Image circulation and copying practices
Painting and print in seventeenth-century Antwerp

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Copying is a key principle for modern visual culture.[1] Visual culture consists of images that proliferate and are multiplied, circulated, altered, and transformed by and between different media. At the same time, the neoliberal market economy which shapes postmodern society is much given to hyping the original, the innovative, and the individualistic. There is a dialectical relationship between copy and original, because they are cultural concepts that cannot exist without the opposite. Bruno Latour has fittingly said of this that 'in order to stamp a piece with the mark of originality, you need to apply to its surface the huge pressure that only a great number of reproductions can provide'.[2] The fascination with the original depends on and is triggered by successive versions—imitations, repetitions, adaptations, copies, or reproductions. In contemporary visual culture, digital images predominate. Digital images are per definition not unique, as they proliferate on the screens of our media devices. They are composed of pixels, the data stored in computer memory, and in as much as it is possible to speak of copying or reproduction in relation to digital images, reproduction is infinite. The change from an analogue to a digital paradigm is most apparent

in the unprecedented quantity and speed at which digital images are reproduced and consumed.[3]

Jumping a few centuries back in time, some of the principal techniques for duplicating and multiplying images were developed and professionalized in the early modern period. In this chapter I will analyse a few of them more closely, looking at practices for both manual copying and the mechanical reproduction of images in the seventeenth century. The image that will be used as an example is a scene from the Bible, *Samson and Delilah*, painted by the Flemish painter Anthony van Dyck (1599–1641) between 1628 and 1630. However, it was not for its content, meaning, and original creator, nor its subsequent versions, that the choice fell on this painting. Rather, it has been chosen because the subject matter would have been easy to identify for the average seventeenth-century European, having a visual literacy and mental image databank largely constructed around stories from the Bible. The style of the design is typically baroque—it is drama caught at its climax, like watching a still image from a kitschy action film—which meant images like this appealed to a consumer taste and were popular to copy or reproduce for the market.

The term reproduction usually refers to printing, while copying is used for painting.[4] Regardless of the terminology, however, as operations the terms and concepts both represent the same kind of cultural technique: symbolic work connected with visual media and undertaken by skilled craftsmen with the purpose of repeating images. Cultural technique is a methodological concept in media theory posited by Bernhard Siegert among others. The word technique refers to the etymology of the word as *techne*, the ancient Greek term for craftsmanship, craft, or art.[5] According to the cultural historian Thomas Macho, cultural techniques are always older than the concepts they generate. Arguably, imitation throughout history has been a core mode of human creativity, long before these practices evolved into cultural concepts such as copying or reproduction.[6]

Figure 8.1. Anthony van Dyck, *Samson and Delilah* (1628–30). © KHM-Museums-verband.

Figure 8.3. Berlin street art spray-painted with stencils (2023). Photo Charlotta Krispinsson.

Figure 8.4. Johanna Vergouwen, *Samson and Delilah* (1673). © Eduardo Galindo Vargas/Museo Nacional de San Carlos.

Figure 8.6. Abraham van Diepenbeeck, *Samson and Delilah* (a.1642). © Christof Weber/Les 2 Musées de la Ville de Luxembourg.

A key classical thinker on the topic of image reproduction is Walter Benjamin, who in his seminal essay 'The work of art in the age of its technological reproducibility' (1936) famously claimed that the more an artwork is reproduced, the more its aura fades. To support this claim with some historical background, he began his essay by writing that

> In principle, the work of art has always been reproducible. Objects made by humans could always be copied by humans. Replicas were made by pupils in practicing for their craft, by masters in disseminating their works, and, finally, by third parties in pursuit of profit. But the technological reproduction of artworks is something new.[7]

The modern technologies Benjamin was referring to as offering 'technological reproduction' were the mass media such as photography, cinematography, and the illustrated press. When making some brief references to the historical antecedents of reproductive technologies and practices, Benjamin also makes a distinction between technological and manual reproduction. These concepts and the relationship between them in the early modern period have later been picked up and elaborated on by Christopher Wood, who describes this relationship as 'The dialectical interplay between the handmade and the mechanically made image is the basic though usually disguised plot-structure of European art.'[8] This description captures a phenomenon that underwent some major changes in Northern Europe in the early modern period: the reciprocal exchange in terms of technological development and dependency between painting and printmaking.

Painting and printing were two of the main techniques for disseminating, reproducing, and distributing images in Europe in the early modern period. As pointed out by W. J. T. Mitchell, the main difference between an image and a picture is that images should be thought of as immaterial entities, while pictures are material

objects—a medium that works as a material support for the image that it carries. To use a modern example, for analogue photography the paper is the material support and medium for the photographic image, while the screen is the material support and medium for digital photography.[9] In the medieval period, the main material supports for painted images were walls (wall paintings), books (illuminations), and wood (for example, altarpieces). At the end of the fifteenth century, canvases and linen began to be used as support for paintings as well, as this material was cheaper and easier to transport. From then on, the new practice of painting with oil-based paint on new kinds of material supports such as linen and canvas, smaller wooden panels, and copper plates made paintings mobile.[10] This development effectively paved the way for a new paradigm of visual culture in Europe, shaped by the mobility and reproducibility of prints and paintings. This change can be compared to how the parallel development from medieval manuscript culture to early modern print culture gave rise to new communities of readers. With the printing press, the production and dissemination of scholarly and scientific texts increased and reached larger audiences. With reference to the idea of a modern information age, this early modern phenomenon has been described as the beginning of a societal information overload.[11] As suggested by Wood and others, however, this development did not simply depend on technological innovations, but rather on exchange and reciprocal interchange between the media of painting and print.[12]

With the possible exception of coins, print was arguably the medium that made the most images reproducible in larger volumes and mobile across great geographical distances. When innovations in printing techniques made images more accessible and affordable, painting had to meet the same increased consumer demand. The painting process was rationalized between the late fifteenth and mid sixteenth centuries, and techniques for copying and serial production were more widely practised at painter's workshops in the commercial centres for artistic production in Europe. The rationalization of the

Figure 8.2. Jan van der Straet, *The Workshop of an Engraver* (*c*.1600). © The Metropolitan Museum of Art. Harris Brickbane Dick Fund, 1953.

painting process encompassed using standardized formats for the wooden panels that served as the material support for paintings, using prints as models for underdrawings for paintings, and the use of specific copying techniques such as pouncing.[13]

Pouncing was an early modern duplication technique for transferring images from one surface to another, and with some alterations it has survived until today, but for other purposes. The technique is similar to how carbon paper was used in the nineteenth and twentieth centuries to copy, say, written text, but without the effect of the carbon paper. In both cases, however, the aim was to transfer lines from one layer onto a second layer. The tool used was a stylus or tracing wheel, used to this day to transfer markings onto fabric when sewing. The techniques can also be compared with how stencils

are used today for street art, as a template used for spray painting images or text on walls in public spaces.

The comparison with how stencils is used for street art is particularly useful in this context since it identifies the structural logic of both techniques as replication and seriality. It makes little sense to claim a difference in artistic value between the first work of street art painted with a stencil and subsequent, virtually identical images painted using the same stencil. None of the images are the original or copies; they are all repeated images. The same logic applies to pouncing when used for serially made paintings in the fifteenth and sixteenth centuries. When practised as part of the painting process, the image had usually been drawn on a cartoon (a larger sheet of paper). A tracing wheel was then used to perforate the significant contours of the image, so that the cartoon could be used as a stencil and template to transfer the image to an underlying primed surface such as a wooden panel. The image was transferred onto the panel by pouncing—patting a bag of charcoal dust over the holes in the stencil, which left a pattern of dots on the underlying panel when the stencil was removed.[14] Compared to drawing a design directly onto a primed surface (an underdrawing) and then continuing by applying paint to the same surface, using stencils made it possible to rationalize the process by transferring the same image onto multiple surfaces and produce multiple paintings using the same template.

With the advent of print culture around 1450, printed images came to be widely used as models for paintings. A market developed for printed pattern books, stocks of printed patterns, and other kind of motifs, which were used as templates by painters.[15] To draw a parallel with the modern media landscape, this practice can be compared to how magazines, advertisers, and similar media contexts source ready-to-use images from stock image agencies and the public domain. Stock photos are readily available visual representations that conform to widely recognized visual stereotypes; by confirming preconceptions about what something 'should look like', they are

more likely to be popular and repeated by and between different media than if they did not. With the invention of the printing press, a printed image could be made and sold in one of the commercial centres for prints in Northern Europe, such as Antwerp or Amsterdam, and then exported and sold in for example Stockholm. Parts of the print could then be used as source material by a local painter and copied as part of a larger motif painted on a wall or a wooden panel a good century after the printed image was first produced. In this sense, print culture could bridge considerable geographical and temporal distances.

A global capital for visual culture

The term 'visual culture' was originally conceptualized by the art historian Svetlana Alpers to describe the proliferation of images in the seventeenth-century Dutch Republic. Her conclusions, though, do not only apply to the Dutch Republic, but also to the situation in Antwerp in present-day Belgium. According to Alpers, in the Low Countries in the sixteenth and seventeenth centuries we can see the first omnipresent images—in printed form and as paintings— throughout society, unlike before, when owning paintings was restricted to the financial and political elites, and only accessible to a wider audience in church buildings. Images began to be found everywhere: as prints in books, pictures on the walls of ordinary people's homes, on fabrics and carpets.[16] By the 1560s, half the houses in Antwerp contained images in the form of paintings and prints.[17] The main reason for this was that the production methods of prints and paintings in Antwerp had converged so that cheap paintings approached the prices of prints. Many painters in Antwerp imitated the printers' logic and set up as proto-industrial workshops. In the sixteenth century they were the forerunners in streamlining the production of paintings by specialization and by applying various techniques that facilitated serial production. The general visual

culture was shaped by print culture, and both paintings and prints could be and were produced in multiples and volumes.[18] This move was motivated by commercial interests, economic growth, and an emerging open market, as Antwerp in the sixteenth century turned into a European capital of capitalism.[19] Under capitalism, the new economic system of the early modern period in Europe, the market was ruled by the basic mechanisms of supply and demand. Crafts-men such as the printmakers and painters working in Antwerp now began to produce their work speculatively, whereas artistic production used to be dependent on commissions and controlled by the wishes of patrons.[20]

For most of the sixteenth century, Antwerp was globally the most important centre for trade, with a harbour that connected the international sea routes with overland trade routes to Germany. It was also a commercial hub and the undisputed centre in the Low Countries for paintings, books, and printed images. Many painters, printmakers, and publishers lived and worked in Antwerp, and the town had a well-developed commercial infrastructure with high volumes of arts, crafts, and prints produced and sold by workshops and publishers through trading houses, shops, and trade fairs.[21]

Antwerp's golden age came to an abrupt halt in the 1560s. There fol-lowed three decades of religious and political turmoil—Reformation and Counter-Reformation, Dutch Revolt and Spanish reconquest—that strongly impacted the city's production and trade. In 1566, there was the first wave of iconoclasm and censorship, and much of the city's famed religious art and printing was destroyed or forbidden. In 1585 the Counter-Reformation reached Antwerp and it was besieged by Spanish troops. Completely cut off from the outside world, its industry and commerce stopped, and its inhabitants, including of course its community of painters, printmakers, and publishers, had to choose between leaving or converting from Protestantism to Roman Catholicism. In the ensuing religious and political crisis nearly half of the population of Antwerp left, as well as almost all

the foreign merchants. As a severe economic setback for the city it was an artistic crisis too.[22]

After 1585 the market in Antwerp stagnated, but in the first half of the seventeenth century its economy recovered, and the city went back to being one of the most important, albeit not uncontested, commercial centres for painters and printmakers in north-western Europe. The rules of the market had changed, though, and new specializations arose.[23] Commercialization and a growing middle class were behind the demand for cheaper paintings such as copies. Painters increasingly specialized in specific genres and techniques, and they also turned ever more to the mass production of copies of popular motifs.[24] Cheap mass-produced paintings meant visual culture was available to more people. The same business patterns and new trends applied for prints. In the sixteenth century, Antwerp's printing industry first played a key role in Europe in the production and distribution of prints, spreading and defending the Reformation, followed by prints in service of the Counter-Reformation. Besides religious prints, the city was also a global centre for the production of political, humanist, and scientific texts and printed images, which could include everything from maps to playing cards. In the first half of the seventeenth century, Antwerp held its position as a global centre for prints, but with a new orientation towards visual design in the form of artists' prints, reproductive prints of paintings, and other kinds of illustrations.[25]

Any craftsman active in Antwerp had to be a member of one of the guilds, which controlled the economy of the city. Like many other cities across Europe in the early modern era there was a guild of St Luke, which since the medieval period had served as the local organization for painters, but also for many other professions, including goldsmiths and embroiders. The name came from Luke the Evangelist, patron saint of artists. Two things set the Antwerp guild apart from most other guilds of St Luke. First was its unusually liberal support for the new economic model—a capitalist system with

a relatively unregulated market.[26] Second, and more importantly for the purposes of this chapter, it had an unusual membership policy whereby painters and those involved in the printing process—book-binders, typefounders, publishers, printmakers—were enrolled in the same guild. This enabled cooperation and collaboration instead of competition between the different professions.[27] I would argue it also reflected the connections between the older and newer media, as well as paradigmatic changes in the media landscape, echoing the earlier shift from script to print in the fifteenth century. Even after the invention of the movable-type printing press, scribes continued to copy manuscripts by hand, even when printed reproductions could have been an option. Printed books were usually sold by the same shops as handwritten ones, and most people made no strong distinction between them.[28] The relationship between painting and printing is best illustrated by the following court case.

In 1495 there was the first documented debate about the new medium of printed images, and it was in a legal context. The Antwerp guild of St Luke went to court to force a printmaker, Adriaan van Liesvelt, to join their guild, and the legal arguments turned on the materials used for printing. Guild officials claimed that Van Liesvelt was obliged to join the guild since he printed devotional books, which included illustrations—that, they said, made him a maker of images, just like a painter. Van Liesvelt countered that his craft was different, because he used paper and ink, not a paintbrush and paint. Samples of the fluid used for printing images were tested in the courtroom to decide whether it was more paint or ink. If ink-like then the profession of printing images was closer to printing texts or writing with a pen, and was not in competition with the painters. Van Liesvelt eventually won and thus avoided paying the guild fee, which was probably the reason he had not wanted to join in the first place.[29] There were advantages to being a member of a guild (such as the quality assurance for members' work which could benefit business, financial aid to widows, and networking), but also

the disadvantage of having to pay the member's fee. After this legal dispute, it remained possible (but not mandatory) for printmakers to join the guild of St Luke, and many of them chose to do so.[30]

The debate in 1495 highlighted how the work of painters and printmakers was intertwined. From our vantage point, it is easy to conclude that paintings and printed images had visuality in common; to the professionals at the time, however, the similarity was rather a matter of materials, equipment, and techniques required for practising their craft. It also becomes clear how new media evolved from older predecessors, evidenced by how often the various practitioners collaborated. Book dealers and bookbinders hired painters to colour woodcuts by hand; painters designed printed images; woodblock cutters and engravers copied designs for prints from paintings; painters used the copper plates that were also used by engravers for printing images; and painters did not begin painting on canvas until the fifteenth century, while textile printing had been practised in Europe since at least the medieval period.[31] Further, when printmaking was still a new media phenomenon, it and goldsmithing were considered related arts and professions since they both engraved or etched on metal surfaces.[32] As a case in point, Johannes Gutenberg, the famous introducer of movable-type printing to Europe, was also a goldsmith by profession.

Samson and Delilah repeated

Among the painters who had to adapt to the changes in the market in Antwerp in the seventeenth century was Johanna Vergouwen (1630–1714). Largely forgotten today, Vergouwen was active as both an art dealer and a painter, and owned a shop where she sold paintings on copper plates alongside other kinds of items, probably paintings.[33] The shop was most likely both a shop and workshop—a place where she produced and sold her own works and works by other painters. The literature on Vergouwen amounts to a single article, concerned

with rediscovering an overlooked female artist.[34] For the purposes of this chapter, however, this makes her all the more interesting. Vergouwen represents the majority of seventeenth-century Antwerp painters who specialized in producing cheap paintings for the general market, and who receive little interest because of an assumed lack of originality. Just three of Vergouwen's works are known to have survived: two portraits and one copy of a history painting.[35] It is the copy which is key to analysing how standardized methods for copying and repeating images enabled artists to meet the demand for images in the seventeenth century.

Although only one of Vergouwen's copies survives, it is likely she specialized in copying paintings. This is based on the fact that she is mentioned in the biographies of Flemish and Dutch painters by Cornelis de Bie (1627–c.1712 a.1715), *Het gulden cabinet van de edel vry schilderconst* ('The golden cabinet of the honourable free art of painting: Containing the praise of the most famous painters, architects, sculptors and engravers of this century') first published in 1662.[36] In *Het gulden cabinet*, de Bie sang the praises of some 365 painters, architects, sculptors, and printmakers, most of them active in the southern Netherlands. Some of them were represented with an engraved portrait too, others only warranted the verse.[37] Vergouwen was one of those praised in words, with de Bie writing that 'Miss Vergouwen is very skilled in copying paintings. Great historical works of art do not frighten her. Scenes by Rubens or Van Dyck she copies faithfully according to the rules of the art. Her highly famous paintbrush brings forth powerful pictures.'[38]

De Bie's *Het gulden cabinet* was biography in the same vein as Giorgio Vasari's *Le Vite* of 1550 and Karl van Mander's *Schilder-boek* of 1604.[39] None claimed to be encyclopaedic. Their purpose was rather to serve as hagiographies, celebrating individual accomplishments and establishing a canon. From the Italian Renaissance on, this literary genre helped to raise the status of the medium of painting from craft to art.[40] The fact that de Bie acknowledged that Vergouwen

copied other painters indicates that she was renowned as a copyist in her lifetime. It also indicates that copying and imitation where and when she was active could be acknowledged and valued as an artistic skill.

Vergouwen's only known copy is of Anthony van Dyck's *Samson and Delilah* from 1628–30, painted long after in 1673 in oils on a copper plate. Just two years after Vergouwen completed it the paint was peeling off the copper plate to such an extent that it had to be restored and new paint applied by two painters in Madrid (to where it had been sold).[41] It is possible the paint might have flaked off when it was shipped from Antwerp, but a more likely reason is that the copy had been painted quickly using a poor technique, like so many of the copies from Antwerp that were flooding the international market in the seventeenth century.

The scene is the story in the Bible about the lovers Samson and Delilah, when Samson has been captured by his Philistine enemies after her betrayal, and Delilah tricks him into revealing that the secret of his great strength is his long, uncut hair, whereupon she sends a servant to cut Samson's hair while he is asleep. The scissors and locks of hair on the ground in front of Delilah's bed confirm the subject matter.

Anthony van Dyck was a painter, etcher, and engraver. Born in Antwerp, he received his training there and was registered as a master of the Antwerp guild of St Luke in 1618 at the age of 19. He won an international reputation as one of the finest painters and printmakers in Europe, and later moved to London where he was Charles I's court painter.[42] His initial success, however, was contingent on his being active in Antwerp, where he could profit from the collaborations between painters, printmakers, and publishers to print his work for an international market. Antwerp became a centre for producing copies after Van Dyck, both prints and paintings, as they were popular commodities and the demand for them only increased.[43]

As an art dealer and painter, Vergouwen capitalized on Van Dyck's popularity, having identified a demand for copies of his paintings.

There are some key differences between Vergouwen's copy and Van Dyck's original. Vergouwen's version was reversed for starters, and her colours and tones are considerably different. Things it must have been easy to make a qualified guess about—the sky, clouds, skin, armour—are painted in similar colours to the original. But when it comes to garments, drapery, and bedding, however, most of the colours differ considerably. It seems likely Vergouwen did not copy Van Dyck direct, but instead worked from a print of Van Dyck's painting.

Several engravings were made after Van Dyck's original; however, only one of them, by the Antwerp-based printmaker Hendrick Snyers, was of that particular painting printed in reverse. The engraving plate was probably done in the 1640s and then continued to be used for decades after that.[44] When an image was transferred between paintings or from drawings to print, the design was to be reversed to correct the effect of the printing process, when the image was printed onto paper from the engraving plate. This was usually achieved by doing an intermediary drawing which was turned over and then pounced with a tracing wheel.[45] In practice, however, artists sometimes skipped this step, with the result that many such printed images were reversed versions of the originals. Vergouwen probably copied Snyers's print without having seen the Van Dyck original or knowing that her version was reversed. More importantly, it is doubtful that Vergouwen would have cared that much, since her primary intention was not to pay artistic homage to Van Dyck but to meet customer demand.

The history of how this image migrated between painting and print did not stop there. In 1642 Snyers was hired for two years for another Antwerp-based painter, Abraham van Diepenbeeck, to engrave plates for printing according to Van Diepenbeeck's wishes.[46] Snyers's engraving of the Van Dyck *Samson and Delilah* had

Figure 8.5. Hendrick Snyers, *Samson and Delilah* (1635–44). © Rijksmuseum, Amsterdam.

been commissioned by Van Diepenbeeck, who in turn had painted a copy in grisaille, which was probably used as the model for the engraving. Grisaille, a method of painting in grey monochrome, was a link between the polychrome painting and the engraving, the colours being translated into tonal values, light, and dark.[47] Instead of working from the polychrome original, the printmaker thus worked from a copy in grisaille. This practice continued well into the nineteenth century, when photography took over the role of earlier graphic techniques to reproduce paintings. Still, a black-and-white photograph of a black-and-white painting gave a better visual result than a black-and-white photograph of a polychrome painting, so the grisaille method continued to be used for the specific purpose of painting copies that would serve as models for photographic reproduction.[48]

On closer inspection, further differences between the four images emerge. Borrowing from the vocabulary developed for digital image editing, we can say that Vergouwen chose to 'zoom out' from the central narrative part of the original motif by adding human figures and outer areas that were not part of the reproductive print by Snyers that she copied. Vergouwen thus added space and content to the dramatic scene by placing it in a setting with classical architecture, some extra background clouds and sky, and in the foreground an extra dog in the left corner, a broken column, and a few additional locks of Samson's hair. Moreover, when Van Dyck's original is compared with Van Diepenbeeck's version in grisaille, the linear composition and proportions seem to be copied exactly with the significant exception that Van Dyck chose to expose Delilah's left breast, while Van Diepenbeeck covered it with clothing. Perhaps this more modest attire would make it easier to sell the prints copied from Van Diepenbeeck's version.

In this chapter I have suggested a chain of images circulating by and between the media of paint and print. The first link in the chain was a copy by Johanna Vergouwen from 1673, which a close visual comparison with the other known copies and reproductions shows must have been based on a reproductive print by Hendrik Snyers, which in turn was based upon a copy painted in grisaille by Abraham van Diepenbeeck. The images considered here together tell the story of intermedial exchange and production of images in seventeenth-century Antwerp. Painters and printmakers specialized in copying and reproducing other artists' designs such as Vergouwen or Snyers represent craftmanship specialized in imitation and repetition that provided a cornerstone for the development of early modern visual culture.

The example of image circulation used in this chapter shows how even though every new painting and print in the suggested sequence of copied images was an imitation that repeated visual content, no two copies were the same. Instead, every time the composition

passed from medium to medium, a translation also occurred that added new content and meaning to every image, making them in a sense unique and original as well. The images in this chapter are variations on a given image prototype, and when compared with one another they provide evidence of the material characteristics of the medium and of media-specific copying techniques, as well as of the interplay between painting and print.

Notes

1 This work was supported by the Swedish Research Council, Grant 2018-06778.
2 Latour & Lowe 2011, 278. For copies, see Schwartz 2013.
3 Steyerl 2009; Schmidt 2019.
4 For the term 'reproduction', see Keuper 2018, 5–16.
5 Siegert 2015, 9–17; Bredekamp & Krämer 2013; Koch & Köhler 2013; Schüttpelz 2006, 88–90.
6 Macho 2003, 179; see also Balke et al. 2012; Hübener et al. 2020.
7 Benjamin 2008, 20.
8 Wood 2008, 16.
9 Mitchell 2015, 16–17.
10 Bloom 2006; Belting 2010, 7–16.
11 Rosenberg 2003.
12 See Wouk 2017.
13 Faries 2006.
14 For pouncing in early modern painting, see Vaccaro 2013, 229; Holmes 2004; Bambach 1999, chs. 1, 2.
15 Faries 2006, 4.
16 Alpers 1983, xvii–xxvii; Falkenhausen 2020, 58–9.
17 Peeters 2009, 154.
18 Onuf 2017, 24–5; Faries 2006, 4; Vermeylen 2003, 125–6, 155, 165; Wilson 1990.
19 Silver 1996.
20 Honig 1998, 109–114.
21 Griffiths 2016, 216; Vermeylen 2003, 153–72; Van der Stock 1998, 27; Honig 1998, 4–5; de Nave 1993.
22 Van der Linden 2015, 19–24; Honig 1998, 4, 104; Vermeylen 2003, 111–18; Van der Stock 1998, 43–52.
23 Nijboer et al. 2019, 4, 6.
24 Van der Linden 2015, 28–9. Similar new business patterns and trends also applied elsewhere in the Low Countries, see Jager 2020; Ho, 2018; Sluijter 2009, 6.

25 Diels 2009, 5–11; Van der Stock 1998, 43–52; de Nave 1993.

26 Vermeylen 2003, 128–9, 137.

27 Van der Stichelen & Vermeylen 2006, 192–192; Martens & Peeters 2006, 215.

28 Eisenstein 2011, 6–8.

29 Van der Stock 1998, 26–36.

30 Ibid. 108.

31 Ibid. 41, 105–108, 122.

32 Depauw & Luijten 1999, 19.

33 Duverger 2001, 46–8.

34 Ibid.

35 The two surviving portraits are of the Antwerp notary Andries Rademaker from 1656, oil on panel and *Portrait of two playing children on a balustrade*, 1668, oil on canvas; Duverger 2001, 53–6.

36 De Bie 1662.

37 *Grove Art Online*, s.v. 'Cornelis de Bie' by Christiaan Schuckman, 2003.

38 Duverger 2001, 53 and Heleen Wyffels, to whom I owe a debt of thanks for her assistance with the translation; De Bie 1662, 558: 'Joufvrouw *Vergoewen* in het copieren net, Die haer niet en ontsiet groot ordonnanti stucken, Van *Rubbens* en van *Dyck* als t'leven af te drucken, Te volghen naer den eysch als t'recht Origineel, Soo wonder krachten baert haer hooch beroempt Pinseel.'

39 The Italian art writer and painter Giorgio Vasari (1550) is often referred to as the first art historian because of his written account of Italian painters' lives in his influential *Le vite de più eccellenti architetti, pittori, et sculptori* (1550). Vasari established a hierarchy between fine arts and applied or decorative arts that still exists today, and his model was imitated by the Flemish art writer and painter Karel van Mander (1604) in his account of Northern art, *Het Schilder-Boeck*. Narratives of art in the tradition of Vasari and Van Mander are the reason for why the history of art has been written as the history of painters and original masterpieces, while other visual media such as printing have received less attention.

40 For Giorgio Vasari, Karel van Mander, and the invention of the concept of art, see Shiner 2001, 39–40; Wood 2019, 87–110.

41 Duverger 2001, 54; see also Wadum 1999.

42 *Oxford Art Online*, s.v. 'Sir Anthony van Dyck' by Jeremy Wood, 2011.

43 Depauw & Luijten 1999.

44 Depauw & Luijten 1999, 305–310.

45 Stewart 2013, 254.

46 Diels 2009, 137, 156–7; Depauw & Luijten 1999, 306.

47 *Oxford Art Online*, s.v. 'Grisaille' by Michaela Krieger, 2003.

48 Hess 2018.

References

Alpers, Svetlana (1983), *The art of describing: Dutch art in the seventeenth century* (Chicago: University of Chicago Press).

Balke, Friedrich, Bernhard Siegert & Joseph Vogl (2012) (eds.), *Mimesis: Archiv für Mediengeschichte 12* (Munich: Wilhelm Fink).

Bambach, Carmen (1999), *Drawing and painting in the Italian Renaissance workshop: Theory and practice, 1300–1600* (Cambridge: CUP).

Belting, Hans (2010), *Spiegel der Welt: Die Erfindung des Gemäldes in den Niederlanden* (Munich: C. H. Beck).

Benjamin, Walter (2008), *The work of art in the age of its technological reproducibility, and other writings on media* (Cambridge, MA: Harvard University Press).

Bie, Cornelis de (1662), *Het gulden cabinet van de edel vry schilderconst, inhoudende den lof vande vermarste schilders, architecten, beldthouwers ende plaetsnyders, van dese eeuw* (Antwerp).

Bloom, James J. (2006), 'Why painting?', in Neil de Marchi & Hans J. van Miegroet (eds.), *Mapping markets for paintings in Europe 1450–1750* (Turnhout: Brepols).

Bredekamp, Horst & Sybille Krämer (2013), 'Culture, technology, cultural techniques: Moving beyond text', *Theory, Culture & Society* 30/6, 20–29.

Depauw, Carl & Ger Luijten (1999) (eds.), *Anthony van Dyck as a printmaker* (New York: Rizzoli).

Diels, Ann (2009), *The shadow of Rubens: Print publishing in 17th-century Antwerp* (Turnhout: Brepols).

Duverger, Erik (2001), 'The Antwerp painter Joanna Vergouwen (1630–1714)', *Jaarboek Koninklijk Museum voor Schone Kunsten Antwerpen/Antwerp Royal Museum Annual 2000* (Royal Museum of Fine Arts Antwerp: Antwerp).

Eisenstein, Elisabeth (2011), *Divine art, infernal machine: The reception of printing in the West from first impressions to the sense of an ending* (Philadelphia: University of Pennsylvania Press).

Falkenhausen, Susanne von (2020), *Beyond the mirror: Seeing in art history and visual culture studies* (Bielefeld: transcript).

Faries, Molly (2006) (ed.), *Making and marketing: Studies of the painting process in fifteenth- and sixteenth-century Netherlandish workshops* (Turnhout: Brepols).

Griffiths, Antony (2016), *The print before photography: An introduction to European printmaking 1550–1820* (London: The British Museum Press).

Hess, Helmut (2018), 'Die Grisaille-Kopie als Transkriptionshilfe in der frühen Reproduktionsfotografie', in Marion Heisterberg, Susanne Müller-Bechtel & Antonia Putzger (eds.), *Nichts neues schaffen: Perspektiven auf die treue Kopie 1300–1900* (Berlin: De Gruyter).

Ho, Angela (2018), 'Marketing workshop versions in the 17th-century Dutch art market', in Maddalena Bellavitis (ed.), *Making copies in European art 1400–1600: Shifting tastes, modes of transmission, and changing contexts* (Leiden: Brill).

Holmes, Megan (2004), 'Copying practices and marketing strategies in a fif-

teenth-century Florentine painter's workshop', in Stephen J. Campbell & Stephen J. Milner (eds.), *Artistic exchange and cultural translation in the Italian Renaissance city* (New York: CUP).

Honig, Elizabeth Alice (1998), *Painting & the market in early modern Antwerp* (New Haven: Yale University Press).

Hübener, Andrea, Jörg Paulus & Fabian Winter (2020) (eds.), *Duplikat, Abschrift & Kopie: Kulturtechniken der Vervielfältigung* (Cologne: Böhlau).

Jager, Angela (2020), *The mass market for history paintings in seventeenth-century Amsterdam: Production, distribution, and consumption* (Amsterdam: AUP).

Keuper, Ulrike (2018) (ed.), *Reproduktion als Übersetzung: Eine Metapher und ihre Folgen—vom Salonsbericht bis zür frühen Fotokritik* (Paderborn: Wilhelm Fink).

Koch, Matthias & Christian Köhler (2013), 'Das kulturtechnische Apriori Friedrich Kittlers', in Friedrich Balke, Bernhard Siegert & Joseph Vogl (eds.), *Mediengeschichte nach Friedrich Kittler: Archiv für Mediengeschichte 13* (Munich: Wilhelm Fink).

Latour, Bruno & Adam Lowe (2011), 'The migration of the aura or how to explore the original through its facsimiles', in Thomas Bartscherer & Roderick Coover (eds.), *Switching codes: Thinking through digital technology in the humanities and the arts* (Chicago: University of Chicago Press).

Linden, David van der (2015), 'Coping with crisis: Career strategies of Antwerp painters after 1585', *Zeventiende Eeuw* 31/1, 18–54.

Macho, Thomas (2003), 'Zeit und Zahl: Kalender und Zeitrechnung als Kulturtechniken', in Sybille Krämer & Horst Bredekamp (eds.), *Bild-Schrift-Zahl* (Munich: Wilhelm Fink).

Mander, Karel van (1604), *Het Schilder-Boeck* (Haarlem), tr. as *Karel van Mander and his foundation of the noble, free art of painting* (Leiden 2023).

Martens, Maximiliaan P. J. & Natasja Peeters, 'Artists by numbers: Quantifying artists' trades in sixteenth-century Antwerp', in Faries 2006.

Mitchell, W. J. T. (2015), *Image science: Iconology, visual culture, and media aesthetics* (Chicago: University of Chicago Press).

Nave, Francine de (1993), 'A printing capital in its ascendancy, flowering, and decline', in Jan van der Stock (ed.), *Antwerp, story of a metropolis: 16th–17th century* (Gent: Snoeck-Ducaju & Zoon).

Nijboer, Harm, Judith Brouwer & Marten Jan Bok (2019), 'The painting industries of Antwerp and Amsterdam, 1500–1700: A data perspective', *Arts* 8/77, 1–11.

Onuf, Alexandra (2017), 'From print to paint and back again: Painting practices and print culture in early modern Antwerp', in Suzanne Karr Schmidt & Edward H. Wouk (eds.), *Prints in translation, 1450–1750: Image, materiality, space* (London: Routledge).

Oxford Art Online.

Peeters, Natasja (2009), 'The guild of Saint Luke and the painter's profession in Antwerp between *c.*1560 and 1585: Some social and economic insights',

Nederlands Kunsthistorisch Jaarboek/Netherlands Yearbook for History of Art 59, 137–67.

Rosenberg, Daniel (2003), 'Early modern information overload', *Journal of the History of Ideas* 64/1, 1–9.

Schmidt, Helena (2019), 'Poor images: Über copies in motion and wo man sie findet', *Art Education Research* 10/17, 1–12.

Schüttpelz, Erhard (2006), 'Die medienanthropologische Kehre der Kulturtechniken', in Lorenz Engell, Bernhard Siegert & Joseph Vogl (eds.), *Kulturgeschichte als Mediengeschichte (oder vice versa?)*: *Archiv für Mediengeschichte 6* (Weimar: Bauhaus).

Schwartz, Hillel (2013), *Culture of the copy: Striking likenesses, unreasonable facsimiles* (New York: Zone Books).

Shiner, Larry E. (2001), *The invention of art: A cultural history* (Chicago: University of Chicago Press).

Siegert, Bernhard (2015), *Cultural techniques: Grids, filters, doors, and other articulations of the real* (New York: Fordham University Press).

Silver, Larry (1996), 'Pieter Bruegel in the capital of capitalism', *Nederlands Kunsthistorisch Jaarboek/Netherlands Yearbook for History of Art* 47, 125–53.

Sluijter, Eric Jan (2009), 'On Brabant rubbish, economic competition, artistic rivalry, and the growth of the market for paintings in the first decades of the seventeenth century', *Journal of Historians of Netherlandish Art* 1/2, 1–31.

Stewart, Alison G. (2013), 'The birth of mass media: Printmaking in early modern Europe', in Babette Bohn & James M. Saslow (eds.), *A companion to Renaissance and Baroque art* (Chichester: John Wiley-Blackwell).

Steyerl, Hito (2009), 'In defense of the poor image', *E-Flux Journal* 10.

Stichelen, Katlijne van der & Filip Vermeylen (2006), 'The Antwerp guild of Saint Luke and the marketing of paintings, 1400–1700', in Neil de Marchi & Hans J. van Miegroet (eds.), *Mapping markets for paintings in Europe 1450–1750* (Turnhout: Brepols).

Stock, Jan van der (1998), *Printing images in Antwerp: The introduction of printmaking in a city: Fifteenth century to 1585* (Rotterdam: Sound & Vision Interactive).

Vaccaro, Mary (2013), 'Drawing in Renaissance Italy', in Babette Bohn & James M. Saslow (eds.), *A companion to Renaissance and Baroque art* (Chichester: John Wiley-Blackwell).

Vasari, Giorgio (1550), *Le vite de più eccellenti architetti, pittori, et sculptori* (Florence: Lorrenzo Torretino), tr. *Lives of the most excellent painters, sculptors, and architects* (New York 2006).

Vermeylen, Filip (2003), *Painting for the market: Commercialization of art in Antwerp's golden age* (Turnhout: Brepols).

Wadum, Jørgen (1999), 'Antwerp copper plates', in Michael K. Komanecky, (eds.), *Copper as canvas: Two centuries of masterpiece paintings on copper, 1575–1775* (Oxford: OUP).

Wilson, Jean C. (1990), 'Workshop patterns and the production of paintings in sixteenth-century Bruges', *Burlington Magazine* 132/1049, 523–7.

Wood, Christopher S. (2008), *Forgery, replica, fiction: Temporalities of German Renaissance art* (Chicago: Chicago University Press).

—— (2019), *A history of art history* (Princeton: PUP).

Wouk, Edward H. (2017), 'Toward an anthropology of print', in Suzanne Karr Schmidt & Edward H. Wouk (eds.), *Prints in translation, 1450–1750: Image, materiality, space* (London: Routledge).