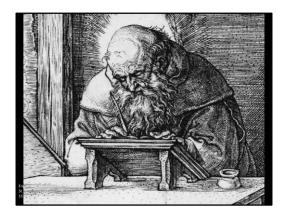




Producing reproductions by cutting into wood was the oldest technique and was used by the Chinese in 200BCE. The first woodcut book illustration in the West was 1461, a few years after the development of movable type (1450, Johannes Gutenberg).



- Lithography was invented in 1796 by Alois Senefelder.
- You draw with wax (oil or fat) onto a stone plate (or metal). Then etch the stone with acid and gum Arabic. After the stone has been cleaned the areas that were etched retain water and when an oil-based ink is applied it rests in the drawn lines as it is repelled by the water.
- Multi-colour printing or chromolithography was not invented until 1837 by Godefroy Engelmann. A stone was used for each colour.
- Lithography was used for printing English commercial maps from 1852.
- Offset-lithography is still used today with metal or plastic plates for high speed printing of books and newspapers.



Albrecht Dürer, St. Jerome in His Study, 1514, an engraving by a Northern Renaissance master

- The intaglio process involves gouging out the metal using a burin. The gouged out metal lines take the ink and produce a black line. This was used to produce illustrations for books.
- Movable type had been invented by Johannes Gutenberg (1398-1468) in 1439 and the first book, of a German poem, was produced in 1450. The 42-line Bible or Gutenberg Bible was printed in 1455. Gutenberg had to borrow money and may have become bankrupt. He was largely forgotten but mentioned as the inventor of typography in 1504.



Etching and drypoint: James Abbott McNeill Whistler (1834–1903), *The Doorway*, 1879-80, from 'The First Venice Set', etching, roulette and drypoint printed on 'antique' laid paper trimmed by the artist

- Etching and drypoint were often combined. Start with an etching and then finish the plate using a drypoint needle.
- This drawing is by one of the great masters of etching, James Abbott McNeill Whistler. This view of the Palazzo Gussoni was drawn from a boat on the Rio de la Fava, east of the Rialto. A chair-repairer's stock of chairs hangs above the interior.
- The prints vary, some have a dark area of water (Fitzwilliam), some (University of Glasgow) have the ink wiped vertically in water zone, representing reflections and shadows.

#### <u>Notes</u>

• A roulette is an engraving tool that has a rotating textured wheel fitted to a shaft with a handle. It is used to create a texture on the plate that will take ink.

#### References

- Fitzwilliam Museum website.
- University of Glasgow website.



Mezzotint: Salisbury Cathedral, by David Lucas after John Constable (1835), V&A

- Mezzotint either dark to light, the most common, or light to dark. Most common
- Invented 1642 by German amateur artist Ludwig von Siegen (1609-c. 1680). Dark to light involves using the rocker over the whole plate. If printed it would be black. Then rub down areas to create white. Or half rub-down to create grey. It was the first half-tone technique without using dots, lines or cross-hatching or stipple.
- From Artseer webpage about 'Constable: The Making of a Master'
  - Constable himself was not adverse to subsequent touch-ups; but he at least stuck to his own work. Salisbury Cathedral form the Meadows, which the artist saw as his landscape masterpiece, had not been a hit with the public and after its initial display at the Royal Academy in 1831, Constable took it home with him, where the urge to fiddle was too much to bear. Worried that his constant reworking might ruin the picture, friends urged him to channel his yearnings into a mezzotint engraving of the work, which he produced in collaboration with the engraver David Lucas. And although Constable was pleased with the result "The print is a noble and beautiful thing entirely improved and entirely made perfect" his friendship with Lucas was all but destroyed during the process.



Aquatint: Francisco Goya (1746-1828), *The Sleep of Reason Produces Monsters* (from *Los Caprichos, 'Caprices'* or '*Whims*'), published 1799

- Spanish romantic painter, last of the old masters and first of the moderns.
- An aquatint requires a metal plate, an acid, and something to resist the acid.
   Traditionally copper or zinc plates were used. The artist applies a ground that will resist acid. Ground is applied by either dissolving powdered resin in spirits, applying the powder directly to the surface of the plate, or by using a liquid acrylic resist. In all forms of etching the acid resist is commonly referred to as the 'ground' and the acid is called the 'mordant'. Contemporary printmakers often use spraypaint instead of a powder, particularly when using the technique known as sugarlift (sugar melted into heated India ink).
- If the plate covered in resin is placed in the acid it will print an overall grey area. If the artist wants a lighter or white area it is first marked out over the resin using an acid-resistant 'stop out' or hard ground. To produce dark lines the artist uses an engraving tool. The process can be multiple stages involving the use of acid and then further stop-out to prevent the area becoming darker.





William Henry Fox Talbot (1800-1877), Latticed window at Lacock Abbey, 1835 See http://en.wikipedia.org/wiki/William\_Henry\_Fox\_Talbot

- It should be noted that Aristotle and Euclid mentioned a type of camera obscura but it did not record images. The first recorded image was taken by Thomas
   Wedgwood in 1800 but it could not be fixed and was very faint. The first surviving permanent image was taken by Nicéphore Niépce in 1826 or 1827 but the image took several days to record and could only be seen by holding the metal plate at an angle.
- William Henry Fox Talbot (1800-1877) was the only son of William Davenport Talbot of Lacock Abbey and Lady Elizabeth Fox Strangways. He was educated at Harrow School and Trinity College, Cambridge and was awarded a prize in classics in 1820. He communicated with the Royal Society on mathematical subjects and optical researches and began experimenting with what became photography in 1834. When Louis Daguerre exhibited his pictures in 1839 Talbot showed his three and a half year old pictures at the Royal Institution in 1839. He submitted his process (photogenic drawing) to the Royal Society in February, six months before Daguerre revealed the details of his process. In 1841 he announced the discovery of the calotype or talbotype process which used paper coated with silver iodide.
- Talbot has often been criticised for patenting his work and charging a license fee of up to £300 a year as it was thought this held back the development of photography in Britain. The alternative daguerreotype process was free in the rest of the world although also patented and charged for in Britain. Talbot's negative/positive process eventually became the standard in the nineteenth and twentieth century and by 1860 the use of daguerreotypes was rare. Early calotypes were fuzzy and daguerreotypes were sharp but in 1851, the year of Daguerre's death) the wet collodion process enabled glass to be used as the support and the level of detail became as great as in daguerreotypes. Wet plates

were inconvenient and in the **1880s** the wet plates were replaced by the **dry gelatin coated plates**. In **1884 George Eastman** invented **dry gel on film** and in **1888** he launched the **Kodak camera** with the slogan 'You press the button, we do the rest'. The first widely used **colour photography** process was not discovered until **1907** although coloured images could be projected using three black-and-white photographs and coloured filters. **Kodachrome film** and therefore simple colour photography was not introduced until **1935**.



Fox Talbot, The Pencil of Nature, 1844, View of the Boulevards of Paris

Key point: within ten years photographs could be taken of streets but long exposures meant no people

# The Pencil of Nature (1844-6)

From the beginning **Talbot** was motivated to automate the **artistic process** and to be able to reproduce the image mechanically. In 1841 he **licensed Henry Collen**, a **miniature painter** as the first professional calotypist and between 1844 and 1846 he published six instalments of *The Pencil of Nature*, the first photographically illustrated book to be commercially published.

This picture is the **second picture** from the **first volume** of the book. He included one portrait and one artistic image in the book and ten of the 24 images were of specific locations such as Westminster Abbey, Queen's College and Lacock Abbey. He realised that complete collections of, for example, china, could be recorded easily and he also recognised their artistic value. He wrote, 'The chief object of the present work is to place on record some of the early beginnings of a new art, before the period, which we trust is approaching, of its being brought to maturity by the aid of British talent.'

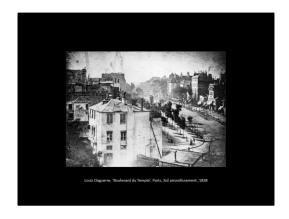


Louis-Jacques-Mandé Daguerre (1787-1851), 'Boulevard du Temple', Paris, 3rd arrondissement, **1838**.

See http://en.wikipedia.org/wiki/Louis\_Daguerre

Key point: the first ever person to be recorded

- Daguerre was a celebrated theatre designer and painter of panoramas. He invented the diorama in 1822.
- In 1829 he partnered with Nicéphore Niépce who had developed the first camera in 1826 and died in 1833. Niépce used bitumen which required exposure times of hours or even days. Daguerre went on to develop the daguerreotype and it was taken up by the French Academy of Science who paid him and Niépce's son a lifelong pension in exchange.
- A daguerreotype is a thin silver-plated copper sheet that has been exposed to the
  vapour of heated iodine crystals producing silver iodide. Daguerre discovered how
  to 'develop' (strengthen) the image using mercury vapour and then 'fix' (make it
  insensitive) it using by washing in heated salt water. Later he used 'hypo' (sodium
  thiosulphate). The image was reversed and had to be examined at an angle and
  mounted under glass to protect it. It could only be copied by taking another
  photograph.
- Believed to be the earliest photograph showing a living person. It is a view of a
  busy street, but because the exposure time was at least ten minutes the moving
  traffic left no trace. Only the two men near the bottom left corner, one apparently
  having his boots polished by the other, stayed in one place long enough to be
  visible. Note that, as with most daguerreotypes, the image is a mirror image.



Louis-Jacques-Mandé Daguerre (1787-1851), 'Boulevard du Temple', Paris, 3rd arrondissement, **1838**.

• Note that, as with most daguerreotypes, the image is a **mirror image** so here I have reversed the image.



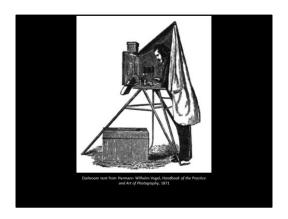


Punch cartoon, 1855, 'Interesting Group Posed for a Daguerreotype', 'Interesting and Valuable Result'

Key point: even in the 1850s long exposures meant many portraits were unsatisfactory

# The Problem with Portrait Photography

 This shows what were perceived by Punch readers as the problems of photography. It was easy if there was any movement for faces to be distorted and for the fine detail of clothing to be obscured. Nevertheless, portrait photography became very popular as it meant that families that could not afford a painting could, for the first time, obtain a likeness.



# From Wikipedia:

- In **1851**, Frederick Scott Archer, an Englishman, discovered that collodion (cellulose nitrate dissolved in ether and alcohol) could be used as an alternative to egg white (albumen) on glass photographic plates. Collodion reduced the exposure time necessary for making an image. This method became known as the 'wet-plate collodion' or 'wet collodion' method. Collodion was relatively grainless and colourless, and allowed for one of the first high-quality duplication processes, also known as negatives. This process also produced two types of positives: the ambrotype; the tintype (also known as ferrotype).
- The process required great skill and included the following steps:
  - Clean the glass plate (extremely well)
  - In the light, pour "salted" (iodide, bromide) collodion onto the glass plate, tilting it so it reaches each corner. The excess is poured back into the bottle.
  - Take the plate into a darkroom or orange tent (the plate is sensitive only to blue light) and immerse the plate in a silver nitrate sensitising bath (for 3–5 minutes)
  - Lift the plate out of the bath, **drain and wipe** the back, load it into a plate holder and protect from light with a dark slide.
  - Load the plate holder into the **camera**, withdraw the dark slide and expose the plate (can range from less than a second to several minutes)
  - **Develop** the plate (using a **ferrous sulphate** based developer)
  - **Fix** the plate (with **potassium cyanide**, fatal dose 200-300mg, or **sodium thiosulfate**)
- All of this was done in a matter of minutes, and some of the steps in (red) safelight conditions, which meant that the photographer had to carry the chemicals and a

- portable darkroom with him wherever he went. After these steps the plate needed rinsing in fresh water. Finally, the plate was dried and varnished using a varnish made from sandarac, alcohol and lavender oil.
- Dark tents to be used outdoors consisted of a **small tent** that was tied around the photographer's waist. Otherwise a wheelbarrow or a horse and covered wagon were used.



David Octavius Hill and Robert Adamson, 'Elizabeth Rigby later Lady Eastlake', c1847 See http://en.wikipedia.org/wiki/David\_Octavius\_Hill See http://en.wikipedia.org/wiki/Lady\_Eastlake

 Key point: with care and careful posing good portrait photographs could be taken in the late 1840s.

### **David Octavius Hill**

Photography quickly expanded in use to include portraits and landscapes. This
portrait was taken by David Octavius Hill and Robert Adamson of Elizabeth Rigby,
later Lady Eastlake, in c1847.

### **Lady Eastlake**

Elizabeth Rigby was a British author, art critic and art historian who married **Sir Charles Lock Eastlake** in **1849**, Keeper of the **National Gallery** from 1843-47 (Note his nephew Charles Locke Eastlake was keeper of the National Gallery from 1878-1898). He became **President of the Royal Academy** and was **knighted in 1850** and **President of the Photographic Society in 1853** and first Director of the National Gallery in 1855. She was the first woman to write regularly for the *Quarterly Review*. When her widowed mother moved to Edinburgh she moved with her and her literary career meant she mixed in the intellectual circles that included David Octavius Hill. He produced a series of 20 calotypes assisted by Robert Adamson and in 1857 she published an **essay** on the relationship between **art and photography**. She married when she was 40 and toured Europe with her husband. She **wrote Five Great Painters** (1883) about Leonardo, Michelangelo, Titian, Raphael and Durer. She is now seen as a **pioneer of female journalism**.

[Click] Played by Emma Thompson in the film Effie Gray. She was sympathetic to Effie Grey's plight when married to John Ruskin. Euphemia 'Effie' Gray is played by Dakota

Fanning (born 1994, 20 years old and been in 55 films, learned to read at 2, Screen Actors Guild Award aged 7, aged 13 she was earning \$4m a year). They are standing in front of John Everett Millais's *The Woodman's Daughter* (1851) and Charles Allston Collins's (1828-1873) *Convent Thoughts* (1851). 'The Woodman's Daughter' is a poem by Coventry Patmore about a country girl Maud who gets pregnant by the squire's son and drowns the baby and herself. Collins was Wilkie Collins brother The passion flower symbolises the crucifixion of Christ. It is a novice nun and the missal shows the Annunciation and the Crucifixion. It was painted in Thomas Combe garden and he bought the painting. The tide of opinion regarding the Pre-Raphaelites was turned by John Ruskin's letter to the Times which was most positive about this painting. He never became a PRB, he fell in love with Maria Rossetti but she rejected him and in the late 1850s he abandoned painting for writing. He married Charles Dickens's daughter Kate in 1860.



David Octavius Hill, The First General Assembly of the Free Church of Scotland, 1866

- The first work of art painted with the help of photographic images.
- Hill was a Scottish painter and arts activist and he formed a studio with Robert
   Adamson an engineer and photographer. An early collaboration between art and
   science with a business objective. They became very early innovators and in 1843
   photographed the 450 ministers who founded the Free Church of Scotland (the
   Disruption Assembly) and then produced a painting of them all 4' 8" high and over
   12' long (took 23 years to complete in 1866).
- Photography was changing the way events were recorded, the way artists worked and the way we see the world.



**Philip Henry Delamotte** (1821-1889), photograph of the Great Exhibition in Hyde Park, 1851

See http://en.wikipedia.org/wiki/Philip\_Henry\_Delamotte See http://en.wikipedia.org/wiki/Great\_Exhibition

Key point: photography was used to **record important events** from the **1950s onwards** 

### **Crystal Palace**

Philip Henry Delamotte (1821-1889) was an artist and photographer and became Professor of Drawing and Fine Arts at King's College, London. He was commissioned to record the disassembly of the Sir Joseph Paxton (1803-1865, died aged 62, made his money by successful speculation on the railways) building in Hyde Park in 1852 and its reassembly in Sydenham. When published it was one of the first books in which photographic prints were used (although you have already heard about *The pencil of Light*). He and Roger Fenton were the first artists to use photography as a way of recording important structures.



Philip Henry Delamotte, Crystal Palace South Transept & South Tower from Water Temple, 1854

- This is a photograph taken by Delamotte after the building had been reassembled at Sydenham in 1854.
- The original building in Hyde Park cost £150,000 and entry was £3 for men £2 for women later a shilling a person. Six million visited (a third of the population) and it made a profit of £186,000 (£17.7m today) which funded the building of what are now the South Kensington museums. The rebuild in Sydenham was 50% larger and with the park cost £1,300,000 (£50.5m today), £800,000 over the £500,000 budget. It never repaid the debt and only ever made a small profit.
- 1,848 feet long, 465 feet wide, 135 feet tall, 900,000 square feet glass and a floor area of 772,784 square feet.
- It had the first public toilets for which it charged one penny ('spending a penny').
- The park and grounds cost much more than rebuilding the Palace.
- **Benjamin Waterhouse Hawkins** made 33 life-sized models of the newly discovered and named **dinosaurs** by Richard Owen.
- There were 12,000 jets of water, the highest fountains were 250 feet and a full display took 7 million gallons of water. The first water towers collapsed under the weight of water and Isambard Kingdom Brunel was called in to design two new towers 284 feet tall and 46 feet wide.



Roger Fenton (1819-1869), Cantinière tends the wounded solder in the Crimean War, 1854

See http://en.wikipedia.org/wiki/Roger\_Fenton See http://en.wikipedia.org/wiki/Crimean\_War

Key point: it was even possible to take war photographs although it is believed many were staged

### **Crimean War Photographs**

- The Crimean War was the first major war to be photographed.
- This photograph shows a Cantinière tending a wounded solder. A Cantinière or Vivandière is a French name for women attached to military regiments as sutlers (someone who sells provisions to soldiers) or canteen keepers. Their actual historic function was selling wine to the troops and working in canteens. Before the French Revolution the provision of food, drink and other items was allocated to eight privileged soldiers called Vivandières. They were allowed to marry and as the soldiers were busy with their other duties their wives took on the role of selling wine. This was encouraged to lessen the chance of desertion. The role of the Vivandière has not been closely studied by historians.
- Roger Fenton (1819-1869) was mentioned previously and he was a pioneering British photographer and one of the first war photographers. His father was a wealthy banker and Member of Parliament and was the fourth of 17 children by two wives. After his degree at Oxford he studied law at University College, London but became interested in painting. He went to Paris and may have studied in the studio of Paul Delaroche. He visited the Great Exhibition in Hyde Park and was impressed by the photography exhibits. He founded the Photographic Society, later the Royal Photographic Society, in 1853.
- In autumn **1854** the Crimean War grabbed the public's attention and Fenton was encouraged by his friend **Prince Albert** to go to the Crimean to record what was

- happening. He stayed for three months and it is possible the photographs were intended as **propaganda** to counter criticism of the war in the press.
- The photographs were converted to **woodblocks** and printed in the *Illustrated London News*. Because of the long exposures photographs **had to be posed** and he **avoided** photographs of **dead**, injured and **mutilated** soldiers.
- Despite high temperatures, breaking several ribs, suffering from cholera and depression from the carnage he managed to take 350 usable negatives which were displayed in London on his return. However, it was not a commercial success. Undaunted he travelled widely across Britain recording the landscape. He later came into conflict with other photographers as he was wealthy and did not need to make money and he believed no photographer should soil himself with the sin of exploiting his talent commercially.
- In **1862** at the International Exhibition in London **photography** was **placed with machinery** and tools rather than with the fine arts as it had been five years earlier at the Manchester Art Treasures Exhibition. For **Fenton this was proof photography has sold out** and its **status was diminished**. In 1863, he **sold his equipment** and returned to law as a **barrister**. He died six years later aged only 50.



John Jabez Edwin Mayall (1813–1901) London, Portrait of Queen Victoria, 1860 See http://en.wikipedia.org/wiki/Carte-de-visite

Key point: when the price dropped further there was a sudden fashion for giving friends and family a *carte de visite*.

#### Carte-de-Visite

- Carte de visite became an overnight success in 1859 when Emperor Napoleon II's photograph was distributed in this format. It was a 2.125x3.5 inch photograph mounted on a 2.5x4" card. It was so popular it became known as 'cardomania'. Cards were traded between friends and visitors and collections of famous people were published. It spread across Europe and then America and albums of such cards became established in Victorian households. In the 1870s there were replaced by cabinet cards which were larger (4.5x6.5") and they remained popular until the early 20th century.
- J. J. E. Mayall is an English photographer now famous for taking the first carte-devisite photograph of Queen Victoria. He was born Jabez Meal, son of a manufacturing chemist from Manchester. He travelled to America where he changed his name to Mayall and took up photography. He was trained, like his father, as a chemist and his daguerreotypes were known for their high quality. When he returned to England in 1846 'The Times' wrote, 'In consequence of the new discoveries which he has made . . . he is enabled to take daguerreotype portraits by an entirely new process, of a degree of delicacy, depth of tone, and lifelike reality, never previously attained by himself of any other photographic artists.'
- He considered himself an artist rather than a photographer and always wrote 'artist' on the census return. He was a pioneer in allegorical photographs but also the scientific improvement of the process. By 1846, he had reduced exposure times to only nine seconds by the use of ammonia. Soon after establishing his

studio in the Strand he **met Turner** who was **fascinated** by the light effects captured by his camera. He was struggling financially and worried about being sued by the owner of the patent to the daguerreotype process in England. **Turner encouraged him** to continue. Mayall produced a series of mammoth plates of the **Great Exhibition** of 1851 in Hyde Park and he exhibited 72 daguerreotypes. He took photographs of eminent men such as Charles Dickens and in 1860 took a number of **portraits of the Royal Family**. In **1861 Prince Albert died** and his death created **enormous demand** for his portrait. Mayall was **paid £35,000** for his portraits of the Royal Family and he produced over **half a million cartes a year** which produced an **income of £12,000 a year**.



From about 1660 to the 1840s upper-class European men of means took a trip around Europe as a form of finishing school. There was an active business in selling portraits and views of the major sites to the wealthy young men.

Starting in the 1750s factory owners and traders were able to afford holiday's abroad as a form of leisure activity and this created a demand for lower cost views of the locations. At the same time with the advent of more engravings of exotic locations there was a market selling to 'armchair travellers'. This included picturesque views of British scenes as well as the well known cities of the Grand Tour and more exotic locations in the Middle East.



Calvert Richard Jones (1804-1877), *The Coliseum*, Rome, 1846 See http://en.wikipedia.org/wiki/Calvert\_Jones See http://en.wikipedia.org/wiki/Thomas Cook %26 Son

Key point: the invention of photography created a large market for famous views.

#### **Calvert Richard Jones**

- Pictures of foreign locations were extremely popular. An Rev. Calvert Richard Jones belonged to a wealthy Swansea family. He became a mathematician and painter, best known for his seascapes. He was educated at Oriel College, Oxford and moved in the same circles as Fox Talbot. He is credited with taking the first photograph in Wales and although he did not take up photography as an occupation he did take many photographs and took his equipment on holiday to France and Italy. He developed his own technique for taking panoramic photographs by overlapping images.
- Knowledge of the calotype process was initially spread through a loose network of family, friends and social contacts. The Rev. Calvert Richard Jones, a family friend of Talbot's, was one of the most assured calotypists of the 1840s, and some of his finest work was made in the course of a tour through France and Italy in 1846.
   Jones was later involved with Talbot's largely unsuccessful attempts to commercialize the calotype process through the selling of prints.
- Thomas Cook began operating European tours in the 1850s opening up the continent to upper middle class families. His first tour was a circuit of northern Europe ending with four days in Paris at an all inclusive cost of £11.
- The photographically illustrated book as a luxury item for armchair travellers began to be replaced in the 1860s by the direct sale of views to the increasing army of

middle class tourists who could afford to take advantage of this new record of the world.



Francis Frith (1822-1898), *The Ramesseum of El-Kurneh, Thebes,* 1857 See http://en.wikipedia.org/wiki/Francis Frith

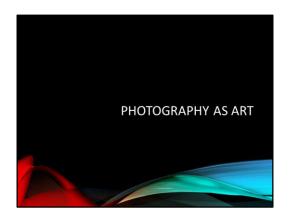
Key point: the best known travel picture photographer was Francis Frith whose photographs can still be bought

#### **Francis Frith**

- Perhaps the best known photographer of travel pictures is Francis Frith. He
  photographed the Middle East as well as many towns in the United Kingdom. He
  was a founding member of the Liverpool Photographic Society in 1853 and he
  dedicated himself entirely to photography in 1855.
- He noted that tourists were the main consumers of views of Italy but armchair travellers wanted scenes of further afield. His ambitious goal was to create a true record, 'far beyond anything that is in the power of the most accomplished artist to transfer to his canvas.'
- He first went to the Nile Valley in 1856 and later extended his trip to include Palestine and Syria. He kept a journal in which he complained about the difficulty of finding a good viewpoint for taking photographs. A problem known to photographers today. Yet he is praised for his ability to find a novel viewpoint. When he had finished his travels he opened the firm of Francis Frith & Co in Reigate and became the world's first specialist photographic publisher. He then embarked on his grand project to photograph every town and village in the United Kingdom. He initially took them himself and later hired people and he set up the first postcard company and within a few years over 2,000 shops in the United Kingdom were selling his postcards. His family firm continued in business until 1970 and Bill Jay, a photography historian identified the archive as being nationally important and he persuaded Rothmans, the tobacco company to purchase it. It was re-launched in 1976 and from 1977 run as an independent

business that sells over 125,000 photographs of 7,000 cities, towns and villages.

This photograph was one of the enormous 20x16 inch glass plates that Frith took to Egypt along with the huge camera and chemicals. The Ramesseum is a memorial temple to Pharaoh Ramesses II (Ramesses the Great) in Thebes in the Upper Nile near modern day Luxor. Only the torso of the statue of the Pharaoh remains and it weighs over 1,000 tons. It was alleged to have been transported 170 miles over land. It is the largest free standing statue in the world.





Oscar Gustave Rejlander (1813–1875), Two Ways of Life, 1857 See http://en.wikipedia.org/wiki/Oscar\_Gustave\_Rejlander

Key point: photographers combined multiple photographs to create artistic pictures in the academic tradition

### **Oscar Gustave Rejlander**

A pioneering Victorian art photographer and an expert in photomontage. His collaboration with Charles Darwin on *The Expression of the Emotions in Man and Animals* has assured him a position in the history of behavioural science and psychiatry.

He may have **invented combination printing** which enabled **two or more photographs** to be combined. One of the earliest is this called **Two Ways of Life** created in 1857 and first exhibited at the **Manchester Art Treasures Exhibition**. It is a made from **32 negatives** and took **six weeks to produce**. It is intended to create the same sort of **serious moral point as a history painting**. On the **left** was see the **immoral life** and a **young man** being **enticed** towards it. On the **right** the **serious**, **religious, moral life** that is attracting the **other young man**. This type of photography became **popular**.



Henry Peach Robinson (1830-1901), *Autumn*, 1860 See http://en.wikipedia.org/wiki/Henry Peach Robinson

Key point: photographs emulated the Pre-Raphaelites

## Henry Peach Robinson (1830-1901)

- Robinson was another pioneer of the technique. He was also an artist and would first sketch the scene he wanted and then create it from multiple negatives. He was a follower of the Pre-Raphaelites and was influenced by the aesthetic views of John Ruskin. In his Pre-Raphaelite phase he attempted to realize moments of timeless significance in a "mediaeval" setting, anticipating the work of Julia Margaret Cameron, Burne-Jones and the Symbolists. According to his letters, he was influenced by the paintings of J.M.W. Turner.
- Henry Peach Robinson, considered to be another one of the pioneers of combination printing, was not only an artist, but also an author, and wrote many journal articles on photography. He then published a book in 1869 entitled Pictorial Effect in Photography. His writings about technique became fairly well known and he was held in high esteem, despite having critics who accused him of misrepresenting the real world and the truth by using the combination printing method.
- In his book, Robinson attempts to add some reasoning to appease the critics, by comparing the photograph editing to other art forms and writing that, 'As music is only sound under governance of certain laws, so is pictorial effect only the combination of certain forms and lights and shadows in like manner harmoniously brought together.'
- Combination printing was technically difficult as each image had to have the same lighting and be scaled to fit the others. Artists wished to create ideal images from natural scenes to portraits and in the same way photographers wished to perfect their images by combining and manipulating them. Another early

proponent of combination printing was Queen Victoria. Robinson **suffered from ill health** because of working for **hours with the chemicals** in the darkroom and he switched to using a 'scissors and paste-pot' technique fro creating combination prints.

• He became the **vice-president** of the **Royal Photographic Society** and strongly argued for photography to be regarded as an **art form**.



Henry Peach Robinson (1830-1901), Fading Away, 1858

Key point: photographs emulated genre paintings

- This is another example created from five negatives. The photo shows the death
  of a young girl and her grieving family surrounding her. It creates the same sort of
  emotional scene that we have seen with genre painting but the use of
  photographs creates an immediacy and a different emotional impact. He was one
  of the most prominent art photographers of the day and was a follower of the PreRaphaelites and John Ruskin.
- This photograph caused controversy not because of the death-bed scene which was common but that he had betrayed the accuracy of photography by manipulating the image. People felt photography had a responsibility to record. The fact that it is a picture of 'a young woman in the flesh' is a travesty of the ideal rendering artist give to spiritual beings on the point of death 'impresses the beholder with the untruth of the whole thing'. It 'carries its untruth and incongruity on the surface' (from Photographic Journal, 1865)
- Controversy broke out in the photographic community about the use of
  combination printing. Photographs originally had been regarded as truth and that
  the camera never lied. However, with the newfound ability to manipulate the final
  product, the notion that photographs depicted 'truth' was soon shattered.

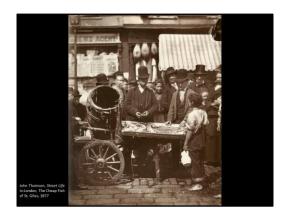
#### **Pictorialism**

See http://en.wikipedia.org/wiki/Pictorialism

 Pictorialism is the name given to an international style and aesthetic movement that dominated photography during the later 19th and early 20th centuries.
 There is no standard definition of the term, but in general it refers to a style in which the photographer has somehow **manipulated** what would otherwise be a straightforward photograph as a means of "**creating**" an image rather than simply recording it. Typically, a pictorial photograph appears to lack a sharp focus (some more so than others), is printed in one or more colours other than black-and-white (ranging from warm brown to deep blue) and may have **visible brush strokes** or other manipulation of the surface. For the pictorialist, a photograph, like a painting, drawing or engraving, was a way of projecting an emotional intent into the viewer's realm of imagination.

In England, as early as 1853 amateur photographer William J. Newton proposed
the idea that 'a "natural object", such as a tree, should be photographed in
accordance 'the acknowledged principles of fine art'. The first organisation
devoted to photography as art was 'The Linked Ring' which was founded by Henry
Peach Robinson, George Davison and Alfred Maskell.





John Thomson (1837-1921), Street Life in London, The Cheap Fish of St. Giles, 1877 See http://en.wikipedia.org/wiki/John\_Thomson\_(photographer)

# **John Thomson** (1837-1921)

John Thomson was a talented and **influential photographer**, who had spent **ten years travelling** in, and taking photographs of, the **Far East**. On his return to London he joined with **Adolphe Smith**, a socialist journalist, in a project to photograph the street life of the London poor. The volumes were published in monthly parts as *Street Life in London*, and were an early example of social and documentary photography (pioneering photojournalism).

# Joseph Carney

This is **Joseph Carney**, a self-employed **costermonger** who must **hire the barrow** for **18d a week**. He must keep an eye out for the **police** who **confiscate** the barrows and place them in the **Green yard** where they charge a **shilling a day** for storage. The owner will also be **fined 2/6 to 10s**. Carney works near **Seven Dials** and this day he has bought a barrel of **500** fresh **herrings** for **25s**. He sells the **200 largest** herring for **1d each** and the **smaller** fish for **1/2d each** (=. Trade was brisk and the price is high today and they are, except for good salmon, the most nutritious fish in the market. If he sells them all he will make a **profit of 4s 2d**.



John Thomson, Street Life in London, The 'Crawlers', 1877

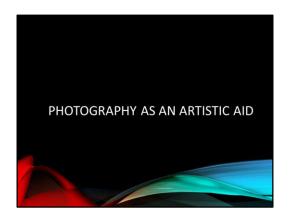
### **The Crawlers**

A crawler is someone who **begs from beggars** and literally **crawls** from place to place. The book writes,

Huddled together on the workhouse steps in Short's Gardens, those wrecks of humanity, the Crawlers of St. Giles's, may be seen both day and night seeking mutual warmth and mutual consolation in their extreme misery. As a rule, they are old women reduced by vice and poverty to that degree of wretchedness which destroys even the energy to beg. They have not the strength to struggle for bread, and prefer starvation to the activity which an ordinary mendicant must display. As a natural consequence, they cannot obtain money for a lodging or for food. What little charity they receive is more frequently derived from the lowest orders. They beg from beggars, and the energetic, prosperous mendicant is in his turn called upon to give to those who are his inferiors in the "profession." Stale bread, half-used tea-leaves, and on gala days, the fly-blown bone of a joint, are their principal items of diet.

They sit **on hard stone steps** day and night in wind and rain and get **little sleep**. She is looking **after the baby** from 10 in the morning to 4 in the afternoon for a **cup of tea** which she does not always get. Many of the crawlers were previously **middle class people** who fell on **hard times**. This woman's **aim** is to **earn a few shillings** in order to travel to the hop fields in order to **save about a pound**. With this she could **start work again**, her **son** could get his **clothes** out of the **pawnshop** and **get a job** and she would **rent** a little **room** in order to have an **address** so she could get a **job**.

**John Thomson** gradually acquired a clientele of the fashionable rich during the 1880s and eventually a royal warrant in 1881.



The photograph was a great aid to artists as a fixed record of a scene, a building or a model. John Ruskin recognised their usefulness and took a photographer with him on trips to Europe. He wrote to his father as early as 1846 about daguerreotypes as 'glorious things' 'very nearly the same thing as carrying off the palace itself' 'every chip of stone & stain is there'. However, later in the century his early enthusiasm waned as he felt photography threatened high art as certain kinds of representation could now be produced mechanically. He saw it as symptomatic of the soullessness of industrial society and such 'grinding', as he called it, will lead to art which is no art and artists who are no longer gentlemen.

Academic studies of nude models enabled artists to reduce the time required to pay a model to pose for hours. Oscar Rejlander made many academic studies for the use of artists. The photographic nude posed a problem as photography was seen as unable to transcend its subject. A photograph of a nude was not regarded as artistic but as a picture of a naked man or woman. The painted nude was classicized or idealised in some way to create a purely aesthetic experience. The ability to produce cheap photographs started in 1851 with the development of the glass plate and the albumen print and this rapidly led to the widespread availability of pornographic images and the Obscene Publications Act of 1857.



See http://en.wikipedia.org/wiki/Dante\_Gabriel\_Rossetti See http://en.wikipedia.org/wiki/John Berger

Key point: photography changed the way people saw the world

Rossetti was also one of the first artists to realize and use photography as a means for disseminating knowledge of his work.

Many artists used photography as an aid but they did not all admit to the practice as there was a long-held belief that copying is a mere skill and true art should be creative.

## John Berger

In 1972, John Berger a painter, novelist, and historian wrote *Ways of Seeing* in which he argued that the invention of the camera changed the way people in general and artists in particular saw the world. The camera could cut off the scene in novel ways, a technique used by Edgar Degas, the long exposures created streaks of light, a technique used by Whistler in *Nocturne in Black and Gold, the Falling Rocket* and later stop action enabled events that took place in a fraction of a second to be frozen and analysed. This also enabled 'snapshots' to be taken of people going about their normal business whereas previously artists would pose people in carefully arranged scenes. Another way it changed the way we see the world is that it could capture detail that required days of work by an artist. Arnason and Klab in *History of Modern Art*, wrote that 'the scrupulous fidelity of the photographic image' was 'a good reason to work imaginatively or conceptually and thus liberated their art from the requirement of pictorial verisimilitude'. The camera also provided the freedom to experiment which ultimately led to the abstraction of form. If the world can be captured by the click of a button then the artist is freed to explore areas of the

imagination beyond mere visual reproduction.

One obvious and widely used roles for photography was to provide the artist with static pictures of a model. Rather than pay for a model to sit for hours a photograph could be used instead. It did not provide the personal connection with the model but it was a useful *qide memoire*.





By putting them side by side we can see the similarities.

Rossetti rarely exhibited his work and so photography enabled many more people to see it and it established his reputation on the continent. The artist Val Prinsep took photographs of Rossetti's work as well as Frederick Hollyer, a professional photographer.



I have devoted a complete section to Julia Margaret Cameron as she was such an influential early photographer who pushed the artistic boundaries of photography before that had even been established.



Julia Margaret Cameron, 'Annie, my first success', 29 January 1864. See http://en.wikipedia.org/wiki/Julia\_Margaret\_Cameron

Key point: Julia Margaret Cameron was an important influence on later photographers

# Julia Margaret Cameron (1815-1879, aged 63)

- In 1863, her daughter gave Cameron her first camera and this is the first print with which she was satisfied. It already exhibits some of her trademark artistic effects.
   Strong side lighting, a slightly out-of-focus face (intentional), a background that places the dark side of the face in contrast with a light background and the light side of the face against a dark background (a technique commonly used by portrait artists).
- The technique of soft-focus 'fancy portraits' was taught her by David Wilkie
  Wynfield (1837-`887) a British painter and photographer. Wynfield used the
  technique of soft focus, close-up, large-format prints of famous people in historical
  costumes.



Julia Margaret Cameron, *Sadness*, Ellen Terry, 1864 See http://en.wikipedia.org/wiki/Ellen\_Terry

## **Ellen Terry**

- Cameron also took mood photographs. Although this is of the actress Ellen Terry it
  is entitled Sadness.
- Dame Ellen Terry (1847–1928) was an English stage actress who became the leading Shakespearean actress in Britain. She was born into a family of actors, Terry began acting as a child in Shakespeare plays and continued as a teen, in London and on tour.
- At 16 she married the much-older artist George Frederic Watts, but they
  separated within a year. She was soon acting again but began a relationship with
  the architect Edward William Godwin and retired from the stage for six years. She
  returned to acting in 1874 and was immediately acclaimed for her portrayal of
  roles in Shakespeare and other classics.
- In 1878 she joined Henry Irving's company as his leading lady, and for more than
  the next two decades she was considered the leading Shakespearean and comic
  actress in Britain. Two of her most famous roles were Portia in *The Merchant of*Venice and Beatrice in Much Ado About Nothing. She and Irving also toured with
  great success in America and Britain.



Julia Margaret Cameron, Alfred Tennyson
See http://en.wikipedia.org/wiki/Alfred Tennyson

Key point: Cameron was not rediscovered until 1948

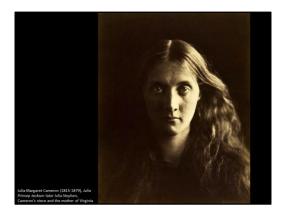
- Watts as one of the first artists who selected people to represent. The other
  person was Cameron. She was very well connected in high society and used to
  select among the rich and famous those she wished to portray. This is the poet
  Alfred Tennyson.
- Cameron left no mark on photography and was not rediscovered until 1948. The
  American photographer Imogen Cunningham (1883-1976) commented 'I'd like to
  see portrait photography go right back to Julia Margaret Cameron. I don't think
  there's anyone better.' And Getty Images commented recently 'Cameron's
  photographic portraits are considered among the finest in the early history of
  photography.'

#### Alfred Tennyson

- Alfred Tennyson, 1st Baron Tennyson, FRS (6 August 1809 6 October 1892) was
  Poet Laureate of Great Britain and Ireland during much of Queen Victoria's reign
  and remains one of the most popular British poets.[2]
- Tennyson excelled at penning short lyrics, such as "Break, Break, Break", "The Charge of the Light Brigade", "Tears, Idle Tears" and "Crossing the Bar". Much of his verse was based on classical mythological themes, such as Ulysses, although In Memoriam A.H.H. was written to commemorate his best friend Arthur Hallam, a fellow poet and fellow student at Trinity College, Cambridge, who was engaged to Tennyson's sister, but died from a brain haemorrhage before they could marry. Tennyson also wrote some notable blank verse including Idylls of the King, "Ulysses", and "Tithonus". During his career, Tennyson attempted drama, but his

plays enjoyed little success.

- A number of phrases from Tennyson's work have become commonplaces of the English language, including
  - Nature, red in tooth and claw
  - Tis better to have loved and lost / Than never to have loved at all
  - Theirs not to reason why, / Theirs but to do and die
  - To strive, to seek, to find, and not to yield
  - My strength is as the strength of ten, / Because my heart is pure
  - Knowledge comes, but Wisdom lingers
  - The old order changeth, yielding place to new



Julia Margaret Cameron (1815-1879), *Julia Prinsep Jackson* (1846-1895) later **Julia Stephen**, **Cameron's niece** and the **mother of Virginia Woolf**. See http://en.wikipedia.org/wiki/Virginia\_Woolf

Key point: Cameron was well connected in society and took photographs of all the famous people

- Julia Stephen wrote Julia Cameron's biography
- Virginia Woolf and Roger Fry edited a collection of Cameron's photographs published in 1926.
- Clementina Maude, Viscountess Hawarden, née Clementina Elphinstone Fleeming (1 June 1822 – 19 January 1865), commonly known as Lady Clementina Hawarden, was a noted portrait photographer of the Victorian Era, producing over 800 photographs mostly of her adolescent daughters.





**Phenakistoscope** (fena-kiss-t'scope) from later in the century. It was a circular disk with images radially drawn between slits. It was spun and you looked through the slits at the images in a mirror.

See http://en.wikipedia.org/wiki/Phenakistoscope

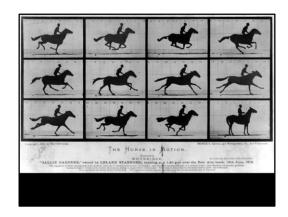
Early devices enabled movement to be shown using hand drawn images that were rapidly projected onto the eye. The principal was known to the Greek mathematician **Euclid** and later in experiments by Newton but it was not until 1929 that devices started to be developed. The persistence of vision was known about in classical times, see Lucretius *De Rerum Natura* (*On the Nature of Things*, Book IV, written 50 BCE).



Eadweard Muybridge (died 1904), first published in 1887 at Philadelphia (*Animal Locomotion*).

- How do you tell an image of a galloping horse was painted before 1878? It is shown with all its legs spread out. The story of how we discovered how a horse gallops involves Eadweard Muybridge.
- Born Edward James Muggeridge he emigrated to America in 1850 and returned to England in 1861 and took up professional photography. He went back to San Francisco in 1867 and in 1868 his large-scale photographs of Yosemite Park made him famous.
- In 1874 he shot and killed Major Harry Larkyns, his wife's lover, but was acquitted in a jury trial on the grounds of justifiable homicide.
- In 1872 Governor Stanford bet \$25,000 that a galloping horse lifts all four feet of
  the ground at the same time. Muybridge spent three years photographing
  galloping horses but failed to convince anyone. In 1878 Stanford ordered him to
  use a battery of 12 cameras in a row triggered by the horse going by. Muybridge
  couldn't make it work so Stanford sent for a young engineer John B. Isaacs who
  used 24, then 48 cameras triggered by strings. Stanford was right but it cost him
  \$40,000 to collect his £25,000 bet.
- A Frenchman called Meissonier invented a way to project the images, a stroboscopic disk he called the Zoopraxiscope which was them exploited by Muybridge.
- It was not until 1878 that Eadweard Muybridge was hired to **settle a bet** on whether a galloping horse had all four feet of the ground at the same time. He set up 12 cameras with trip wires and showed that all four foot are lifted at the same time. He went on to lecture and show his moving images using a device he called a Zoopraxiscope. This projected images from glass plates in rapid succession and can be considered as the first movie projector.

- In the 1880s he produced over **100,000 images** of animals and humans in motion at the University of Pennsylvania in Philadelphia. He gave lectures and demonstrations of photography and in 1894 returned to England permanently.
- He died at the home of his cousin Catherine Smith, Park View, 2 Liverpool Road, Kingston-upon-Thames. The house has a British Film Institute commemorative plaque and a Royal Photographic Society plaque (sponsored by Olympic) on the outside wall.



# Eadweard Muybridge (1830-1904), The Horse in Motion, 1878

- This is one of the sequences of images that settled the bet. It is clear that the horse lifts all its legs under it but when its legs are stretched out one is always on the ground.
- The sequence of images was taken in 1878. The images could be made to move using a **Zoopraxiscope** and within 17 years the first moving pictures were being projected.



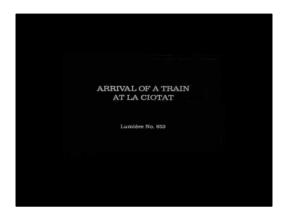
**Eadweard James Muybridge** (1830-1904, birth name Edward James Muggeridge, born and died **in Kingston**), **Zoopraxiscope**, **1879** See http://en.wikipedia.org/wiki/Eadweard\_Muybridge

- A Zoopraxiscope is essentially a projecting Phenakisticsope. The images are on a spinning wheel, the first movie projector. Images first drawn then photographic and hand-coloured.
- There are 71 disks remaining, 67 in Kingston Museum.
- It was not actually invented by Muybridge as we shall see...

Key point: Eadweard Muybridge pioneered motion photography and lived in Kingston-upon-Thames

## **Eadweard James Muybridge**

 Muybridge, English photographer important for his pioneering work in photographic studies of motion, and early work in motion-picture projection. He adopted the name Eadweard Muybridge, believing it to be the original Anglo-Saxon form of his name.



#### Arrival of a train 1895

- The first film was based on trying to record a sequence of images like the Zoopraxiscope but with a single camera and a moving film. They first tried a disk as in the Zoopraxiscope and then Edison used an Eastman film. The film was actually invented by Reverend Hannibal Goodwin but he died before his patent was awarded. Edison misunderstood the invention and was only interest in adding images to his phonograph which were projected inside a box to the person wearing ear phones and looking through a peep hole. His assistant William Kennedy Laurie Dickson (1860-1935), a Scottish inventor, made the first film projector when Edison was away in 1887. On his return he was shown the working movie projector and rejected it as it would 'spoil everything' as he wanted to make many profitable pep-show machines but thought only ten projectors would be sold across the whole of the US. The first peep show theatre came to New York in 1894 but the first screen did not arrive until 1896. There were seven inventors, five in the US, and all working independently.
- Louis Le Prince (1841-1890) shot the first moving pictures on paper film using a single lens camera. He was a **Frenchman** who worked in the US and UK and invented moving pictures in **1888** in **Leeds**.
- Typical films of the period:
  - Horse galloping, 1878
  - Roundhay garden scene, 1888
  - Dickson greeting, 1891
  - Record of a sneeze, 1894
  - · Buffalo dance, 1894
  - The contortionist, 1894
  - Arrival of a train, 1895
  - Exciting the factory, 1895
  - Fishing for goldfish, 1895

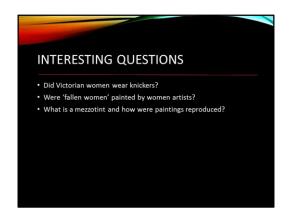
- Jumping the blanket, 1895
- Cordeliers square in Lyon 1895
- The sprinkler sprinkled, 1895 (early comedy)



## **Khodynka Tragedy**

- The earliest moving images date from the 1890s and by 1895 there were many movies being shown.
- Europe went in for early news film. In 1896 a Frenchman filmed the Czar Nicholas II's coronation and four days later the celebration on Khodynka Field during which 1,389 people were killed and 1,300 injured (the Khodynka Tragedy) in the rush for imperial gifts. Nicholas and Alexander were told about the tragedy later and wanted to cancel the dinner at the French Embassy but were convinced by others that it would an insult to the French. They visited the injured in hospital the following day. Nicholas II replaced Alexander III, an autocrat who reversed the liberal measures of his father but who fought no major wars for which he was styled 'The Peacemaker'. Nicholas II was called Nicholas the Bloody by some and Saint Nicholas the Martyr by the Russian Orthodox Church.





## **Interesting Questions Asked in Class**

- Did Victorian women wear knickers?
  - During the Regency period wealthy women wore two-piece pantellettes or drawers (as they were drawn on and as there was one for each leg they are called a pair of knickers today). The name came from Herr Diedrich Knickerbocker a fictional character invented by Washington Irving in History of New York (1809). He was meant to have descended from the original Dutch settlers in New York who were illustrated in the book (by George Cruikshank) wearing loose breeches tied at the knee and they were adopted by men for 'sporting occasions'. Later, particularly in the UK the word was used to describe women's undergarments and often abbreviated to 'knickers'. Queen Victoria encouraged knickers for all women and by the Edwardian period only the poorest women went without underwear. There were adopted for warmth and later because Victoria thought it more proper. In the **1840s** drawers were plain and white and reached below the knees but by 1868 colour and embellishment such as lace was normal. The legs were still open until 1876 when the two legs merged. By the late 1870s knickers were widely accepted but never referred to in polite conversation. Loose trousers tied at the knee were called knickerbockers. Knickers were sometimes called bloomers after Elizabeth Miller invented loose trousers worn by women and after 1849 Amelia Bloomer promoted the idea. Lingerie is derived from the French for linen.
- Were 'fallen women' painted by women artists?
  - Occasionally, such as Elizabeth Eleanor Siddall, Pippa Passes (1854).
     Women artists also rarely painted the nude as they ran the risk of being viewed as morally decadent. However, Evelyn Pickering De Morgan painted Cadmus and Harmonia in 1877 which shows a naked Harmonia being embraced by a snake. This is based on a less well-known classical story and it therefore demonstrates her superior classical knowledge. Ovid describes

how Cadmus kills a serpent and years later marries Harmonia, daughter of Venus and Mars, but their children die. He fears he killed a sacred serpent and prays he can became a serpent. He transforms into a one and embraces Harmonia and she in turn prays to become a serpent and is also turned into one and the two embrace.

- How were paintings reproduced?
  - Very few books and periodicals were illustrated. Reviews of painting
    exhibitions always had to describe the painting first. To reproduce a
    painting it was necessary for an engraver to copy the painting in black and
    white using a line-based technique. This resulted in the painting being
    reversed.
  - The Illustrated London News was the world's first illustrated weekly news magazine; its inaugural issue appeared on Saturday, 14 May 1842. The magazine was published weekly until 1971, and less frequently thereafter. Publication ceased in 2003. The first edition featured sensational stories and used wood engraving. By 1855 it was selling 200,000 copies a week. From about 1890 onward The Illustrated London News made increasing use of photography.