

Colour

Victoria Finlay

Published by Sceptre

Extract

All text is copyright of the author

[Click here to buy this book and read more](#)

This opening extract is exclusive to Love**reading**.
Please print off and read at your leisure.

INTRODUCTION

The Paintbox

'In old days the secrets were the artist's; now he is the first to be kept in ignorance of what he is using.'

WILLIAM HOLMAN HUNT, in an address to the
London Society of Arts

'What did I learn at art school? I learned that art is painting, not painted.'

HARVEY FIERSTEIN, quoted in the exhibition 'A Family Album: Brooklyn Collects' at Brooklyn Museum of Art,
April 2001

The prison was called 'the stinker', and it was the place where debtors tended to disappear for years. This medieval Florentine institution would have lived up to its name particularly in summer, and it was on one such rank and smelly day in the mid-fifteenth century that a man sat at a wooden desk. To his left was a pile of handwritten papers, and to his right was one final page. Perhaps he paused for a moment before doing something that was probably forbidden to him as a prisoner of the Vatican: picking up his quill and marking the date – 31 July 1437 – and the words 'ex Stincharum, ecc'. The postscript not only notified readers that the document was written in the heart of the Stinche itself, but it also puzzled scholars for years.

The book was *Il Libro dell'Arte* by Cennino d'Andrea Cennini, and it was to become one of the most influential painting manuals written in the late medieval period – although it would take more than four centuries to find a

publisher. It was not the first 'how to' book of paint-making: there had been a few in the past, including the *Mappae Clavicula* from the ninth century which included a veritable hotchpotch of recipes for pigments and inks for illuminated manuscripts, and in the twelfth century the mysterious metal-working monk Theophilus wrote his *De Arte Diversibus* describing how to make stained glass and metalwork as well as paintings. But Cennino's book was special. He was an artist, the direct inheritor of a tradition¹ that stretched back to Giotto di Bondone in the late thirteenth century, and his *Handbook* was the first time a professional artist had revealed the secrets of his trade so comprehensively and openly. And when in the early nineteenth century the book was taken down from its shelf in the Vatican library, dusted off and published,² it was to cause a minor sensation in a European art world that was beginning to realise that in so single-mindedly pursuing its art it had neglected to remember enough of its craft.

At first, having read the 'Stinche' postscript, art historians imagined that the manual – later translated into English as *The Craftsman's Handbook* – was written by a criminal. They fondly pictured Cennino as an old man writing his memoirs in a miserable lock-up, so caught up by the beauty of the processes he was describing that he omitted to mention the ugliness of his present location. Just as Marco Polo only spoke of his travels into the heart of Asia many years later, when he had time on his hands and a willing scribe in his prison cell, so, people thought, his Tuscan compatriot only wrote about the mechanics of painting the shadows once he was locked firmly inside them. Sadly for the imagination, although rather happily for Cennino, later researchers found other copies of the manuscript without reference to any penitentiary. They had to concede reluctantly, that Cennino probably lived and died

a free man, and that the version with the postscript was written by a literate prisoner who was condemned to copying books for the Pope.³

Whenever I open Cennino's book – and he has acted as my 'guide' for many of the journeys in this book – I often think about that copyist. What kind of man would he have been? An educated one certainly: something of a scoundrel perhaps – in prison for debt, or for a white-collar (or black medieval velvet-collar) crime. He may have been in there for years, copying out pious prayers and religious treatises in neat longhand. And then suddenly, somewhere between a prayer book and a Bible, the prison librarian handed him his next project: a treatise containing the kind of valuable secrets that a man would never have dreamed would fall into his hands – at least not while he was doing prison labour.

As he began writing, our scribe may have felt a kinship with those whom Cennino chides for having chosen their artistic careers 'for profit' – as well as a distant curiosity about those others who had entered the profession 'through a sense of enthusiasm and exaltation'. And then a few pages later he may have felt a sense of exaltation himself. If he knew anything of the art world he would be aware of how secretive artists were about the tricks of their trade, and how in order to learn them apprentices lived in the studios of their masters for years, grinding pigments, preparing canvases, and then, after many years, being allowed to paint backgrounds and less important figures. It was usually only when they themselves became masters that they could stroll into their own studios to finish the faces and main figures on canvases their own apprentices had prepared earlier.

Here are some of the many things Cennino explains in his book: how to make imitations of expensive blue using cheaper pigments; how to use tracing paper (by scraping kid

skin until 'it barely holds together', then smearing it with linseed oil) to copy a master drawing; which types of panel were favoured by thirteenth- and fourteenth-century masters (fig wood was good) and how to paste old parchments together. Cennino claimed, probably sincerely, that his *Handbook* was intended for the good of artists everywhere, but if there had ever been a *Teach Yourself Medieval Art Forgery* guide, this was it. And our man in the jail had the document.

We cannot know whether our copyist ever managed to take advantage of his knowledge. I like to think so. I imagine him leaving the prison at the end of his term, and going into the equivalent of the antique business, touching up century-old panels with a judicious spot of gilded tin carefully prepared in the way that Cennino recommended, or mixing glues made of lime and cheese, just as Giotto might have used to fix his own painting boards.

But whether he capitalised on it or not there must have been days when our incarcerated scribe would have fantasised about cooking up green with good wine vinegar, or designing cloths of gold. No doubt he would have thought wistfully about being free to sit in chapels, sketching with the thigh bone of a gelded lamb and making sure the light was falling on his left side, so his drawing hand did not make a shadow across the paper. And he would certainly have paused for some kind of thought as he read Cennino's warning against something that can make your hand so unsteady 'that it will waver more, and flutter far more, than leaves do in the wind, and this is indulging too much in the company of women'.

The book has certainly inspired latter-day forgers. Eric Hebborn was one of Britain's best-known twentieth-century forgers, who became something of a celebrity. He wrote several books, but his last one, *The Art Forger's Handbook*,

explicitly set out to teach the amateur how to make decent fakes in the kitchen. He used and adapted Cennino's advice extensively – preparing panels, tinting papers different colours, and making brand-new works look as if they had been varnished some time before (by using beaten egg-white, left overnight and then painted on with a brush), just as the master advised.

But as well as forgery, in the years since it was rediscovered, Cennino's book (along with other early manuals of how to make paints and dyes) has inspired something rather different: a nostalgia for the past, especially among Victorians, for whom the late medieval period was an idealised time of the best art and the most noble chivalry. Today, if I want to buy paint, I can go into an art shop and find any number of tubes, each labelled with a name, number and a coloured pattern to tell me what its contents look like. Some paints have descriptive names like 'emerald green'; others have historical ones like 'vermilion' or hard-to-pronounce chemical ones like 'phthalo blue' or 'dioxazine purple'. Others, like 'burnt sienna' or 'lamp black', give clues about where the paint has come from and what has been done with it, even though it is unlikely that sienna still comes from the Tuscan town of Siena any more, or that that particular black comes from lamps. If I feel overwhelmed, browsing along those laden art-shop shelves, the assistant will almost certainly have a chart to tell me the permanence, opacity or toxicity levels of my chosen paints, and will be able to direct me to a shelf of manuals that will tell me how to use them. But despite all this help it is easy for the beginner to feel a little lost. It is partly the terms – what, for example, is the difference between Cadmium red hue and Cadmium red?⁴ – and it is partly the sheer breadth of choice. But it is also the sense that, not really knowing what these paints are or where they have come from, one

is somehow alienated from the process of making them into art.

That uncertainty about materials is not restricted to amateurs alone, nor is it restricted to the present day. In the eighteenth and nineteenth centuries, European artists were already beginning to feel alienated from their materials – and to sound alarm bells about this once they saw the cracks in their canvases. In April 1880 the Pre-Raphaelite William Holman Hunt stood before an audience at the Royal Society of Arts in London⁵ and gave a speech that summed up his despair about artists' loss of technical knowledge over the previous century or more.

The problem, he told his audience, was that artists had never learned the tricks their medieval predecessors had known from their first days as apprentices. What was the good of painting a masterpiece if its constituent elements would spend the next few years fighting together chemically on the canvas, and ultimately turn black? The early seventeenth-century painter Anthony Van Dyck knew how to employ varnish so that colours that would otherwise react with each other would be safe from ruin; Victorian artists, however, did not, and this was, Holman Hunt predicted, to be their downfall.

Part of the issue was that he – and his teachers, and his teachers' teachers – had rarely had to mix paint from basic materials. He had never had to grind a rock, or powder a root, or burn a twig, or crush a dried insect. Nor, more importantly, had he observed the chemical reactions involved in paint-making and seen how colours changed over the years. By his time, and in stark contrast with Cennino's pre-paintbox world, almost all artists' supplies were made and sold by professionals called colourmen. Hunt was particularly passionate on the day he spoke – or at least the day he prepared his speech – because his own colourman had

just sent him a bad batch of adulterated pigments, which had ruined one of his paintings.

The solution was not about doing everything oneself, he assured his listeners. Holman Hunt was the first to admit that some artists – like Leonardo da Vinci, whose patrons sometimes despaired that he would ever actually start the painting, he was kept so busy distilling and mixing – spent far too long on the preparation stages. After all, even the old-timers sometimes delegated – the excavations at Pompeii had unearthed paint pots in a workshop waiting for the artist to collect them, and Cennino himself had bought his vermilion ready made.

And the solution was also not to get rid of the colourmen. Some were excellent, Holman Hunt said – recounting legendary stories of a pharmacist in Holland who could make vermilion that was ‘three times brighter’ than anyone else’s, and of Michelangelo’s contemporary Antonio da Coreggio, who was famously helped to prepare oils and varnishes by a chemist whose portrait, in gratitude, ‘still exists in Dresden’. But what was urgently needed, he said, was for artists to spend time learning the basics of their trade, so that when they collaborated with colourmen they would know what they were talking about.⁶

Colourmen⁷ first appeared in the mid-seventeenth century, preparing canvases, supplying pigments, and making brushes. In France some of them were originally luxury goods grocers, selling exotica like chocolate and vanilla alongside the cochineal, but most of them quickly turned to full-time art supplying. The arrival of these professionals on the art scene was a sign – as Cennino’s book was a much earlier sign – of how the act of painting was moving from a craft profession to an art one. For ‘craftspeople’ the ability to manage one’s materials was all important; for ‘artists’ the dirty jobs of mixing and grinding were simply time-consuming obstacles

to the main business of creation. There were of course enough scare stories of charlatans adulterating colours to keep some artists mixing their own for several centuries. But slowly and irrevocably artists began to push their porphyry pestles and mortars to the backs of their workshops, while professional colourmen (or rather, in some cases, the horses of professional colourmen) did the grinding.

As well as the alienation of artists, putting paint-making into the hands of a few commercial dealers had another radical effect on the art world: technical innovation. When Cennino wrote his *Handbook*, artists were going through the all-important transition period between using tempera (egg) and oils (linseed or walnut or poppy were popular) as binders. Later Giorgio Vasari would ascribe this invention to Johannes and Hubert Van Eyck. Certainly the Flemish brothers' brilliantly translucent fifteenth-century oil paintings were the new medium's greatest early advertiser, but oils had been used for many years before that. In the late 1300s Cennino was already using oils to paint the top layer on a picture of a velvet gown, for example,⁸ and even in the sixth century a medical writer called Aetius was mentioning how artists used a 'drying oil', which was probably linseed.⁹ However, since the eighteenth century inventions and innovations have been coming in so quickly it is not surprising that some artists have been bewildered. It is not just the hundreds of new paints but also the mediums – pigments can now be suspended in acrylics, fast-drying alkyds and a whole range of gums and exotic oils¹⁰ – and even the packaging of paints which have changed.

One discovery that changed the art world was made by a young man called William Reeves in the late eighteenth century. He was a workman employed by a colourman called Middleton, but he spent some of his spare time doing experiments of his own. Up until then watercolours – which are

Introduction

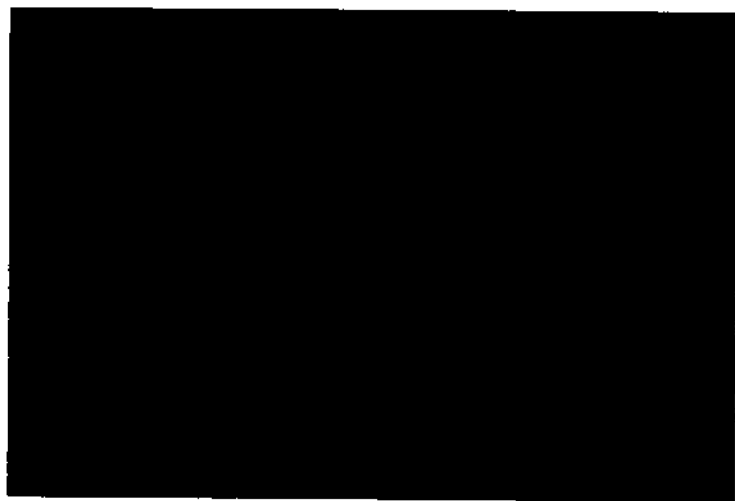
basically pigments mixed with water-soluble gum – had been sold in dry lumps that had to be grated. But Reeves found that honey mixed with gum arabic would not only stop the cakes from drying out, but also allow them to be moulded into regular shapes. His brother, who was a metalworker, made the moulds, and in 1766 Reeves & Son opened near St Paul's, supplying the army and the East India Company with the first watercolour paintboxes. It would take the collaboration of artist Henry Newton with chemist William Winsor in 1832 before anyone would think to add glycerine – meaning that watercolours no longer had to be rubbed and could be used straight from the pan. Suddenly it was easy – in terms of materials at least – to become an artist, and many enthusiastic amateurs followed Queen Victoria's lead in ordering the new paintboxes and using them out of doors to sketch landscapes.



*The Watercolour room at Winsor & Newton in the
mid-nineteenth century*

Oil painting *alfresco* was naturally the next big change. For centuries, artists had stored their paints in pigs' bladders. It was a painstaking process: they, or their apprentices, would carefully cut the thin skin into squares. Then they would spoon a nugget of wet paint on to each square, and tie up the little parcels at the top with string. When they wanted to paint, they would pierce the skin with a tack, squeeze the colour on to their palette and then mend the puncture. It was messy, especially when the bladders burst, but it was also wasteful, as the paint would dry out quickly. Then in 1841 a fashionable American portrait painter called John Goffe Rand devised the first collapsible tube – which he made of tin and sealed with pliers. After he had improved it the following year and patented it, artists in both Europe and America really began to appreciate the wonder of the portable paintbox. Jean Renoir once told his son that without oil paints in tubes: 'There would have been no Cézanne, no Monet, no Sisley or Pissarro: nothing of what the journalists were later to call Impressionism.' Impressionism, after all, was a movement that depended on recording nature in nature. Without being able to use colours outside it would have been hard for an artist like Monet to record the impressions that the movements of the light had made on him, and so create his atmospheric effects.

One of the most popular colourmen in Paris at the end of the nineteenth century was Julien Tanguy, affectionately nicknamed 'Père'. This jovial dealer and art supplier was an ex-convict who had once served time on a prison ship for subversion¹¹ – a biographical detail that no doubt endeared him to some of the post-Impressionists, who were his main customers. Paul Cézanne bought from him, as did Emile Bernard, who described going to Tanguy's shop at 14 rue Clauzel as being like 'visiting a museum'. Another famous (though impecunious) customer, Vincent Van Gogh, painted



*The Oil-colour Tube-filling room at Winsor & Newton
in the early days*

three portraits of Père Tanguy. The first, from 1886, is very brown – the subject looking rather like a workman, with just a touch of red on his lips and a spot of green on his apron.¹² Then, in the spring of 1887, Van Gogh changed his palette – experimenting with colour oppositions of red against green, orange against blue – and his work was never the same again. The other two portraits of Tanguy (dated 1887 and 1888) are a raucous celebration of the dealer's paint products. They show him standing in front of Japanese prints, kabuki actors competing on the walls with soft-focus cherry-tree landscapes. Suddenly blues are striped with yellows, and on top of Tanguy's hat is Mount Fuji, giving him the conical look of a rice farmer, rather than the quizzical look of a French merchant. Both paintings were part of what Van Gogh called his 'gymnastics' of experimenting with how to put intense colours rather than grey harmonies in his paintings.¹³

Van Gogh's relationship with the Tanguys was turbulent – Mme Tanguy frequently complained about the amount of credit the artist was given (blaming one's spouse for financial precision is a convenient way for a merchant to stay both amiable and solvent), and Van Gogh often complained in turn about the insipidness of some of the products.¹⁴ He may have been right: certainly someone was supplying him with fugitive paints, as there are several that have faded. One of the most popular works at Washington's National Gallery of Art is a Van Gogh painting that for years has been titled *White Roses*. It was only in the late 1990s that it was realised that it contained traces of what was probably madder red, and that the roses had originally been pink.¹⁵ When I visited the gallery shop in early 2001, the postcards labelled the painting simply as *Roses* but the posters, which were older stock, still bore witness to Van Gogh's choice of a paint that had faded.

Since the end of the eighteenth century we have seen dozens of new colours arrive on artists' palettes. The new colours are mostly beyond the scope of this book – but some of the more important were chromium (isolated by Louis Nicolas Vauquelin in 1797 from a rare orange mineral called crocoite), cadmium, which was discovered by accident in 1817 by a German chemist, Dr Stromeyer, and the 'aniline' colours first isolated from coal tar in 1856 by a teenage chemist called William Perkin, who reappears in my quest for purple.

But alongside the excitement of new discoveries, there has often been a parallel movement to rediscover the colours of the past. Shakespeare's Birthplace in Stratford-upon-Avon is one of England's most popular tourist destinations. In 2000 it was redecorated – from an arrangement of white walls and what, in retrospect, look from the photographs like 1970s curtains, to an attempt to reproduce in an authentic

way what Shakespeare actually grew up with in the sixteenth century. So 'painted cloths' – the kind of cheap alternatives to tapestries that a middle-class glove-maker could have afforded – have been made on unbleached linen, with the designs of naked putti and satyrs coloured in with ochre reds and yellows, lime white and soot, just as the Stratford 'peynter-steyners' and 'daubers' would have made them. Meanwhile the 'second-best bed'¹⁶ is now covered with curtains and bedspreads in astonishingly bright greens and oranges, as was the fashion of the time. The fabrics are made of a woven material called dornix – a wool-linen blend, dyed with natural plant extracts, which was last made in England in 1630.

It is a trend for authentication that is being followed by historical houses all over the world – from colonial Williamsburg in Virginia, which has become a centre for eighteenth-century paint technology, to a Tudor town house called Plas Mawr in Conwy, North Wales. At Plas Mawr the original wall decorations have been recreated – big-bosomed and near-naked caryatids leering pinkly from above fireplaces – so bright in their authentic organic and mineral colours (and certainly a shock if one had thought the Tudors liked whitewash or subtle effects best) that when I met the paint consultant, Peter Welford, he asked me whether I had my sunglasses with me.

This move to revisit the ghosts of pigments past, mixed with a sense of loss for what today we have forgotten, is not new at all. The Romans carefully copied the Greek polychrome techniques, the Chinese were always recreating and adapting the crafts and colours of previous dynasties, while Cennino's book itself was an attempt to preserve methods that he feared were about to disappear. And in the 1880s one of Holman Hunt's friends, the designer William Morris, was a major force in bringing back some of the old colours

being displaced by aniline dyes, calling the new ones 'hideous'¹⁷ and challenging people to take another look at the old colours, and see how 'magnificent' they were. It is almost as if every few generations we seem to realise we have assigned our predecessors to a black-and-white past, and then rejoice together at rediscovering that they loved colours too.

One of the most extraordinary moments in the history of paint happened in eighth-century Byzantium, where painted icons had been all but destroyed after senior church members argued it was against God's teaching to make images. There was passionate debate on both sides, and in the end it was resolved that the works were celebrations of the natural gifts of God. Not only in their depictions but in their materials – and that by using plants and rocks and insects and eggs God was glorified through the very body of the artwork.¹⁸ Which is one of the reasons why even today, when there is so much choice, it is an instinctive decision for an Orthodox icon painter to choose pigments that are as natural as possible.

'Look for the sign to Bog,' my instructions read. 'And then go along the other track.' I was looking for the studio-cottage of Aidan Hart, a New Zealand icon painter. The former Brother Aidan had been a novice Orthodox monk for sixteen years before leaving, with the blessings of his church, to get married. He was living on a very remote hillside on the Welsh borders: it seemed a fitting place to find a man who works with natural paints. He is not a rigid purist – there was a small pot of zinc white and a few other manufactured paints on his shelves among the intriguing flasks of coloured stones and powders from Siberian river banks, Turkish trees and Italian mountains – but over the years he had found that natural colours fitted not only with his sense of aesthetics, but with his theology.

‘The natural paints aren’t perfect . . . and that’s the point,’ he said, in words that would echo so much of what I would hear, throughout my travels, from people who worked with paints and dyes. He then poured a little French ultramarine powder (invented in the nineteenth century) on to his palm, to demonstrate his point. ‘All these crystals are the same size, and they reflect the light too evenly. It makes the paint less interesting than if you used real ultramarine, from stones.’

When Aidan starts an icon painting, he always begins in the traditional way, by applying gesso to a panel made of ash or oak. Gesso is the Italian word for gypsum or plaster of Paris, although in fact artists have a choice of ‘whitings’, including chalk or alabaster. First he paints several layers of rabbit-skin glue (which before it is added to water looks like demerara sugar and smells like a pet shop), after which he lays a piece of linen on top, so if the wood cracks later it can be replaced without damaging the painting. Then he adds a dozen layers of glue and chalk, and sands them down so finely that the panel looks startlingly like white Formica. The Orthodox tradition emphasises the light inside every human being: and so icon paintings also begin with light, which seems to shine through the pigments and through the gold laid on top.

Icons are not just stories in paintings, Hart explained. ‘The intention is to introduce you to reality, not to imitate nature. It is to show you not what you see, but what is real.’ So the figures of saints often go beyond the frame to show how there are no real boundaries, and buildings tend to have a strange perspective – you can see left and right and up and down, which is meant to represent the way God ‘sees’ the whole world at once. The use of natural pigments is similarly embodied in the Orthodox teaching that humanity – like all Creation – was created pure but not

perfect, and the purpose of being born is to reach your true potential. Grinding a piece of natural rock so that it becomes the blush on a saint's cheek can be seen as a parallel transformation.

If you open up a box of paints, there are numerous such stories hidden inside it. They are stories of sacredness and profanity, of nostalgia and innovation, of secrecy and myth, of luxury and texture, of profit and loss, of fading and poison, of cruelty and greed, and of the determination of some people to let nothing stop them in the pursuit of beauty. But in my travels through the paintbox I will start at the beginning: with the first coloured paints, and with what happened to one group of artists when one day they woke up and found their colours had been taken away.