Chapter 2.1
Drawing
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Drawing

Gateways to Art: Understanding the Visual Arts
by Debra J. DeWitte, Ralph M. Larmann, M. Kathryn Shields

Thames & Hudson
Introduction

- Drawing—defined as the depiction of shapes and forms on a surface, primarily by means of lines—is a fundamental artistic skill
- Even before we learn to write, we learn to draw
- Drawing provides a primal outlet for artistic energy and ideas
- Artists draw for many reasons
  - To define their ideas
  - To plan for larger projects
  - To resolve design issues in preparatory sketches
  - To record their visual observations
2.1 Leonardo da Vinci, Drawing for a wing of a flying machine, from the Codice Atlantico, fol. 858r. Pen and ink. Biblioteca Ambrosiana, Milan, Italy.
Leonardo da Vinci, Drawing for a wing of a flying machine

- Leonardo considered whether humans might also be able to fly if the mechanics of a bird’s wing were re-created on a human scale.

- His drawing of a flying machine illustrates a concept that had never been considered in this way before.

- Drawing provided Leonardo with a way to express his ideas beyond what could be said in words.
2.2 Leonardo da Vinci, Studies of the foetus in the womb, c. 1510–13. Pen and ink and wash over red chalk and traces of black chalk, 12 x 8¾". Royal Collection, England.
Leonardo da Vinci, 
Studies of the foetus in the womb

- Drawings like this are rare because the Church banned all acts that desecrated the body, including dissection.

- Leonardo may have been allowed to record his observations because he practiced his drawing methodically and with great care.

- Some speculate that the Church was interested in Leonardo’s observations as possible evidence of how the human soul resides in the body.
Functions of Drawing

- All artists draw for the same reasons as Leonardo: as an end in itself, to think, and to prepare and plan other works

- Drawing played an essential role in Raphael’s planning of his fresco The School of Athens
2.3a Raphael, Cartoon for *The School of Athens*, c. 1509. Charcoal and chalk, 9'4¼" × 26'4¾". Biblioteca Ambrosiana, Milan, Italy


Raphael’s preliminary drawings allowed him to refine his ideas and perfect the image at a smaller scale

- The artist began the painting process by creating a large drawing of the work
- This design, called the cartoon, was perforated with small pinholes all along where the lines were drawn
- It was then positioned on the wall where Raphael intended to paint the work, and powdered charcoal dust was forced through the small holes in the cartoon’s surface
- The impression left behind would aid Raphael in drawing the image onto the wall
The Materials of Drawing: Dry Media

- Dry media offer the artist some unique and versatile properties
DRY MEDIA: Pencil, Charcoal, Conte, Crayon, Pastel.

- Fixative
- Binder
- Paper Tooth
Materials for Drawing

Dry Media

Charcoal/Graphite

Metalpoint with white gouache

Filippino Lippi, Figure Studies, c. 1490.
Dry Media: Pencil

- A deposit of solid graphite was discovered in the mid-1500s and gave rise to the manufacture of the basic pencil we know today

- Pencils have different degrees of hardness
  - The B or black graphite pencils are softer and darker
  - The H or hard graphite pencils create a relatively light mark

![Pencil hardness scale from 9H to 9B](http://www.verydoc.com and http://www.verypdf.com)
MATERIAL CHOICES


Seurat. L'Echo (study for Une Baignade). Conte crayon. 1883-4
Ilka Gedö, Self-portrait

- Used thick dark lines to imply darkness and thin light lines to suggest lightness
  - The dark value of the eye and wavy hair, where the pencil has been pressed hard, concentrates our attention on the artist’s face
  - Notice how softly the artist handles the graphite in the areas representing the skin compared with the hair or clothing
- Gedö was a survivor of the Holocaust
  - This drawing records her gaunt features shortly after her internment
Dry Media: Color Pencil

- Color pencil is manufactured much like the traditional graphite pencil, but the mixture that makes up the lead has higher amounts of wax and pigment.

- Color pencils are used just like graphite pencils, although their marks may be harder to erase or alter.
Birgit Megerle, Untitled

- Megerle applies the colored pencil lightly, allowing the whiteness of the paper to dominate.

- These pale tones of color give the drawing a light overall appearance.

- Megerle’s highly regarded style communicates a sense of stillness.
Dry Media: Silverpoint

- Silverpoint is a piece of silver wire set in a holder to make the wire easier to hold and control
  - The artist hones the end of the wire to a sharp point
  - Because of the hardness of the silver, artists can create finely detailed drawings
  - Because silver tarnishes, the drawing becomes darker and the image more pronounced over time

- Historically, artists have drawn with silverpoint on wood primed with a thin coating of bone ash
Raphael, Heads of the Virgin and Child

- Because silverpoint has such a light value and is usually drawn with very thin lines, much of the white paper is exposed.

- Closely overlapping many parallel lines across each other creates the illusion of a darker value. This is called hatching.

- Artists use this technique to darken values and create the effect of shading.
Dry Media: Charcoal

- Charcoal smudges easily, creates lines that can be easily shaped and altered, usually has strong dark value, and is soft compared to metal-based drawing materials.

- Artists choose charcoal as a drawing material when they want to express strong dark tones, add interest to a surface, and make something look solid rather than linear.
  - Vine charcoal is made from thin vine branches and is very soft and easily erased.
  - Compressed charcoal, to which a binding agent such as wax is sometimes added, is much denser.

- To draw with charcoal, an artist drags the stick across a fibrous surface, usually paper, leaving a soft-edged line.
Käthe Kollwitz, Self-portrait in Profile to Left

- In her self-portrait we feel a sense of energy from the way Kollwitz applies the charcoal.

- Although she renders her own face and hand realistically, in the space between we see the nervous energy connecting the eye to the hand.

- Kollwitz draws with a spontaneous burst of charcoal marks along the arm, in expressive contrast to the more considered areas of the head and hand.
Léon Augustin Lhermitte, An Elderly Peasant Woman

- Each line and blemish on this woman’s face has been carefully rendered

- The charcoal’s dark value accentuates the contrast between the highlights in the face and the overall darkened tone of the work

- Lhermitte has controlled charcoal’s inherent smudginess to offer an intimate view of the effects of aging
Dry Media: Chalk, Pastel, and Crayon

- Sticks of chalk, pastel, and crayon are made by combining pigment and binder

- Binders include oil, wax, gum arabic, and glues
  - Chalk is powdered calcium carbonate mixed with a gum arabic (a type of tree sap) binder
  - Pastel is pigment combined with gum arabic, wax, or oil, while crayon is pigment combined with wax
  - Conté crayon is a heavily pigmented crayon sometimes manufactured with graphite
Red chalk, 11⅞ x 8¾".
Metropolitan Museum of Art, New York.
Purposes for Drawing: Preparatory Sketch
14.21 overview (diff. than book)

Michelangelo,
Studies for the Libyan Sibyl

- Drawn using red chalk known as sanguine
- Made in preparation for painting the Sistine Chapel ceiling in Rome
- The artist’s study concentrates on the muscular definition of the back and on the face, shoulder, and hand, and gives repeated attention to the detail of the big toe
- These details are essential to making this twisting pose convincing
2.11 Edgar Degas, *The Tub*, 1886. Pastel, 23\frac{3}{8} \times 32\frac{3}{4}". Musée d'Orsay, Paris, France
PASTELS

Carriera Allegory of Painting. 1720. pastel on paper.

Degas. Breakfast after the Bath. C. 1894. pastel on paper.
Edgar Degas, The Tub

- Degas is noted for pastel studies that stand as finished works of art

- Degas lays down intermittent strokes of different color pastels

- The charcoal-like softness of the material is used to blend the colors together, giving them a rich complexity and creating a variety of contrasting textures
2.12 Georges Seurat, *Trees on the Bank of the Seine* (study for *La Grande Jatte*), 1884. Black Conté crayon on white laid paper, 24½ x 18½”. Art Institute of Chicago.
Georges Seurat,
Trees on the Bank of the Seine
(study for La Grande Jatte)

- Conté crayon drawing

- Seurat designates the foreground by using darker values

- He allows the color of the paper to be more dominant in areas he wants to recede into the distance
PART 2
MEDIA AND PROCESSES

Chapter 2.1 Drawing

Georges Seurat: Sunday on La Grande Jatte

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Click the image above to launch the video

Part 2
Media and Processes

Chapter 2.1 Drawing

Or for more on another artist who drew many studies before completing his final painting, watch:

Théodore Géricault: Raft of the Medusa

Click the image above to launch the video

Erasers and Fixatives

- Erasers are used not only for correction but also to create light marks in areas already drawn.

- In this way the artist can embellish highlights by working from the dark to light.
Robert Rauschenberg, Erased de Kooning Drawing

- Rauschenberg created a new work of art by erasing a drawing by Willem de Kooning.
- De Kooning agreed to give Rauschenberg a drawing, understanding what the younger artist had in mind.
- But, in order to make it more difficult, de Kooning gave Rauschenberg a drawing made with charcoal, oil paint, pencil, and crayon.
- It took Rauschenberg nearly a month to erase it.
- Rauschenberg’s idea was to create a performed work of conceptual art and display the result.
The Materials of Drawing: Wet Media

- The wet media used in drawings are applied with brushes or pens
- Wet media dry or harden as the liquid evaporates
Wet Media: Ink

- Ink is a favorite of artists because of its permanence, precision, and strong dark color
  - Carbon ink, made by mixing soot with water and gum, has been in use in China and India since around 2500 BCE
    - A contemporary version of carbon ink, called India (or Indian) ink, is a favorite of comic book artists
  - Most European ink drawings from the Renaissance to the present day are made with iron gall ink
    - Gall ink is not entirely lightfast, however, and tends to lighten to brown after many years
  - Other types of fluid media include bistre, which is derived from wood soot and usually a yellow-brown color, and sepia, a brown medium that is derived from the secretions of cuttlefish
Wet Media: Quill and Pen

- Traditionally a quill—the shaft of a bird’s feather, or a similarly hollow reed—is carved to a point to apply the ink.
- A slit, running parallel to the shaft, helps control its rate of flow.
- The artist can control the flow of the ink by pressing harder or more softly.
- The artist can further increase or decrease the width of the drawn line by holding the pen at different angles.
Vincent van Gogh, 
Sower with Setting Sun

- Van Gogh uses a reed pen and brown ink

- By changing the way he applies his pen strokes and by controlling their width, he creates an undulating, restless design

- Van Gogh’s emphatic direction of line expresses the characteristic energy of his work
Wet Media: Brush Drawing

- The ancient Chinese used brush and ink for both writing and drawing
- These brushes are made with a bamboo shaft and either ox, goat, horse, or wolf hair
- Traditionally, Asian artists use a stick of solid ink that they hold upright and grind on a special ink stone with a small amount of water
- Artists wet the brush by dipping it into this reservoir, and then adjust the shape and charge of the brush by stroking it on the flat of the grinding stone
2.15 Wu Zhen, Leaf from an album of bamboo drawings, 1350. Ink on paper, 16 x 21”. National Palace Museum, Taipei, Taiwan
Wu Zhen, Leaf from an album of bamboo drawings

- This finely planned design contains carefully controlled brushstrokes as well as loose, freer ink applications.
- Because the artist uses only a few shapes, the arrangement of the bamboo leaves becomes like a series of letters in a word or sentence.
- Wu achieves the changing dark and light values by adding water to create a wash and lighten the ink.
- This work was intended as a model for Wu’s son to follow as he learned the art of brushwork from his father.
2.16 Claude Lorrain, *The Tiber from Monte Mario Looking South*, 1640. Dark brown wash on white paper, 7\(\frac{3}{8}\) x 10\(\frac{3}{8}\)”. British Museum, London, England.
Claude Lorrain, The Tiber from Monte Mario Looking South

- Thoughtful brushstrokes give us a feeling of the great expanse of the Italian countryside.

- The wash that Lorrain uses gives a sense of depth by making the values of the foreground areas both the darkest and lightest of the whole drawing.
Paper

- Paper was invented in China by Cai Lun, who manufactured it from pounded or macerated plant fibers.
2.17 Hishikawa Moronobu, *Papermaking in Japan*, showing the vatman and the paper-drier, from the *Wakoku Shoshoku Edzukushi*, 1681. Woodblock print.
Hishikawa Moronobu, Papermaking in Japan

- This work depicts how the fibers are suspended in water and then scooped up into a flat mold with a screen at the bottom, so that the water can escape.
- The fibers are now bonded to each other enough to keep their shape when they are taken out.
- The sheet is then pressed and dried.
- Handmade papers are still manufactured this way in many countries, mostly from cotton fiber, although papers are also made of hemp, abaca, flax, and other plant fibers.
2.18 Surface texture of wove and laid paper

Paper surface patterns reveal the texture of the screen used in the manufacture of each sheet.
ALTERNATE DRAWING SURFACES
DRAWING ON WALLS

Chauvet Caves. Prehistoric drawings
erased de kooning
Reaching for the Wall

Conceptual Art: Idea more Important than Form

Gary Simmons, *boom*, 1996. *Chalk and slate paint on Wall*
Recent Directions

Reaching For the Wall

Chapter 2.1

Drawing
Introduction

- Artists have painted surfaces of many kinds for tens of thousands of years

- Paint in its most basic form is composed of pigment suspended in a liquid binder that dries after it has been applied
  - Pigments have been extracted from minerals, soils, vegetable matter, and animal by-products
  - Binders are traditionally beeswax, egg yolk, vegetable oils and gums, and water; in modern times, art-supply manufacturers have developed such complex chemical substances as polymers
Paint is made of
Pigment: powdered color - compounded with a
Medium: a liquid that holds the pigments together without
dissolving them, which can also include a
Binder: an ingredient that ensures that the paint will adhere to
the surface. It is applied on a
Support: a surface on which the artist works, with a
Ground or Primer: a preliminary coating.
Grisaille: a painting technique executed in gray-scale values
before color glazes.
Glazes: thin, translucent layers of color
Note: media and medium are also used to refer to all materials
used in a work of art.
Ceiling view. Altamira cave. Spain. 12,000BCE. Black manganese and red ochre.
Ptd ceiling of cubiculum in Catacomb of Sts. Peter and Marcellinus Rome, 4th C.
Encaustic

- To use encaustic, an artist must mix pigments with hot wax and then apply the mixture quickly.
- Artists can apply the paint with brushes, palette knives, or rags, or can simply pour it.
- A stiff-backed support is necessary because encaustic, when cool, is not very flexible and may crack.
2.23 Portrait of a boy, c. 100–150 CE. Encaustic on wood, 15¾ x 7½". Metropolitan Museum of Art, New York.
**Portrait of a boy**

- This type of portrait would have been used as a funerary adornment that was placed over the face of the mummified deceased or on the outside of the sarcophagus in the face position.

- Was made by an anonymous artist during the second century CE in Roman Egypt.

- Encaustic portraits from this era are referred to as Fayum portraits after the Fayum Oasis in Egypt where many of them were found.
Jasper Johns. Numbers in Color. 1958-9, Encaustic and collage on canvas
Fresco

- This technique involves pigment mixed with water painted onto a freshly applied lime-plaster surface
- The pigment is not mixed into a binder, as it is in other painting techniques
- Once this chemical reaction is complete the color is extremely durable, making fresco a very permanent painting medium
- The earliest examples of the fresco method come from Crete in the Mediterranean (the palace at Knossos and other sites) and date to c. 1600–1500 BCE
For more on Michelangelo’s monumental work on the Sistine Chapel ceiling, watch:

**St. Peter’s Basilica and the Sistine Chapel**

Click the image above to launch the video

2.29 Melchor Peredo, *Remembrance Fresco*, 1999. Fresco, each panel 4 x 8'. Harton Theater, Southern Arkansas University, Magnolia.
In the 1920s a group of artists decided to champion the struggles of ordinary Mexicans and express the ideals of the Mexican Revolution by reviving the art of fresco painting.

- The muralists were political radicals who were influenced by the ideas of socialist and communist leaders.

Diego Rivera’s fresco Sugar Cane portrays the exploitation of workers on the large sugar farms in Morelos, south of Mexico City.

Peredo studied with the great mural painters.

- His Remembrance Fresco focuses on important historical figures and local folklore, based on ideas given to him by students and members of an Arkansas community.
Fresco: Paint into Plaster

Pigment is mixed with water and applied to a plaster support, usually a wall or ceiling in plaster. It is usually worked while the plaster is damp, which requires working on small areas at one time.

Advantages:
Large scale projects
Survives for centuries

Michelangelo. Sistine Chapel.

14.22,23 Creation of Adam, before and after cleaning.

Frescoes were re-popularized in the 20th century in Mexico.

Diego Rivera, Mixtec Culture, 1942.
2.28 Diego Rivera, *Sugar Cane*, 1931. Fresco on plaster, 4'10" x 7'11". Philadelphia Museum of Art
Tempera

- Painters who use egg tempera have different ideas about what parts of the egg work best for tempera painting, but artists during the Renaissance preferred the yolk.

- Tempera is best mixed fresh for each painting session.

- Tempera is usually applied with a brush and dries almost immediately.
The Virgin and Child with Angels, Ferrarese School

- Tempera paint consists of pigment and egg yolk
  - Also incorporates oil and gold leaf, a common combination at this time
- Artist has chosen to paint an illusionistic frame that makes us think we are looking at the back of a damaged canvas
- Tempera is normally painted with short thin strokes and lends itself to such careful detail
Islamic artists enjoyed the sensitive detail that can be achieved with tempera, and some used tempera with gold leaf to create rich images for the ruling class.

This work, Two Lovers, combines a rich gold-leaf finish with the high detail of tempera.

The artist used the transparency of the medium to make the plant life look delicate and wispy.

The intertwined lovers stand out proudly from the softness of the plants in the background.
An aqueous (water) medium like watercolor, with the durability of oil. Most famous emulsion is egg yolk.

**Advantages:**
Retains its brilliance and clarity-
Does not yellow like oil.
Dries quickly, form can be built up.
12.3 Cimabue Madonna Enthroned. 1280-90. Tempera on Wood. 12’7”.

Byzantine influence
12.4 Giotto. Madonna Enthroned. 1310

Spatial relationship. 3 Dimensionality
Oil/Tempera: Hybrid

Jan Van Eyck. Madonna and Child with the Chancellor Rolin. 1433-1434. Oil and tempera on panel.
Oil

- Artists used oil paint during the Middle Ages, but have only done so regularly since the fifteenth century.

- The oil most used as a binder was linseed oil, a by-product of the flax plant from which linen cloth is made.

- Giorgio Vasari, an Italian Renaissance writer and artist, credits the fifteenth-century Flemish painter Jan van Eyck with the invention of oil paint.
2.30 Jan van Eyck, *The Madonna of Chancellor Rolin*, 1430–34. Oil on wood, 26 x 24¾”. Musée du Louvre, Paris,
Jan van Eyck, The Madonna of Chancellor Rolin

- Although Van Eyck did not invent oil paint, he was an exceptional practitioner of oil painting

- This painting exhibits his masterful use of thin layers of color called glazes

- Glazes attain a rich luminosity, as though lit from within
2.31 Joan Brown, *Girl in Chair*, 1962.
Oil on canvas, 5 x 4'. LACMA.
Joan Brown, 
Girl in Chair

- Used oil in an impasto (thickly painted) fashion

- The paint can pile up, giving Brown’s work a three-dimensional presence
2.32 Hung Liu, *Interregnum*, 2002. Oil on canvas, 8’ x 9’6”. Kemper Museum of Contemporary Art, Kansas City, Missouri
Hung Liu, Interregnum

- Hung grew up in Communist China before emigrating to the United States
- Hung’s images express her Chinese roots
- The traditional Chinese style is reflected in the idyllic figures in the upper part of Interregnum
- Hung’s work shows the discontinuity between reality and the ideal
Oil on canvas, 6'6¾" × 5'3¾".
Uffizi Gallery, Florence, Italy
Auerbach. Head of Michael Podro. 1981. oil on board.

Hartigan, City Life. 1956. 81" x 98 ½" o/c

Watercolor and Gouache

- Watercolor and gouache suspend pigment in water with a sticky binder, usually gum arabic
  - Watercolor is transparent
  - An additive (often chalk) in gouache makes the paint opaque
- Usually watercolor and gouache are painted on paper because the fibers of the paper help to hold the suspended pigments in place
- Any white area in a watercolor is simply unpainted paper
- White gouache can be used to cover areas of a watercolor that become too dark
2.36 Albrecht Dürer, *A Young Hare*, 1502. Watercolor and gouache on paper, 9\(\frac{3}{4}\) x 8\(\frac{3}{4}\)". Graphische Sammlung Albertina, Vienna, Austria.
Albrecht Dürer, A Young Hare

- Reflects direct observation of a natural subject
- Combination of watercolor with opaque white heightening
- Conveys a sense of the creature’s soft, striped fur
2.37 Sonia Delaunay, *Prose of the Trans-Siberian Railway and of Little Jehanne of France*, 1913. Watercolor and relief print on paper, support 77 x 14"
Sonia Delaunay, *Prose of the Trans-Siberian Railway and of Little Jehanne of France*

- Delaunay was the first woman to have her work shown at the Louvre Museum during her lifetime
- *Prose*... is an artist’s book
- Collaboration with the poet Blaise Cendrars
- If all 150 copies of the first edition were placed end to end, it was intended they would stretch the height of the Eiffel Tower
- Meant to be folded like a roadmap
- Illustration progressively changes as the reader advances down the page
Watercolor

Pigment with a medium of water and gum arabic that acts as a binder. Usually, white is not added, using the transparent effect of water instead.

Advantages: Transparency Portability Spontaneity

John Singer Sargent, Mountain Stream, c. 1912-14.

Watercolor

Gouache is watercolor with an inert white pigment added for opacity.

Similar to poster paints.

**Advantages:**
Dries quickly.
Light colors can be layered over dark ones.

Wilfredo Lam, The Jungle, 1943.
Acrylic

Synthetic/polymer paint perfected in 1950’s.
Medium is acrylic resins and water.

Advantages:
Tough, flexible & waterproof.
Fast drying.
Effects can mimic oils, watercolor, gouache & tempera.
Plastic quality for Mixed Media.
Acrylic

- Acrylic paints are composed of pigments suspended in an acrylic polymer resin

- These paints have only been in use since about 1950

- They dry quickly and can be cleaned up with relative ease, using water

- When dry acrylics have similar characteristics to those of oil paint

Roger Shimomura, Untitled

- Shimomura uses acrylic paint to create works that investigate the relationships between cultures.
- He merges traditional Japanese imagery with popular culture and typically American subjects.
- This combination of styles reflects the mixing of cultures resulting from communication and contact between nations.
- The painting explores the effects of conflict between two cultures.
Flack. Wheel of Fortune. 1977-8/ acrylic on canvas. 8’ x 8’