

The Fitzwilliam Museum

**Hockney's Eye:
The Art and Technology of Depiction**

Large Font Label Book

Route starts in Gallery 3

**Please return to the entrance desk
before leaving the Museum**

Gallery 3

**Labels for Gallery 3 ordered
anti-clockwise from entrance**

Hockney's Eye

The Art and Technology of Depiction

This exhibition is the first to explore the many ways of seeing and depicting in the art of David Hockney, and to give an account of pictures and picture-making seen through his eyes.

Hockney is the most intellectually restless of the great contemporary artists. Over a long career, he has continuously explored how the surface of a flat picture can convey what we actually see, radically questioning traditional ways of depicting space, and engaging deeply with modern technologies. Naturalistic techniques familiar in works by earlier painters, including the optical rules of perspective, have been displaced in his art by more dynamic ways of seeing – what Hockney calls ‘eyeballing’.

Hockney's revolution has been conducted against the background of his intense dialogue with the Old Masters. His paintings and drawings are shown here in a series of provocative encounters with historic paintings and drawings.

Hockney's quest is underpinned by hands-on experimentation with the pre-photographic devices that are a focus of this exhibition: the camera obscura, the camera lucida and concave mirrors. The remarkable results lie behind his controversial claim that 'western art' from the Renaissance to the late nineteenth century was dominated by a 'camera culture', even before the invention of photography itself. He argues that artists routinely made use of optical tools and, more contentiously, that art historians have largely missed this pervasive aspect of their work.

Hockney, however, rejects photography and other optical systems as corresponding precisely to the way we see the world. He knows we are mobile and emotional viewers, our eyes connected to our brains – and to our hearts. We see things through the filters of memory and feeling, and in relation to our own bodies. And we are all different.

Doing Portraits

As a great living painter of portraits, David Hockney belongs to a tradition dating back to Antiquity in the history of European art. His pictures of people are visibly related to the works of many predecessors whose works are hung alongside his in this gallery, painters such as Carlo Dolci, William Hogarth and Joshua Reynolds. Yet, paradoxically, Hockney's very engagement with this time-honoured art form has been an act of rebellion.

In the 1960s, when Hockney came of age as an artist, the depiction of an individual's human features was generally considered to be hopelessly outdated. But Hockney never accepted this, saying 'They said you couldn't do portraits anymore. But you can, everything is open now. Portraiture remains infinite.'

Even when his pictures were closest to abstraction, they incorporated references to his thoughts, feelings and everyday life. Soon he began to develop ways of representing his sitters (and himself) that were at once absolutely contemporary and based on profound observation. His explorations of this idiom continue to the present day.

A Critic Observed

David Hockney (b.1937)

**Martin Gayford, 4th, 5th, 6th December
2013 from 82 Portraits and 1 Still Life, 2013**

Acrylic on canvas (one of an 82-part work)

Collection of the artist

This is part of a series, *82 Portraits and 1 Still Life*, which comprise a single, collective work. They are connected by time and space. Every sitter sat in the same chair in the same position relative to the artist for a similar time.

From this uniformity came individuality: everyone sat, looked and acted differently. The subject is one of the curators of this exhibition.

Three Seated Gentlemen

David Hockney (b.1937)

Portrait of Sir David Webster, 1971

Acrylic on canvas

Ross Foundation

Hockney's only commissioned portrait, this painting was based on a mixture of direct observation and photographs. 'I did a lot of drawings, usually when he was asleep', the artist remembers; 'when he was awake, I took a lot of photographs'. The sitter was not represented in his own domestic surroundings.

Hockney visited Webster on many occasions over a period of months, but he failed to find a suitable setting in his house. The picture was eventually painted in the artist's studio: the setting is just a 'table and chair and flowers', as Hockney put it.

The effect, imposing yet domestic, fits into the tradition of grand-manner British portraiture stretching back to Joshua Reynolds, whose unfinished double portrait of Lord Rockingham and Edmund Burke also comprises a chair and table, with still life details, all clearly studied from reality. But Reynolds's backdrop is imaginary, borrowed from portraits by Van Dyck and ultimately Titian in sixteenth-century Italy.

Sir David Webster was similarly not represented in his own domestic surroundings. Hockney visited him on many occasions over a period of months, but failed to find a suitable setting in his house. The picture was eventually painted in the artist's studio: the setting is just a 'table and chair and flowers', as Hockney put it.

Three Seated Gentlemen

Joshua Reynolds (1723 – 92)

**Lord Rockingham (1730 – 82)
and Edmund Burke (1729 – 97)**

c.1766

Oil on canvas

The Fitzwilliam Museum

Given by Charles Fairfax Murray, 1908 No. 653

Hockney's painting of Sir David Webster, exhibited nearby, was based on a mixture of direct observation and photographs. 'I did a lot of drawings, usually when he was asleep', the artist remembers; 'when he was awake, I took a lot of photographs'.

The effect, imposing yet domestic, fits into the tradition of grand-manner British portraiture stretching back to Joshua Reynolds, such as this unfinished double portrait of Lord Rockingham and Edmund Burke, which comprises a chair and table, with still life details, all clearly studied from life. But Reynolds's backdrop is imaginary, borrowed from portraits by Van Dyck and ultimately Titian in sixteenth-century Italy.

Thinking Men

David Hockney (b.1937)

A Man Thinking, 1962 – 63

Oil on canvas

Private collection

Hockney's painting and Dolci's portrait each alludes to their subject's mental state. In this early work, with typical directness, Hockney has used the cartoonist's convention of the 'think' balloon to suggest what is happening inside this imaginary figure's head — perhaps happy thoughts about the coming year of 1963?

Carlo Dolci indicates Sir Thomas Baines's intellectual preoccupations by his pensive expression, and by carefully labelling the philosophical tomes in front of him, *Plato and Aristotle*. Baines's engagement with these books is emphasised by his hands; he has looked up in the act of turning a page.

In full- and half-length portraits, Hockney has noted, 'It's important how the hands interact with the head. The eye moves from the head to the hands I think — flesh to flesh — and then you go back to the face if the hands are right. If they are a bit wrong, you stop there.'

Thinking Men

Carlo Dolci (1616 – 86)

Sir Thomas Baines, F.R.S., F.R.C.P. (1622 – 81)

1665 – 70

Oil on canvas

The Fitzwilliam Museum

Given by The National Art-Collections Fund, 1972

PD.13-1972

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Like Dolci's portrait, Hockney's painting — exhibited opposite — alludes to the subject's mental state.

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iPad Self-portraits, 2012

David Hockney (b.1937)

**Self Portrait II,
14th March 2012**

iPad drawing

Collection of the artist

David Hockney (b.1937)

**Self Portrait,
9th March 2012**

iPad drawing

Collection of the artist

David Hockney (b.1937)

**Self Portrait,
10th March 2012**

iPad drawing

Collection of the artist

David Hockney (b.1937)

**Self Portrait I,
13th March 2012**

iPad drawing

Collection of the artist

David Hockney (b.1937)

**Self Portrait I,
16th March 2012**

iPad drawing

Collection of the artist

David Hockney (b.1937)

**Self Portrait III,
20th March 2012**

iPad drawing

Collection of the artist

David Hockney (b.1937)

**Self Portrait I,
25th March 2012**

iPad drawing

Collection of the artist

In 2012 Hockney drew a series of 20 self portraits on his iPad. In these, the artist confronted himself in his pyjamas and dressing gown. He smoked, grimaced, looked himself squarely in the eye and saw an aging man in a cap, with a cigarette in his mouth. Here is a self-assessment as he approached the age of 75: light-hearted, even comic, but honest.

Ways to Paint Shame

David Hockney (b.1937)

Shame, 1960

Oil on board

Private collection

Alfred Elmore (1815 – 81)

On the Brink

1865

Oil on board

The Fitzwilliam Museum

Given by The Friends of the Fitzwilliam in memory of

Dr A.N.L. Munby, with a contribution from the

Victoria and Albert Museum Grant-in-Aid

PD.108-1975

Hockney is never merely a recorder of what he can see. Painted in 1960 when in his early twenties, *Shame* adopts the shallow space of Abstract Expressionism, created by paint marks rather than any form of perspective. This accentuates the impression of claustrophobic anguish and burning red ‘shame’. Here, no doubt, is a comment on the taboo nature of gay love before homosexual acts between men were legalised in England and Wales in 1967.

Juxtaposed with the hellish, gaslit glow in Alfred Elmore's painting, Hockney's picture shows us how Elmore positioned figures to reveal the desperate woman sitting pallid and forlorn in the evening gloom. She has lost her wager in the gambling room; a shadowy male figure propositions her; she is On The Brink of losing something even more precious. Shame.

Tygers Burning Bright

David Hockney (b.1937)

Tyger, 1960

Oil and pencil on board

Private collection

David Hockney (b.1937)

Tyger Painting No. 2, 1960

Oil on board

Private collection

George Stubbs (1724—1806)

Tygers at Play, 1776

Oil on canvas

On loan from a private collection,

Hong Kong PDL.3232-001

These two paintings by Hockney pre-date his first thinking about optical technologies and come close to the abstraction that was highly fashionable during his art school days. It should never be forgotten that part of his ambition is emotional.

He recalls, 'Having been trained at Bradford School of Art rather academically, which I'm now rather glad I was, I wanted to go against that. In my first year at the Royal College of Art in London I did a few kind-of Abstract Expressionist pictures.' But, Hockney adds, there was a difference, 'I quickly started putting words in them'.

Sometimes he referred to favourite poems, in this case, William Blake's *The Tyger*. When young, Hockney was attracted to 'romantic notions': in literature, music and 'seeing new things'. Stubbs's fantasy of big cats at play is an earlier example of a similar attraction to the distant and exotic.

Hockney and Hogarth

David Hockney (b.1937)

Self Portrait, 22nd November 2021

Acrylic on canvas

Collection of the artist

This vivid self portrait belongs to a group of works begun in late 2021. Like other such sequences by Hockney, these are defined by technique and time. They are all executed quickly and broadly so the marks of the artist's brush are clearly visible. Hockney quotes a Chinese proverb: to paint, three elements are required, 'the hand, the eye, and the heart. Two won't do.'

For Hockney, Hogarth ('a very good painter') is an important predecessor and reference point.

In 1975 he based his designs for Stravinsky's opera, *The Rake's Progress*, on Hogarth's engravings.

Hogarth's portrait of Richard James, a youthful, fresh-faced lawyer, demonstrates the close, truthful scrutiny both artists apply to their sitters. As Hockney says, 'Most people don't look at a face too long, you tend to look away. But not if you are painting a portrait.'

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Hockney and Hogarth

William Hogarth (1697 – 1764)

Portrait of Richard James of the Middle Temple (d.1772)

c.1744

Oil on canvas

The Fitzwilliam Museum

**Bequeathed by Dr D.M. McDonald, 1991, received 1992
PD.116-1992**

Hogarth's portrait of Richard James, a youthful, fresh-faced lawyer, demonstrates the close, truthful scrutiny both he and Hockney apply to their sitters. As Hockney says, 'Most people don't look at a face too long, you tend to look away. But not if you are painting a portrait'.

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Hockney and Hogarth

William Hogarth (1697–1764)

George Arnold (1683 –1766)

1738 – 40

Oil on canvas

The Fitzwilliam Museum

**Bequeathed by James William Arnold, 1865,
received 1873**

No. 21

Hogarth's portrait of George Arnold, a bluff merchant, demonstrates the close, truthful scrutiny both he and Hockney apply to their sitter. As Hockney says, 'Most people don't look at a face too long, you tend to look away. But not if you are painting a portrait.'

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Gallery 6

The Perspective Window

Early theorists of linear perspective — the optical method for portraying space — compared the results to looking through a framed window and tracing what could be seen. In this demonstration, the receding lines of the floor, walls and vault of the gallery are drawn on the window. They will match the real view if we look through the window from the right viewpoint.

You are standing in a perspectival space.

Linear perspective only works exactly if your eye is in a fixed position. When that happens, receding lines converge on a single ‘vanishing’ point. You can find the ‘right’ viewing position, beginning by positioning yourself on the spot marked ‘X’.

Perspectives on Perspective

Linear perspective is a technique that treats the surface of a picture like a window, on which is recorded what can be seen through the window when the observer is placed in a single, static position. This method can be seen in its purest form in Cosimo Rosselli's large *Virgin and Child with Saints* (opposite) and, in a more sophisticated way, in two small panel paintings by Domenico Veneziano, displayed alongside Hockney's painting.

Developed in the fifteenth century, the technique provides rules whereby forms painted on the picture's surface are represented as systematically smaller the further they are from the imagined spectator. If depicting a tiled floor, for example, lines along the sides of the tiles converge progressively towards a 'vanishing point'. The intervals between the horizontal lines of the tile diminish progressively in proportion to their notional distance from where we are. The result presents the illusion of a tiled floor that recedes into space behind the surface of the picture. Objects and people can then be 'placed' in specific positions within the painted space.

David Hockney comments, 'Renaissance European perspective has a vanishing point... a view from sitting still. It is not the way you usually see landscape; you are always moving through it. If you put in a vanishing point anywhere, it means you've stopped. In a way, you're hardly there.'

Angles on Angelico



Fra Angelico (c.1395 – 1455)

The Annunciation, c.1440—45

Fresco, 230 x 321 cm

Dormitory stairs, San Marco, Florence

Scala, Florence. Photo Raffaello Bencini



(From Top to Bottom)

David Hockney (b.1937)

**Annunciation I, Interior and Exterior with
Flowers from *The Brass Tacks Triptych*, 2017**

Acrylic on canvas, 48 x 96" (hexagonal)

David Hockney. Photo Credit: Richard Schmidt

David Hockney (b.1937)

**Annunciation II, after Fra Angelico
from *The Brass Tacks Triptych*, 2017**

Acrylic on canvas, 48 x 96" (hexagonal)

David Hockney. Photo Credit: Richard Schmidt

David Hockney (b.1937)

**Birth and Copulation and Death. That's all
the facts when you come to brass tacks from
The Brass Tacks Triptych, 2017**

Acrylic on canvas, 48 x 96" (shaped)

David Hockney. Photo Credit: Richard Schmidt

David Hockney (b.1937)

**Annunciation II, after Fra Angelico
from *The Brass Tacks Triptych*,
2017**

Acrylic on canvas

Collection of the artist

Hockney was very familiar with Fra Angelico's wall-painting of an Annunciation from a reproduction in his Bradford school. Years later he reshaped the Renaissance master's admired painting according to the different optical rule of reverse perspective as advocated by the Russian theologian and philosopher Florensky. The conventional 'vanishing point', in which parallel lines converge into the distance, is abandoned in favour of diagonal spaces in which the lateral margins of the floor converge towards us.

The lucid and harmonious space of the enclosed garden and the loggia of the Virgin's palatial home provide an elegant and tranquil setting for Gabriel's announcement that the Virgin was to give birth to Jesus, while an inscription reminds us to say a 'Hail Mary' as we turn into the corridors at the top of the stairs of the convent of San Marco in Florence.

Walking Into The Renaissance, Virtually

This film uses modern camera-matching software to project Domenico Veneziano's perspective into 3D.

The software reads the image as it would a photograph, and the 3D projection it creates allows us to see more clearly the spatial discrepancies and distortions in the picture's perspectival construction.

The analysis of the spaces created by Veneziano reveals the extraordinary effort on a small scale to create settings appropriate to each narrative. He exploits linear perspective with considerable ingenuity.

Modern techniques that allow us to see under the paint, revealing his planning, confirm that the settings consist of painters' architecture and that he has not rigidly followed the rules, for rendering in precise perspective, the structure of actual buildings.

In *The Annunciation*, Veneziano used a sharp instrument to incise key geometrical elements of the architecture, and its shadows, into the picture's surface, with a significant change of mind visible in the central arch. The converging lines of the building and pavement come to an abrupt halt in the area of the distant door. However, in the panel representing St Zenobius, Veneziano exploited perspective in a much less regular manner, using multiple vanishing points to describe the jumble of buildings in a typical Florentine street.

**From Renaissance Perspective to Computer Vision:
Exploring Domenico Veneziano's Approach to Pictorial
Space with Digital Technologies**

**Film created by florence4d.org and Fresh Ground Films.
Renderings and visualisations by Luca Brunke, research
by Francesca Aimi, Donal Cooper, Martin Kemp and
Fabrizio Nevola, realized with support from the Getty
Foundation and the Universities
of Exeter and Cambridge**

Exploring Florentine Space



Domenico Veneziano /

Domenico di Bartolomeo da Venezia (c.1410 – 61)

**The Saint Lucy Altarpiece (main panel),
c.1445—7**

Tempera on panel, 209 x 216 cm

Galleria degli Uffizi, Florence, 1890

n. 884

**2021. Photo Scala, Florence –
courtesy of the Ministero Beni e Att. Culturali e del Turismo**

Domenico Veneziano /

Domenico di Bartolomeo da Venezia (c.1410—61)

The Annunciation

c.1445—7

Tempera on panel

The Fitzwilliam Museum

Bequeathed by Frederick Fuller, 1923

No. 1106

Domenico Veneziano /

Domenico di Bartolomeo da Venezia (c.1410—61)

A Miracle of St Zenobius

c.1445—7

Tempera on panel

The Fitzwilliam Museum

Bequeathed by Frederick Fuller, 1923

No. 1106

These small panels are two of five that originally formed the base (called the predella) of the *Madonna and Child with Saints*, painted by Domenico Veneziano around 1445—7 for the church of Santa Lucia de' Magnoli in Florence. The main panel of the altarpiece, now in the Uffizi, is a masterpiece of early linear perspective.

***The Annunciation* was the central predella panel and was located vertically below the seated Virgin. It has been slightly cut down on the left. Mary inhabits a courtyard rendered in rigorous perspective. The space is meaningful. The enclosed garden (hortus conclusus) signifies Mary's virginity, barred by the closed door (porta clausa) – both symbols derived from the Song of Songs in the Old Testament.**

Saint Zenobius, bishop of Florence, prays for a bleeding boy who has been struck by an oxen cart. The drama of the distraught mother is played out against a brilliantly characterised townscape of domestic, civic and religious buildings, rendered with varied perspective.

Art and Perception: Hockney's Conversations

David Hockney (b.1937)

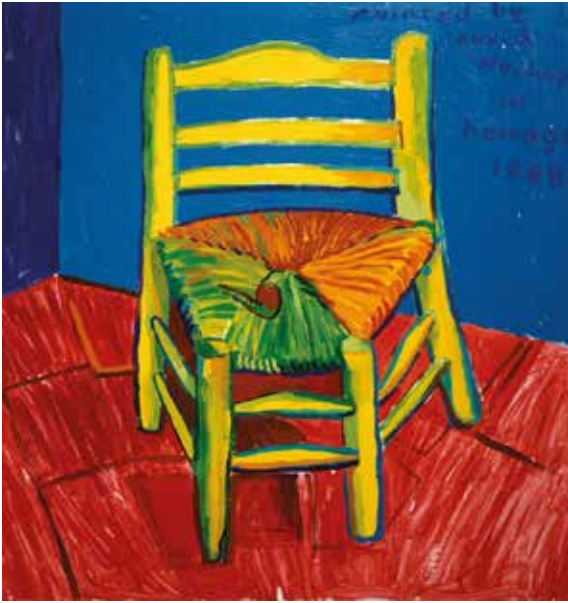
Colin Blakemore, 2018

Charcoal and crayon on canvas

Private collection

The distinguished brain scientist Sir Colin Blakemore, who specialises in vision, has enjoyed productive exchanges with Hockney about the relationship between art and perception. Blakemore visited the artist in Los Angeles in 2017. This portrait is one of a set that experiments with drawing media on canvas.

Reverse Perspective



David Hockney (b.1937)

Vincent's Chair and Pipe, 1988

Acrylic on canvas, 36 x 36"

Private collection © David Hockney

Long dismissive of the claims of Renaissance linear perspective to represent how we see objects in space, Hockney has recently been attracted by the notion of reverse perspective, as formulated by the Russian priest Pavel Florensky, executed under Stalin's regime in 1937. Florensky linked the traditional format of Russian and Byzantine religious icons with the spatial techniques of early twentieth-century Cubism. He believed that these icons had much earlier overthrown the strict rules of linear perspective in favour of less constrained modes of seeing.

Hockney's conception of reverse perspective is apparent in his reworked version of a chair from Van Gogh's *Bedroom in Arles*. We see not only the front of the seat and its two near legs, but also splayed views of the sides of the chair and its rear legs. The seat is wider at the back than the front. The image opens up as it moves into depth.

Gallery 7

Nicolas Poussin's Grande Machine



David Hockney (b.1937)

**1\” scale model, Act II, Final Version
from *Tristan und Isolde***

1987

Gouache, Acrylic, Foamcore, Plaster,

Paper and Wood, 74” x 78” x 66” (model)

© David Hockney Collection, The David Hockney Foundation

Poussin is known to have constructed various 3D models to help him organise space, light and narrative time in his paintings. In the most elaborate of these, he constructed a flat board within a chest-like box that formed a 'stage' on which he positioned small wax models of the protagonists. Apertures with sliding covers admitted light to best effect. A peep-hole allowed Poussin to view the overall composition in perspective and adjust as necessary.

We do not know for certain that Poussin used such a device when preparing the painting *Extreme Unction* (1638 – 42; exhibited nearby). But the remarkably taut composition, carefully studied lighting, melodious line linking gesture and expression and – especially – the perspectival marking on the floor, suggest that it was at least a strong possibility.

Hockney points out that 'Poussin made little models of the figures in his paintings to get his lighting right'. He himself used models while working on his designs for opera. 'Perspectives can't be quite real in the theatre', Hockney argues, 'because they have to create an illusion'.

Poussin Sets the Scene

Nicolas Poussin (1594 – 1665)

Extreme Unction

1638 – 40

Oil on canvas

The Fitzwilliam Museum

Accepted by H.M. Government in Lieu of Inheritance Tax and allocated to the Fitzwilliam Museum in 2012, and acquired with additional contributions after a public appeal led by The Art Fund from the Heritage Lottery Fund, The Friends of The Fitzwilliam, The Monument Trust, and a number of generous private individuals.

PD.11-2012

***Extreme Unction (or Final Anointing)* depicts a powerful and moving scene, as a family gathers at the bedside of a dying man as he is administered his last rites.**

The painting was likely made using a box structure with models similar to the one recreated nearby.

**Now turn right and walk down
the length of the gallery to a tall case
at the far end of the Italian room (Gallery 7)**

Darkened Chamber

Reflex Camera Obscura, c.1820

Wood, glass, paper

History of Science Museum, University of Oxford No. 78618

This is a standard type of portable camera obscura, similar to that owned by Canaletto. Inside the box, an inclined mirror corrects the upside-down image that enters the camera obscura — the ‘dark chamber’ — via the lens. A hinged viewing hood allows the image to be seen more luminously on the ground-glass screen under it.

Canaletto's Nephew – and His Camera

Bernardo Bellotto (Canaletto)

(1720 – 80)

**A View of the Arno Towards the
Ponte Vecchio in Florence**

c.1745

Oil on canvas

The Fitzwilliam Museum

Given by Augustus Arthur Vansittart, 1876

No. 192

Canaletto (Giovanni Antonio Canal)

(1697 – 1768)

**View of the Grand Canal: Santa Maria della
Salute and the Dogana from Campo Santa
Maria Zobenigo**

c.1730 – 34

Oil on canvas

The Fitzwilliam Museum

Bequeathed by Dr D.M. McDonald, 1992

PD.106-1992

Bernardo Bellotto (Canaletto)

(1720 – 80)

**A View at the Entrance of the Grand Canal,
Venice**

c.1741

Oil on canvas

The Fitzwilliam Museum

Bequeathed by Richard, 7th Viscount Fitzwilliam, 1816

No. 186

Bernardo Bellotto (Canaletto)

(1720 – 80)

**A View of the Arno Towards the
Ponte alla Carraia in Florence**

c.1745

Oil on canvas

The Fitzwilliam Museum

Given by Augustus Arthur Vansittart, 1876

No. 195

In his lifetime, the much-travelled nephew of Antonio Canaletto came to be known by his uncle-teacher's name, because of how well he emulated Antonio's manner of painting. In 1740, quite early in his career, Bernardo was invited to Florence. During four months in the spring and summer, he undertook a series of paintings of notable Florentine views, probably using a camera obscura. The view of the Ponte Vecchio looks up the river to the east, while its pair looks down it to the west.

**Continue into Gallery 8 (the Spanish Gallery)
immediately to your right**

Gallery 8

Hockney and Brueghel

David Hockney in front of Pieter Brueghel the Elder's *The Tower of Babel* (1563) at the Kunsthistorisches Museum, Vienna in 2018

© Dr Franz Pichorner

In 2018, on visiting an exhibition of Pieter Brueghel the Elder in Vienna, Hockney argued that he was looking at a show of great contemporary art because, 'if a picture is still exciting and interesting to you, it's still contemporary'. He was 'thrilled beyond words' by Brueghel's 'fantastic pictorial space', and the way 'every figure has a clear space within it'.

A Bigger Picture, Brueghel-style

Pieter Brueghel the Younger (c.1564 – 1637/8)

A Village Festival, with a Theatrical Performance and a Procession in Honour of St Hubert and St Anthony

1632

The Fitzwilliam Museum

Given by Harold, 1st Viscount Rothermere, 1927 No.1192

Pieter Brueghel the Younger specialised in variants of works by his father. This example employs a device the older painter often used: a view looking down over an extensive landscape from above, as if from an upper floor. The resulting vista — vast, yet packed with sharply focused detail — is too big, as Hockney has noted, ‘to photograph, even with the widest lens’.

Spectacles and Cameras

Bartolomé Esteban Murillo (1617 – 82)

St John the Baptist with the Scribes and Pharisees

c.1655

Oil on canvas

The Fitzwilliam Museum Purchased by W.W. Burdon, 1869

No. 334

An early description of the camera obscura as a tool for artists appeared in 1568. It occurs in a treatise on the rules of perspective by Daniele Barbaro, a Venetian humanist and patron of the visual arts.

He described how one should darken a room, allowing no light in except through a lens.

Then, 'on the paper you will see the whole view as it really is, with its distances, its colours and shadows and motion, the clouds, the water twinkling, the birds flying. By holding the paper steady, you can trace the whole perspective with a pen, shade it and delicately colour it from nature.'

Barbaro suggested a convex lens, 'as used by old men in their spectacles'. Glasses were invented in Italy in the thirteenth century, and were in widespread use by the late Middle Ages. One of the Pharisees in this painting by the seventeenth-century Spanish artist, Murillo, is wearing a pair.

**Continue into the
Gallery 10 (Octagon Gallery)
which adjoins the gallery you are in**

Gallery 10

**Start with the central case
and then continue anticlockwise
from the left of the door
you entered through**

Seeing Them Watching Us

When invited to contribute to the exhibition *Encounters: New Art from Old* at the National Gallery, London, in 2000, Hockney chose not to respond to works of art in the gallery's collection as most of his contemporaries had done. Instead, using a camera lucida combined with freehand drawing, he portrayed a group of the gallery's front-of-house staff, whose job it was to watch members of the public as they looked at art.

The series *12 Portraits After Ingres in a Uniform Style* was inspired by a temporary exhibition of Ingres's portraits then presented at the gallery. The title expressly acknowledges Ingres as Hockney's source of inspiration while punning on the notion of the uniform. How can uniformity create diversity in portraiture?

Consistency in size, poses, and props – chair, unisex regulation blazers and security badges – anchors the ensemble, accentuating difference, highlighting individuality. As with Ingres's portraits, we are drawn to the sitters' distinctive facial features. The guards have uniqueness in numbers.

Lens, Eyes and 'Eyeballing'

Model of the human eye in the form of a camera obscura, c.1850 – 1900

Metal (brass and lead alloy), glass, enamel

Whipple Museum of the History of Science,

University of Cambridge

No. 5984

In this engaging demonstration, the human eye is set up as a camera obscura. The lens at the front of the sphere is enamelled with flesh-colour and a blue iris. At the rear of the eyeball, an extendable brass tube contains a glass screen on which the image is projected. The lenses serve to obtain a clear focus on the seen object.

David Hockney (b.1937)

**12 Portraits After Ingres in a Uniform Style;
Ron Lillywhite, London, 17th December 1999**

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

**12 Portraits After Ingres in a Uniform Style;
Maria Vasquez, London, 21st December 1999**

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

**12 Portraits After Ingres in a Uniform Style;
Jack Kettlewell, London, 13th December
1999**

Pencil and coloured pencil and gouache on paper

Private collection

Ingres, Portraiture and Uniformity

**Charles Joseph Hullmandel (1789 – 1850),
after Jean-Auguste-Dominique Ingres (1780 – 1867)**

**Katherine Anne (North),
Lady Glenbervie (1760 – 1817)**

c.1815 – 1823

Lithograph on paper

The Fitzwilliam Museum

Given by John Charrington, 1933

P.14248-R

**Charles Joseph Hullmandel
(1789—1850), after Jean-Auguste-Dominique Ingres
(1780–1867)**

**Sylvester (Douglas),
Baron Glenbervie (1743 – 1823)**

c.1815 – 1823

Lithograph on paper

The Fitzwilliam Museum

Given by John Charrington, 1933

P.14249-R

**Charles Joseph Hullmandel (1789 – 1850),
after Jean-Auguste-Dominique Ingres (1780 – 1867)
The Hon Frederic Sylvester Douglas
(1791 – 1819)**

c.1815 – 1823

Lithograph on paper

The Fitzwilliam Museum

Given by John Charrington, 1933

P.14250-R

**Charles Joseph Hullmandel (1789 – 1850),
after Jean-Auguste-Dominique Ingres (1780 – 1867)
Frederick (North), Earl of Guildford
(1766 – 1827)**

c.1815 – 1823

Lithograph on paper

The Fitzwilliam Museum

Given by John Charrington, 1933

P.14251-R

During the 14 years he spent in Italy, Ingres made hundreds of portraits of the travellers from across Europe who converged on the city. Among his first sitters were the North-Glenbervie family. Between 1815 and 1816, Ingres drew Frederick North – who actively promoted Ingres among his British contemporaries – as well as his nephew, the Honorable Sylvester North Douglas, and Douglas's parents, Lord and Lady Glenbervie.

At some point before Lord Glenbervie's death in 1823, all four portraits were grouped on one lithographic stone and published in London by Charles Hullmandel; many sheets, like these, were also printed, and collected, separately. Whether or not Ingres drew their portraits using a camera lucida, the uniformity of the portraits' dimensions and the sitters' poses create a tight-knit family grouping: a partly posthumous memento of their time together in Italy.

David Hockney (b.1937)

**12 Portraits After Ingres in a Uniform Style;
Ken Bradford, London, 20th December 1999**

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

**12 Portraits After Ingres in a Uniform Style;
Fazila Jhungoor, London, 18th December
1999**

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

**12 Portraits After Ingres in a Uniform Style;
Vincent Simon, London, 16th December
1999**

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

12 Portraits After Ingres in a Uniform Style;

Pravin Patel, London, 5th January 2000

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

12 Portraits After Ingres in a Uniform Style;

Devlin Crow, London, 11th January 2000

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

12 Portraits After Ingres in a Uniform Style;

Katherine Dooley, London, 6th January 2000

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

12 Portraits After Ingres in a Uniform Style;

Graham Eve, London, 7th January 2000

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

12 Portraits After Ingres in a Uniform Style;

Lena James, London, 3rd January 2000

Pencil and coloured pencil and gouache on paper

Private collection

David Hockney (b.1937)

12 Portraits After Ingres in a Uniform Style;

Brian Wedlake, London, 10th January 2000

Pencil and coloured pencil and gouache on paper

Private collection

**Now walk back through
the last two galleries of the exhibition
(Gallery 8 and 10)
to Gallery 17 (the Flowers Gallery)**

**As you walk through Gallery 10
you will see the next artwork;
David Hockney's *Beach Umbrella* visible
through the doors**

Gallery 17

What a Shadow Shows Us

David Hockney (b.1937)

Beach Umbrella, 1971

Acrylic on canvas

Private collection

This is a brilliant exercise on a theme that has long fascinated Hockney: the shadow. Rather than the brightly coloured umbrella itself, it is the shade it casts that creates visual drama in this picture — and the space. Hockney has come to connect the prominence of shadows in European art to optical instruments. The camera, he believes, made us shadow-conscious.

How to Make Flowers Last

Jan Brueghel the Elder (1568 – 1625)

A Stoneware Vase of Flowers

c.1607 – 8

Oil on panel

The Fitzwilliam Museum

**Bequeathed by Henry Rogers Broughton Fairhaven, 1973,
received 1975**

PD.20-1975

When Hockney discovered the iPhone, and subsequently the iPad, as drawing tools he was excited by their potential. ‘This is a real new medium’, he explained, ‘So much variety is possible. You can’t overwork this because it’s not a real surface. And you can put anything on anything: a bright, bright blue on top of an intense yellow.’ Over the following period he explored the huge range of diverse marks and textures that the tablet and Brushes app enabled him to make.

For a time, Hockney would email a new drawing every morning to acquaintances — often a bouquet in a vase on his windowsill. As he said, ‘I draw flowers every day and send them to friends, so they get fresh flowers every morning. And my flowers last!’ As of course, actual blooms quickly wither.

In Jan Brueghel's picture, the jewels lying beside the vase suggest the transience of worldly wealth. The dragonfly, bee and butterfly hidden amongst the petals are equally ephemeral. The implicit message of all flower paintings is tempus fugit: time flies. However, as Hockney notes, pictures are more permanent.

How to Make Flowers Last

David Hockney (b.1937)

14th July 2010

iPad drawing

Collection of the artist

David Hockney (b.1937)

6th January 2011

iPad drawing

Collection of the artist

David Hockney (b.1937)

6th July 2010

iPad drawing

Collection of the artist

David Hockney (b.1937)

30th June 2010

iPad drawing

Collection of the artist

David Hockney (b.1937)

21st August 2010

iPad drawing

Collection of the artist

David Hockney (b.1937)

7th March 2011

iPad drawing

Collection of the artist

David Hockney (b.1937)

9th January 2011

iPad drawing

Collection of the artist

David Hockney (b.1937)

11th May 2011

iPad drawing

Collection of the artist

David Hockney (b.1937)

16th June 2011

iPad drawing

Collection of the artist

David Hockney (b.1937)

20th February 2011

iPad drawing

Collection of the artist

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Continue to your right into Gallery 15

**Upon entering the gallery
circulate anticlockwise**

Gallery 15

**Upon entering the gallery
circulate anti-clockwise**

Perspective, Orthodox and Reverse

Hockney's rejection of perspective with its fixed 'vanishing point' does not imply his automatic dismissal of painters who have used it, such as the seventeenth-century Dutch masters, Pieter Saenredam and Gerrit Berckheyde. Hockney's own more orthodox landscapes, like *Huggate St Mary's*, continue to rely on non-geometrical clues of scale in naturalistic pictures. However, he does reject the idea that orthodox perspective painting and straightforward photography producing a single image are the 'correct' ways to represent what we see.

One of his major paintings, *Le Parc des Sources*, plays ironically with perspective. It is a painted illusion of an actual illusion. The lawn is actually triangular and the trees are less tall on either side as they retreat into depth.

And Hockney delights in Meindert Hobbema's spacious Avenue at *Middelharnis*. But in his radical variation of the picture, he abandons the 'vanishing point' in favour of reverse perspective. Lines that are parallel in the features depicted in Hobbema's view now open up towards us as we look into Hockney's picture. This differently conceived painted space now embodies time, memory and motion – the ways we see different views of an object as we pass it, supplemented by our knowledge or memory of its complete appearance.

Onwards and Outwards and Upwards

David Hockney (b.1937)

After Hobbema (Useful Knowledge), 2017

Acrylic on six canvases Collection of the artist

Hobbema's *The Avenue at Middelharnis* has been crucial to Hockney's recent explorations of visual space.

He is fascinated by its combination of plunging space and soaring verticality. Yet he reorders the space according to reverse perspective, in which the fields on either side converge as they become closer to us. Hockney also disrupts Hobbema's central focus in favour of dispersed centres of visual interest on shaped canvases.

Straight Down the Avenue

Meindert Hobbema (1638 – 1709)

The Avenue at Middelharnis, 1689

Oil on canvas

The National Gallery, London, Bough, 1871

NG830

Hobbema's most famous picture is his last major work and is exceptional in his career for its emphasis on perspective. Most of his paintings depict forest scenes of an informal nature. The arrow-straight road to Middelharnis is flanked by heavily pruned trees, probably oak. Distinct zones of land are dedicated to the cultivation of trees, while on the right the ships' masts speak of Dutch overseas trade.

Trompe l'Oeil, French Style

David Hockney (b.1937)

Le Parc des Sources, Vichy, 1970

Acrylic on canvas

Private lender

This painting represents the painter's friend Ossie Clark and Hockney's then partner Peter Schlesinger, seated in two chairs. They are seen from behind, as if watching a performance — which in a way, they are. The heavily trained trees and lawn in the park form a triangle, not an avenue. It is a picture of an illusion: the horticultural equivalent of a theatrical set.

Making Space

David Hockney (b.1937)

California Bank, 1964

Acrylic on canvas

Private collection

Gerrit Adriaensz Berckheyde (1638 – 98)

The Town Hall of Amsterdam

c.1674

Oil on panel

The Fitzwilliam Museum

Bequeathed by Richard, 7th Viscount Fitzwilliam, 1816

No. 44

Gerrit Adriaensz Berckheyde (1638 – 98)

The Great Church at Haarlem

1674

Oil on panel

The Fitzwilliam Museum

Bequeathed by Richard, 7th Viscount Fitzwilliam, 1816

No. 47

California Bank is one of Hockney's earliest depictions of Los Angeles, a city he described as being visually unknown. The grid-like building plays wittily on the 'hard-edge' geometrical abstraction, which was then fashionable. But, with an abracadabra, Hockney also conjured space out of the flat surface by placing a few blobs of vegetation in front of the multi-storey structure.

This device was used in a tradition of urban topographical painting going back to painters such as Berckheyde and beyond. In these seventeenth-century Dutch paintings, space is created by perspective recession, perhaps based on camera obscura studies. But space is also created just as Hockney does here: by positioning objects, figures and dark shadows in the foreground against the distant buildings.

Gerrit Berckheyde was taught by his older brother, Job, and they set up a shared studio in Haarlem. Gerrit is chiefly known for his townscapes painted in emphatic perspective with powerfully cast shadows. It is possible that he used a camera obscura to capture the coherent description of space, light and shade, the primary characteristics of his art.

Cornelius Varley: Artist-inventor

Cornelius Varley (1781—1873)

Patent Graphic Telescope, c.1840

Brass, bronze, copper, glass

Whipple Museum of the History of Science,

University of Cambridge

No. 0069

The Graphic Telescope patented by Cornelius Varley in 1811 resembled the camera lucida in that it allowed an image of what was in front of the camera to be superimposed on the horizontal drawing surface.

The key was the precision-made eyepiece with a razor-edge mirror angled in such a way that permitted simultaneous viewing. The telescopic body of the device allows a very wide range of magnifications.

Painting Nature

David Hockney (b.1937)

**Huggate, St Mary's Church Spire,
August 2005**

Oil on canvas

On loan to the Fitzwilliam Museum

from the Estate of the late Mrs Elizabeth Corob

John Constable (1776 – 1837)

Hampstead Heath

c.1820

Oil on canvas

The Fitzwilliam Museum

Purchased from The Marlay Fund

**with a contribution from The National Art-Collections Fund,
1948**

PD.207-1948

Meindert Hobbema (1638 – 1709)

A Wooded Landscape

1667

Oil on canvas

The Fitzwilliam Museum

Given by Augustus Arthur Vansittart, 1876

No. 49

‘Landscape’, according to Hockney, ‘is a spatial thrill’. It is a sensation that can be enjoyed in these three paintings, from three distinct eras: the seventeenth, nineteenth and twenty-first centuries. In each case, space recedes into the distance — to a far horizon in the case of Constable and Hockney. But this sense is not created by the neatly converging lines of Renaissance perspective.

This, as Hockney points out, was formulated by architects, like the fifteenth-century Italians Brunelleschi and Alberti. As such, ‘its rules are all about buildings; you don’t notice the perspective so much in trees and vegetation’. Nor, one might add, in that favourite subject of all three of these artists: the skylines of billowing clouds.

Constable famously observed that such a sky is ‘the chief organ of sentiment’ in a picture. He was himself much inspired by Dutch artists of the seventeenth century, including Hobbema.

Through a Lens, Darkly

Adriaen Coorte (c.1665 – 1707/10)

A Bundle of Asparagus

1703

Oil on canvas

The Fitzwilliam Museum

Given by Frank Brangwyn, 1943

No. 2575

Little is known about Adriaen Coorte. He is thought to have been born and died at Middelburg in the province of Zeeland, and was trained in Amsterdam.

Details of his working methods are similarly obscure, but his limpidly beautiful works with their small-scale, dark backgrounds and meticulous observation of the fall of light and distribution of shadows, suggest he might have used a small camera obscura.

Coorte's working life was close both chronologically and geographically to that of Willem Jacob 's Gravesande, a mathematician, astronomer and professor at the University of Leiden who published his *Essai de Perspective* in 1711. The latter simply took it for granted that 'Everyone knows how easy it is by one convex glass only, to represent Outward objects in any darken'd place, according to their natural Appearances'.

Gallery 15

Table Cases

Drawn with the Telescope

Cornelius Varley (1781 – 1873)

Vale of the Exe from Tiverton, Devon

1824

Pencil on paper

The Fitzwilliam Museum

Sir Ivor and Lady Batchelor Bequest, 2015

PD. 179-2015

The drawing is inscribed, lower left, with the initials 'PGT' signifying that Varley made it using his Patent Graphic Telescope. Sometimes he added these initials retrospectively, including to drawings made before the device was patented in 1811.

It may be that the inscription was added to demonstrate the powers of the instrument to fellow artists eager to experiment with the device.

Perspectival Truth

Cornelius Varley (1781 – 1873)

Study of a Masted Boat

c.1823

Pencil and watercolour on paper

The Fitzwilliam Museum

Purchased from the Biffen Fund, 1993

PD.42-1993

Varley published two books of prints of shipping, in 1809 and 1847. In the latter, Drawing Book of Boats, he specified that he had drawn the vessels using his Graphic Telescope ‘so as to secure both truth of form and perspective’.

This drawing was probably made by Varley in 1823, using a Graphic Telescope to capture ‘all [the] minutiae of rigging’, with watercolour washes added later.

Reverse Perspective



David Hockney (b.1937)

Vincent's Chair and Pipe, 1988

Acrylic on canvas, 36 x 36"

Private collection © David Hockney

Long dismissive of the claims of Renaissance linear perspective to represent how we see objects in space, Hockney has recently been attracted by the notion of reverse perspective, as formulated by the Russian priest Pavel Florensky, executed under Stalin's regime in 1937. Florensky linked the traditional format of Russian and Byzantine religious icons with the spatial techniques of early twentieth-century Cubism. He believed that these icons had much earlier overthrown the strict rules of linear perspective in favour of less constrained modes of seeing.

Hockney's conception of reverse perspective is apparent in his reworked version of a chair from Van Gogh's *Bedroom in Arles*. We see not only the front of the seat and its two near legs, but also splayed views of the sides of the chair and its rear legs. The seat is wider at the back than the front. The image opens up as it moves into depth.

Gallery 14

Artists and Optical Aids

Since 1991, Hockney has experimented enthusiastically with the camera lucida, mainly for portraits.

The period 1800–80 witnessed an extraordinary flourishing of theoretical innovation, practical invention and popular interest in optical theory and the development and use of optical instruments. Invented by William Hyde Wollaston in 1806, it replaced the more cumbersome camera obscura as the artist's optical instrument of choice.

Within a decade, scientists and instrument-makers across Europe had created ever-more sophisticated devices based on Wollaston's invention. The Graphic Telescope, patented in 1811 by British artist–scientist Cornelius Varley, extended the range of magnification and uses of the device. In Europe, the most successful variant was developed later in the decade by the physicist, astronomer and optician Giovanni Battista Amici, who cleverly marketed it in Italy, France and beyond.

The camera lucida was not always easy to use. William Henry Fox Talbot's frustration with his abject efforts to draw with devices led him to explore ways of using light-sensitive chemicals to 'fix' the elusive images, and so to the birth of photography.

Drawn in a Camera

Thomas Sandby (1721 – 98)

Windsor Castle from the Goswells

Drawn in a Camera,

c.1760 –70

Pencil, pen and ink and watercolour on paper

Royal Collection Trust

© Her Majesty Queen Elizabeth II, 2022

RCIN914602

‘Drawn in a camera’, as recorded in Thomas Sandby’s inscription, this panorama of Windsor seen across the Thames was assembled from four views joined together. He has skilfully disguised the junctions of the four different perspectives produced by turning the camera.

Brother of the topographical painter, Paul, Sandby was a military draftsman and architect, well skilled in surveying and measured drawing.

Girtin and the Camera Obscura

Thomas Girtin (1775 – 1802)

View of the Louvre and the Pont des Tuileries from the Pont Neuf, from A Selection of Twenty of the Most Picturesque Views in Paris and its Environs 1801

Soft-ground etching, pencil and watercolour on paper
The Fitzwilliam Museum

Purchased from the Biffen Fund, with a contribution from the
Victoria and Albert Museum Grant-in-Aid
PD.5-1983

A brilliant and short-lived topographical draftsman and close friend of Turner, Thomas Girtin was responsible in the last two years of years of his life for a grand volume of wide-angle views of Paris, *A Selection of Twenty of the Most Picturesque Views in Paris and its Environs*, and a huge project for a walk-in panorama of London, the *Eidometropolis* (now lost).

It seems likely that he used a camera obscura to take multiple views for his London panorama from a central position. His sweeping views of Paris may have used a camera that panned across the scene. His finished watercolours were worked up in the studio from rapid notations. His preliminary sketch of Lancaster exhibits the simple outlines that often characterise camera drawings.

Portraits and the Patent Graphic Telescope

Cornelius Varley (1781 – 1873)

**Portrait of William J. Booth (c.1796 – 1871),
Head in Profile**

1811

Pencil on paper

The Fitzwilliam Museum

Sir Ivor and Lady Batchelor Bequest, 2015

PD.178-2015

While John Varley used the Graphic Telescope to draw portraits of fellow artists, his brother Cornelius portrayed figures from a wider circle of scholars or scientists.

These included their uncle, Samuel Varley, a watchmaker noted for his fine lenses and philosophical instruments, and 15 year-old William Booth, who went on to become an architect and surveyor to the Draper's Company estates in County Derry from 1827 to 1855.

Portraits and the Patent Graphic Telescope

John Varley (1778 – 1842)

Portrait of William Havell (1782 – 1857)

c.1810—11

Pencil on paper

The Wordsworth Trust, Dove Cottage, Grasmere

1997.2.2

Cornelius Varley's older brother, John, a distinguished watercolour painter and drawing master, apparently drew the first portrait using the Graphic Telescope after it had been patented in 1811.

But both artists clearly used the device before this, in John's case to make portraits of artists in their circle, such as this drawing of his friend and fellow watercolourist, William Havell.

Drawing Without a Camera

David Hockney (b.1937)

William Hardie, March 11

1994

Pencil and crayon on paper

Private collection

Hockney's camera lucida portraits developed from his long-standing practice of making rapidly drawn portraits of friends and acquaintances in a similar format, such as this drawing of the art dealer Bill Hardie.

As Hockney has repeatedly insisted, using the device is not a substitute for artistic training, it cannot 'draw for you'.

Scientists and the Camera Lucida

Camera Lucida

1850

Metal (brass), glass

Whipple Museum of the History of Science,

University of Cambridge

No. 0093

Camera lucida, owned by the Herschel family, nineteenth century

Glass, brass

National Maritime Museum, Greenwich, London,

Herschel Collection

AST0794

W&D Lizars, Edinburgh after John Farey

Camera Lucida, Plate XLVI from

The Encyclopedia Britannica, 5th edition

Engraving on paper

Published A. Constable & Co., Edinburgh, 1817

Sir John Herschel used the camera lucida to capture topographical images and scientific specimens.

A friend of William Henry Fox Talbot, he was closely involved with Talbot's invention of photography, and was responsible for naming it. This device, uses a semi-silvered mirror rather than a transparent lens. The first 'Graphic Mirror' was invented by Alexander of Exeter in the 1830s.

The camera lucida

The camera lucida was invented in 1806 – 7 by the scientist William Hyde Wollaston. A four-sided prism allows the viewer to see simultaneously objects in front of the camera, by internal reflection, and the surface on which a drawing is to be made. A small metal plate with an eye-hole is positioned so as to overlap the edge of the prism and create a ‘split pupil’ effect that permits the double viewing. The operator can see both the track of the pencil on the drawing and the exterior scene.

The great advantages over the camera obscura are that it is easily carried and can operate at any light level (hence the name ‘lucida’ meaning ‘bright’).

Did Ingres use a camera?

David Hockney is one of a long line of artists, from Edgar Degas and Paul Cézanne to Pablo Picasso and Lucian Freud, to have admired the astonishing pencil portraits of the nineteenth-century artist Jean-Auguste-Dominique Ingres. Fascinated by their ‘uncanny accuracy’, and intrigued by the technical means by which Ingres had created such startlingly realistic effects, Hockney began to experiment with a camera lucida, having concluded that Ingres himself had used this, or a very similar optical aid, to achieve his extraordinary ends.

Did he? There is no documentary evidence to support the theory, but also none to suggest that Ingres shunned their use. For Hockney, using an optical device does not diminish Ingres’s stature as an artist. ‘A master of the pencil’, Ingres did not need the camera in order to draw. Hockney has written that optical instruments do not make art — ‘they do not draw for you’.

More Precise than Mathematics

Jean-Auguste-Dominique Ingres (1780 – 1867)

**Mr and Mrs Joseph Woodhead
and Mr Henry Comber in Rome**

1816

Pencil on paper

The Fitzwilliam Museum

Given by the National Art-Collections Fund, 1947

PD.52-1947

The majority of Ingres's Roman portraits depict a single sitter, but he occasionally made drawings of family groups. Here Joseph and Harriet Woodhead, on honeymoon in Italy, are depicted with Harriet's brother, Henry Comber.

Ingres delineates their engaging and characterful expressions with great precision while drawing details of dress and hair with astonishing freedom. Could the camera lucida have helped?

Ingres's 'Graphic Truth'

Jean-Auguste-Dominique Ingres (1780 – 1867)

Portrait of Maréchale Kutusov (1754 – 1824)

1815

Pencil on paper

The Fitzwilliam Museum

Accepted by HM Government in lieu of Inheritance Tax and allocated to the Fitzwilliam Museum, 2010

PD.40-2010

Among the distinguished international tourists to commission portraits from Ingres in Rome was Princess Catherine Kutusov, widow of one of Russia's most distinguished military commanders.

Highly cultured, she was a renowned society hostess and passionate theatre-goer, who had been a precocious actress in her youth. Ingres drew her portrait soon after she arrived in the city in the latter half of 1815.

Ingres's 'Uncanny Accuracy'

Jean-Auguste-Dominique Ingres (1780 – 1867)

Portrait of Mrs John Mackie

1816

Pencil on paper

Victoria & Albert Museum

Gift of Miss Winifred M. Giles through the Art Fund

E.230-1946

Mrs Mackie was the wife of a Scottish doctor and sat for Ingres on 9 April 1816. Ten days later, the artist had completed the portrait.

While some parts are drawn sketchily, Ingres lavishes attention on the fur stole, the elaborate English bonnet and the sitter's gentle expression.

An optical device may have helped him to position key facial features before completing the portrait by direct observation.

Margaret Hockney, Through a Camera Lucida

David Hockney (b.1937)

Margaret Hockney, Bridlington

16th May 1999

Pencil on paper using a camera lucida

Collection of the David Hockney Foundation

The painter's sister.

Camera Lucida Portraits

Portraits presented a particular set of challenges when using a camera lucida. An even lighting helped to avoid glare, while careful positioning of the sitter with respect to the artist/instrument was crucial to avoid distortion.

A key advantage of the camera was its ability to ensure correct proportions in the model's facial features.

However, many found it tricky to use, and the lines it produced could be faltering and hesitant. Happily, this could be corrected by drawing over the initial lines in a more expansive freehand, producing tell-tale 'traced' lines, apparent, for example, in portraits made by John and Cornelius Varley.

After seeing a group of portrait drawings, including these, by the great nineteenth-century French artist J.A.D. Ingres, in an exhibition at the National Gallery, London, in 1999, Hockney became convinced that he had used a camera lucida to achieve such remarkable likenesses on a small scale.

Inspired by these, Hockney made a series of intense and rapid pencil portraits of acquaintances, using a camera lucida. He used the device only briefly to mark the key facial features and expression, before finishing by eye. Camera drawings could be 'very, very dull', Hockney has insisted, but are transformed by great draftsmanship.

Damien Hirst, Through a Camera Lucida

David Hockney (b.1937)

Damien Hirst, London

18th June 1999

Pencil on paper using a camera lucida

Collection of the David Hockney Foundation

Once controversial Young British Artist.

Alan Bennett, Through a Camera Lucida

David Hockney (b.1937)

Alan Bennett, London

25th May 1999

Pencil on paper using a camera lucida

Collection of the David Hockney Foundation

Humourist, author and playwright.

Colin St John Wilson, Through a Camera Lucida

David Hockney (b.1937)

Colin St John Wilson, London

3rd June 1999

**Pencil and coloured pencil on paper
using a camera lucida**

Collection of the David Hockney Foundation

Architect of the British Library.

Martin Kemp, Through a Camera Lucida

David Hockney (b.1937)

Martin Kemp, London

22nd June 1999

**Pencil and coloured pencil on paper
using a camera lucida**

Collection of the David Hockney Foundation

Art historian and curator.

Ian McKellen, Through a Camera Lucida

David Hockney (b.1937)

Ian McKellen, London

27th May 1999

Pencil and coloured pencil on paper

using a camera lucida

Collection of the David Hockney Foundation

Actor and activist.

Geometrical Space

David Hockney (b.1937)

The Ballroom, Santa Cruz

1966

Pen and ink on paper

Private collection

A typically eloquent and assured drawing, from the time in California when Hockney was creating lucid geometrical spaces that retain a strong sense of line on the surface of the painting or drawing.

For all its apparently perspectival and geometrical qualities, the creation of depth is more instinctual than calculated, in that there is no dominant 'vanishing point'.

Tracing but Not Cheating

Andy Warhol (1928 – 87)

Danger

c.1980

Black conté crayon? on heavy wove paper

The Fitzwilliam Museum

**Given by The Friends of The Fitzwilliam in memory of
Sir Robert Adeane, patron of the Friends (1975 – 9), 1980**

PD.35-1980

Andy Warhol traced many drawings using a slide projector. But, Hockney noted, these ‘had a line that is always very recognisable’. He argued that such traced works, like any other type of drawing, require both skill and thought: the technique is not a ‘cheat’.

Rather, it produces a characteristic ‘look’ that can be recognised in works from past centuries.

Gallery 14

Table Cases

Talbot Family Albums

William Henry Fox Talbot (1800 – 77)

Villa Melzi, 5 October 1833

Pencil on paper

Science Museum Group

1937-2537/06

Constance Fox Talbot (1811 – 80)

Villa Melzi Lago di Como, 1833

Pencil on paper

The Bodleian Libraries, University of Oxford

MS. WHF Talbot 98, fol. 9

Caroline Augusta Fielding (1808 – 81)

**Casaccia a Bellagio, Lago di Como,
October 1833**

Watercolour on paper

The Bodleian Libraries, University of Oxford

MS. WHF Talbot 89, fol. 14

This unremarkable group of three sketches heralds one of the most momentous events in the history of representation, namely the birth of photography.

In 1833, William Henry Fox Talbot, his sister Caroline and his wife Constance, visited Italy. They had been tutored by drawing masters and practised the art of sketching picturesque views.

A series of albums in the Bodleian Library in Oxford contain a range of pleasing drawings, often inscribed with the locations and occasionally with the artist's name.

By far the least skilled of the amateurs was Henry, who confessed that his efforts were 'melancholy to behold'. His laboured rendering of the terrace of the Villa Melzi on Lake Como compares unfavourably with Connie's more adept drawing from a similar viewpoint. Humiliated by his inability, he used his knowledge of chemistry to 'fix' the optically generated image he created using with a very basic camera obscura.

Girtin and the Camera Obscura

Thomas Girtin (1775 – 1802)

View of Lancaster

c.1797

Pencil on paper

Tate

**Accepted by the nation as part of the Turner Bequest, 1856
D36575**

A brilliant and short-lived topographical draftsman and close friend of Turner, Thomas Girtin was responsible in the last two years of his life for a grand volume of wide-angle views of Paris, *A Selection of Twenty of the Most Picturesque Views in Paris* and its Environs, and a huge project for a walk-in panorama of London, the *Eidometropolis* (now lost).

It seems likely that he used a camera obscura to take multiple views for his London panorama from a central position. His sweeping views of Paris may have used a camera that panned across the scene. His finished watercolours were worked up in the studio from rapid notations. His preliminary sketch of Lancaster exhibits the simple outlines that often characterise camera drawings.

The 'Dark Chamber'

Box Camera Obscura

nineteenth century

Wood, metal, glass

Whipple Museum of the History of Science,

University of Cambridge

No. 6492

This is a standard type of portable camera obscura, similar to one owned by the painter Antonio Canaletto. Inside the box, an inclined mirror re-inverts the upside-down image that enters the 'dark chamber' via the lens. A hinged viewing hood allows the image to be seen more luminously on the ground-glass screen under the hood.

Women Power

Caroline Augusta Fielding (1808 – 81)

**Lago Maggiore from the Theatre
in the Isola Madre**

n.d.

Pencil on paper

The Bodleian Libraries, University of Oxford

MS. WHF Talbot 74, fol. 25

One of the sketches made in 1833 by William Henry Fox Talbot, his sister, Caroline, and his wife, Constance, while travelling in North Italy. They availed themselves of the camera lucida, with which the women achieved results far in advance of Henry's laboured efforts. Caroline had learnt graphic skills and how to set up a view from a drawing master. Henry's humiliation lay behind his invention of photography.

Gallery 12

Time Travel

David Hockney (b.1937)

Woldgate Woods, Winter 2010, 2010—11

Nine digital videos synchronised and presented on nine monitors to comprise a single artwork, duration: 49 minutes.

Collection of the artist

This is one of four linked works representing a journey along the same stretch of road in East Yorkshire during different seasons. These belong to a long tradition of depictions of spring, summer, autumn and winter to which the paintings in this room by Monet, Van Gogh, Renoir and Pissarro are also connected.

Hockney's seasons consist of digital videos, but they are far from being straightforward moving pictures. By making a mosaic of images, taken from differing angles and at slightly varying times, Hockney contended that he was producing an image closer to our real experience.

His objections to photography, he pointed out, were to do with its fixed, single viewpoint. He is not anti-lens, but 'anti-one lens'. What he was doing when he made these works was a form of drawing. But, he added, 'with this technique I could not only draw in space, I could also draw in time'.

iPad Paintings

David Hockney (b.1937)

20th April 2020, No. 1

iPad painting

Collection of the artist

David Hockney (b.1937)

17th April 2020, No. 2

iPad painting

Collection of the artist

David Hockney (b.1937)

20th September 2020, No. 5

iPad painting

Collection of the artist

Like Monet, Hockney settled in Normandy to paint. He found its climate similar to his native East Yorkshire: 'They are both maritime, northern places'. Arriving in winter, he immediately began to paint trees.

Drawing — and more recently painting — with an iPad allowed Hockney to work with unprecedented spontaneity. Less viscous than oil paint and more forgiving than delicate watercolour washes, it allowed him to 'get a marvellous flow'. In many ways the new medium became a digital successor to outdoor painting practised throughout the nineteenth century. Motivated by the desire to depict a single motif under ever-changing effects of light and atmosphere, Hockney has used the iPad to capture evanescence.

In nature and human vision, green is a background colour. In Hockney's landscape it dominates, refuses to retreat. By using his iPad to paint green, Hockney goes beyond what can be done with pigments. His astonishing range of greens are made directly from light, emitted not reflected.

iPad Paintings

David Hockney (b.1937)
28th November 2010
iPad drawing
Collection of the artist

David Hockney (b.1937)
5th April 2020, No. 1
iPad painting
Collection of the artist

David Hockney (b.1937)
30th November 2010
iPad drawing
Collection of the artist

David Hockney (b.1937)
5th April 2020, No. 2
iPad painting
Collection of the artist

David Hockney (b.1937)
6th December 2010
iPad drawing
Collection of the artist

David Hockney (b.1937)
29th April 2020, No. 3
iPad painting
Collection of the artist

David Hockney (b.1937)
7th December 2010
iPad drawing
Collection of the artist

Like Monet, Hockney settled in Normandy to paint. He found its climate similar to his native East Yorkshire: 'They are both maritime, northern places'. Arriving in winter, he immediately began to paint trees.

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The Four Seasons: Spring (Monet's Tree Canopy)

Claude Monet (1840 – 1926)

Springtime

1886

Oil on canvas

The Fitzwilliam Museum

**Purchased by Alex Reid and Lefevre with a contribution
from The National Art-Collections Fund**

PD.2-1953

Monet lived in Normandy for much of his life. Here he depicts his stepdaughter, Suzanne, and his son, Jean, in the orchard of his house in Giverny. However, Monet's focus is on the dense network of trees and canopy of blossom that all but obscure the sky, controlling the play of light and shadow on the vegetation and figures below.

Light was Monet's 'great subject', Hockney has said.

The Four Seasons: Winter (Leafless)

Camille Pissarro (1830 – 1903)

Piette's House at Montfoucault: Snow Effect 1874

Oil on canvas

The Fitzwilliam Museum

Bequeathed by Stanley William Sykes, 1966

PD.10-1966

Pissarro was a superb painter of snow. He relished its luminosity, as well as the varying colours it took on — warm mauve when freshly fallen, cool, slate-grey once it began to melt, slowly revealing the vegetation beneath. Montfoucault held great appeal for Pissarro. The home of his close friend Ludovic Piette, it was wild and remote: 'the true countryside' with 'no traces of man left'.

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