, sluggish, apathetic)
Blood	Sanguine (courageous, hopeful, confident, amorous)
Bile (or choler)	Choleric (angry, irascible)
Black Bile	Melancholic (thoughtful, pensive, sad, depressed)

Humanists (see below) identified Melancholy as being influenced by the planet Saturn, and emphasized the introspective, intellectual qualities of the melancholic temperament associated with artists, philosophers and theologians, exemplified by Dürer's 'Melencolia I'.

Holy Roman Empire

The Holy Roman Empire was a varying complex of territories in western, central and southern Europe, ruled by the Holy Roman emperor, a title first held by Frankish and then by German kings for ten centuries. It was one of Europe's largest medieval and early modern states, but its power base was unstable. During Dürer's lifetime, the Empire was undergoing reform negotiated with the many different territories of the Empire by the Habsburg emperor Maximilian. After Martin Luther launched what would later become known as the Reformation in 1517, the empire became divided along religious lines, with the north, the east, and many of the major cities - Nuremberg, Strasbourg and Frankfurt – becoming Protestant while the southern and western regions largely remained Catholic. After the death of Maximilian I in 1519, his son Charles V was crowned Holy Roman Emperor, a title he held until his abdication in 1556.

Dürer's Printmaking Techniques Relief printing

Woodcut is a relief printmaking process where the design is drawn directly on the plank surface of a wood block. The block is then cut with knives and gouges, so that the parts of the block that are to print are left in relief. The block is inked with a pad called a dabber. The printing ink needs to be of a stiff consistency to remain on the raised parts of the block and not flow into the hollows. The block can then be printed on a relief press, where pressure is applied uniformly and vertically but need only be light. Dürer would have drawn his design onto each wood block. It is most likely that he would then have closely supervised the cutting of the block by a specialist professional block-cutter (Formschneider), of which there were many in Nuremberg's flourishing workshops, rather than doing the block cutting himself.

Dürer's Printmaking Techniques Intaglio printing

Intaglio printing includes engraving and etching. The ink is pressed into incised lines cut into a metal plate using a pad called a dabber. Any ink left on the surface is usually removed by wiping muslin across the plate, although a thin film of ink can sometimes be left on the surface of the plate to give tone to the printed image. The paper is dampened to make it more flexible and then passed through an intaglio press on a board that slides between two rollers. The pressure must be strong enough to force the damp paper into the lines and lift the ink out onto the paper.

Engraving is a form of intaglio printing in which lines are incised into a copper plate with a tool called a burin, which is a small metal rod with a sharpened point and a wooden handle that fits into the palm of the hand. The burin is pushed across the plate, forcing the copper up into slivers in front of the V-shaped line. These curls of copper are removed from the plate with a sharp bladed instrument called a scraper. It is certain that Dürer designed and engraved all his own copper plates.

Etching uses a chemical process. The essential principle is that the metal plate, always iron in the case of Dürer's etchings, is eaten into by acid rather than cut out with a burin tool. The plate is coated with a ground resistant to acid through which the artist draws freely with an etching needle to expose the metal. The whole plate is then immersed in acid until the lines are sufficiently bitten. Finally, the ground is removed, and the plate inked and printed using an intaglio press. It is certain that Dürer designed and etched all his own iron plates for etching.

The visual characteristics of engraving differ from those of etching. Engraving, requiring considerable force, is done from the strength of the arm pushing the burin and it removes the less controlled appearance of etching, which is done more from the fingertips with an etching needle, like freehand drawing. The hallmarks of engraving are often elegantly swelling and tapering lines that have pointed ends. The lines of an etching are usually of uniform thickness and have rounded ends.

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