The Baroque: From Revolution in the Church

to Revolutions in US & France

to the Industrial Revolution

4.1 Bernini, detail *The Ecstasy of Saint Teresa*.

4.2 Diderot, image from *Encyclopedia*.

The glorious exuberance of Gianlorenzo Bernini's *Santa Teresa in Ecstasy* (**4.1**) can be contrasted with the arduous constraints of the illustration from Denis Diderot's *Encyclopedia* (**4.2**) to illustrate the extreme and conflictual differences that characterized the historic period known as the Baroque. With the ostentatious wealth of absolute monarchs and increased oppression of their subjects in some parts of Europe, and a rising middle class and its growing capitalist economy in other parts, the sensual and spiritual yet increasingly mechanized Baroque was a period of remarkable contrasts.

Chapter 4: Baroque

Scholars still debate whether the Baroque period was the final phase of Renaissance or the beginning of modern era. Rather than enter that debate, we will simply discuss the Baroque as the era that begins with the Counter Reformation—the Catholic Church's response to Protestant Reformation initiated by Martin Luther--and ends as world-shaking revolutions, both political and industrial, swept over Europe and the Americas.

The Baroque was complex and contradictory. Largely Catholic Southern Europe was characterized by the Counter Reformation and absolutist monarchies. In the north, Protestantism was on the rise, alongside growing capitalism. Widely divergent arts were created in service of the Church, absolutist monarchs and Northern European burgers. In the culture of display of the South, the "desire to evoke emotional states by appealing to the senses, often in dramatic way [led to] grandeur, sensuous richness, drama, vitality, movement, tension, emotional exuberance, and a tendency to blur the distinctions between the various arts."[1] This tendency can be seen, for example, in the grandiose spectacles designed for Louis XIV at Versailles (**4.3**). In contrast, much of Northern European art was rather restrained and austere, like the quiet middle class gestures of Dutch painter Jan Vermeer (**4.4**).


LEFT: 4.3 Rigaud, *Louis XIV.*

RIGHT: 4.4 Vermeer, *Girl with a Pearl Earring.*

Chapter 4: Baroque

The Baroque was also a period of scientific innovation. Descartes and Galileo conceptualized a new way of thinking about nature that was not based on Greek philosophy or Church tenets, but on reason and the analysis of physical laws. French philosopher Rene Descartes famously declared "I think therefore I am," situating the self in the rational mind and thereby splitting the intellect from the physical in a mind/body bipolar opposition. The focus on the rational extended to Baroque sciences as well.

One way to understand the impact of Baroque scientific innovations is to look at the period's response to Ptolemy's 150 AD assertion that the earth was the center of the universe. During the Renaissance, Nicolaus Copernicus had written that the earth and planets revolved around the sun. Corpernicus' revolutionary thesis had little impact until, during the Baroque period, Johannes Kepler published his laws of planetary motion. A few years later, Galileo Galilei began looking at the surface of the moon through a telescope and announced his findings (**4.5**). Kepler and Galileo's new scientific ideas kindled ideological conflicts. Galileo was brought to Rome, tried by the Church, forced to read a (falsified) confession, and remained under house arrest until his death in 1642.
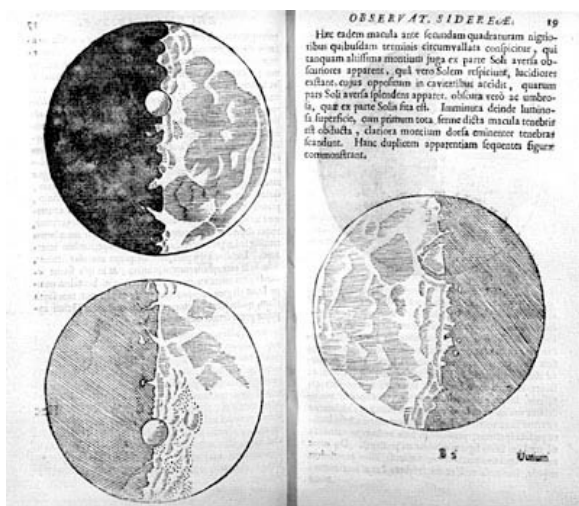
4.5 Galileo an astronomical treatise.

In addition to the telescope, Baroque scientists also developed and used the microscope, the thermometer, and the barometer in their investigations. And new projective technologies were developed that would soon democratize image-production.

The scientific revolution of the

Chapter 4: Baroque

Baroque was echoed in political revolutions that undermined the traditional cultural strongholds and proved every bit as transforming as Luther's revolution against Catholicism. By the eighteenth century, social discontent was organized into massive uprisings that crossed class lines and initiated wide changes in social and political practices. The first was the American Revolution for Independence from England (1776). It was soon followed by the French Revolution, which unfolded throughout the last two decades of the eighteenth century, and into the first of the nineteenth.

The Counter-Reformation & the Council of Trent

In reaction to the growth of Protestantism (began, as we have seen in the last chapter, by reformers like Martin Luther), the Catholic Church initiated what is known as the Counter-Reformation. In order to distinguish itself from as well as condemn the principles and doctrines of Protestantism, the Church convened an ecumenical council in 1545 in the German city of Trent. An outbreak of the plague in Trent caused the council to adjourn and temporarily reconvene in Bologna, in northern Italy. The council completed its work in Trent in 1563.

The council repudiated certain Protestant positions and affirmed the basic structure of the Catholic Church as it had existed in medieval times. It codified Catholic doctrines on salvation, the Seven Sacraments, and the Biblical canon. The Catholic Mass was standardized, thereby abolishing the pluralism of local variations. Church discipline and administration were reformed. So was the practice of the sale of indulgences. The role of the Pope as an absolute ecclesiastical authority was "firmly legitimized."[2] The Inquisition was revitalized to prevent the growth of heresy. In 1564, the year following the completion of the work at Trent, an index of prohibited books was issued.

Chapter 4: Baroque

The visual arts were also addressed by the council. Cardinal Paleotti wrote a tract on what he termed *decorum* in painting, a detailed discussion of what was and wasn't acceptable. In Paleotti's *decorum*, "Nudity and eroticism were out…Anything faintly tinted with heretical incorrectness was anathema. Nothing from real life was to intrude that might diminish or distract from the improving and uplifting image. Dignity was essential. Humor was banned. So was fantasy. Anything new of any kind was banned."[3] By 1597, an index of prohibited images was issued.

However, as the Baroque progressed, the Church shifted from restraining and admonishing worshippers to attracting them. Aware that most Christians were illiterate, the Church fathers emphasized the visual arts—rather than printed texts—to "speak" to the masses. They declared that "[t]he purpose of religious art was to teach and inspire the faithful and to serve as propaganda for the Roman Catholic church. Religious art should always be intelligible and realistic, and, above all, it should serve as an emotional stimulus to piety."[4] In its efforts to propagate the messages of the Counter Reformation through art, Rome, the capital city of the Church, became "the world's great image factory."[5]

One of the artists who portrayed the emotional passion of Counter-Reformation Catholicism was **Caravaggio**.

Michelangelo Merisi, called Caravaggio

In the Baroque society whose culture "revolved around painting,"[6] people flocked to see the paintings newly installed in public venues, just as they flock to see newly released movies today. One of the most popular painters of the early Counter Reformation was Michelangelo Merisi (1571-1610), known as Caravaggio, from the name of his home region of Italy. Caravaggio was also one of the Counter Reformation's most controversial artists. He painted in

Chapter 4: Baroque

the style known as naturalism, which meant he repeatedly violated the terms of Cardinal

Paleotti's *decorum*. He was also prone to outbursts of violence. Accounts of his many encounters

with the police were reported in the *avvisi*, Roman precursors to modern newspapers.

The work of Michelangelo da Caravaggio introduced the Baroque spirit into painting. His

art inspired Baroque painters in northern and southern Europe by dramatically shifting the

vanishing point toward the spectator. Renaissance artists like Leonardo had used the central

vanishing point to create a stable, balanced image. Caravaggio shifted the vanishing point, the

light source, and the main characters in the action away from the center of the painting. His

paintings brought the viewer into the scene with some of the boldness that we now experience

with the moving angle shots used by cameras in movie and television productions.

Caravaggio's *Deposition from the Cross*

In about 1600, Girolamo Vittrice hired Caravaggio to paint a *Deposition* (an image of Christ

being taken down from the cross) for his family chapel in Santa Maria Vallicella in Rome (**4.6**).
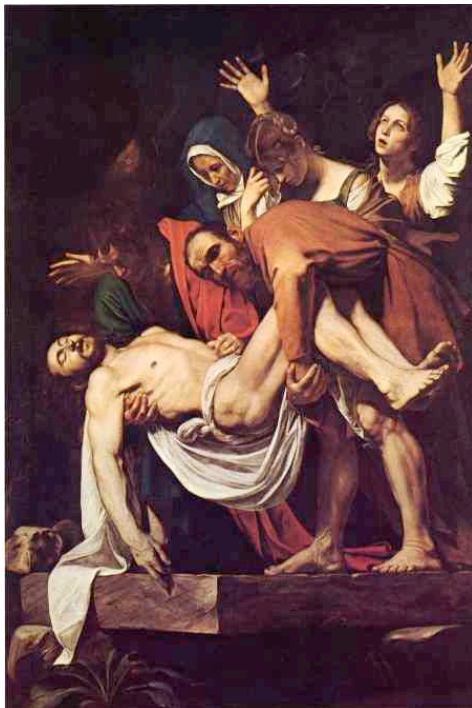
4.6 Caravaggio, *Deposition***, ca. 1600.**

Caravaggio chose to paint Jesus being laid on the stone with which the tomb would be closed. Christ is surrounded by four figures: his mother, Mary Magdalen, Nicodemus and Mary of Cleophas, who raises her arms to heaven.

The Deposition shows how Caravaggio's use of a below-center vanishing point produced a dramatic encounter between the viewer and Christ. Instead of being placed in an idealized central position, the viewer is placed below the scene and

watches the awkward attempt to remove the body of Christ for burial. The rough, homely features of the peasant holding Christ's legs and the plain, ordinary clothing of the grief-stricken women add to the immediacy of the scene. Caravaggio's use of ordinary people in ordinary dress also decreased the psychological distance between the sacred space of the painting and the private space of the individual believer.

The less stable point of view forces the viewer's eye to move continuously within the scene and gives the painting its momentary, almost journalistic quality. Compared with the static distant figures and idealized central space of Renaissance paintings, *The Deposition* seems like a photograph taken of a dramatically lit theater stage.

The dramatic impact of Caravaggio's *Deposition* is so compelling that film director Tarsem Singh recreated it in *tableaux vivants* (living paintings) for a popular late twentieth century music video (discussed further in Chapter 11).

Caravaggio's Use of Mirrors & Compasses

Leonardo da Vinci had begun his *Book on Painting* with a discussion of painting as a science. Familiar with Leonardo's text from the copy owned by his first major patron (Cardinal Del Monte), Caravaggio employed all the advances of the growing science of optics in his own work. In order to control the light, Caravaggio arranged the figures--usually models hired from the urban underclass--in his dark studio. He illuminated them with light from single window, usually to the upper left. (He got in trouble with one landlady for cutting such a window into the wall of one of his studios.)

Documents indicate that Caravaggio used mirrors to project images onto his canvases and compasses to measure aspects of his compositions. One of his earliest biographers, Baglione asserted that the artist "made a few small pictures portrayed from the mirror" for Cardinal del

Chapter 4: Baroque

Monte.[7] Caravaggio's most recent biographer, Peter Robb, is convinced that the artist often used convex mirrors in composing his paintings. Robb points out that Baglione's statement about the artist's use of mirrors is confirmed by legal document, a 1599 list of personal belongings abandoned by Caravaggio when he was forced to leave a home without paying past due rent. In the artist's studio, the authorities found a "big mirror" and a "mirror shield" (i.e., a large convex mirror.)[8] David Hockney suggests that Caravaggio probably used mirrors in setting up his compositions, then scored (with pointed end of brush) the outlines of the arranged figures into a wet layer of underpainting.[9]

It is also possible that Caravaggio knew about the camera obscura. Ten years before Caravaggio abandoned his large convex mirror, scientist and playwright Giambattista Della Porta had published *Magiae naturalis (Natural magic)*. Della Porta's popular book included discussion of optical projections and an account of the use of the camera obscura with a lens to cast an image.[10] He revealed that the use of lenses in camera obscuras had previously been "a great secret," but that he had "often shewed this kind of Spectacle to my friends, who much admired it, and took pleasure to see such a deceit…"[11] Caravaggio may have met Della Porta when they were both in Naples in 1606.[12] The painter probably also knew Galileo, who used lenses and mirrors in developing his telescope, through the Del Montes.[13]

In addition, Caravaggio used compasses in his work. Again, the legal documents support this: in 1598, he was arrested for "wearing a sword without a license and carrying a pair of compasses." The compasses, which may have looked to unknowing police eyes like daggers, were probably reductions compasses used for measuring proportions.[14]

Whether or not Caravaggio used technology to assist him, his images stand as some of the most powerful statements of European religious art. The iconic impact of his work was

especially important at the beginning of the seventeenth century. Catholic art at this time sought to provide a greater sense of personal involvement for believers, similar to that offered by the Protestant approach of individual interpretation of the Bible. Catholic artists like Caravaggio and his followers sought ways to combine the long tradition of communal art in churches with the new need for a greater sense of the personal. Caravaggio's followers spread his style throughout Catholic Europe as churches increasingly deployed art to convey their messages.

Artemesia Gentileschi

One of Caravaggio's most outstanding followers was the daughter of his Roman friend **Orazio Gentileschi**. One of the men who had been arrested and charged with street brawling alongside the more famous painter, Orazio Gentileschi adopted Caravaggio's remarkable naturalistic style and passed it on to his gifted daughter **Artemisia Gentileschi** (1593-1652/53, **4.7**). It was Artemisia who transmitted Caravaggesque naturalism throughout the Italian peninsula and beyond. Born in Naples and raised in Bologna, Artemisia Gentileschi was the first woman to join the Academy in Florence, where she became quite well known as a painter. She also worked in Rome and Naples. In the late 1630s, she was invited to join her father at the court of Charles I in London. When he died, she returned to Italy and continued painting.

4.7 Gentileschi, *Self-Portrait as Martyr.*

She was a skilled painter of female nudes and many of her paintings depict biblical and mythological heroines. Like Caravaggio, Artemisia

Chapter 4: Baroque

Gentileschi did several versions of Judith and Holofernes, the Biblical account of a Jewish woman seducing then beheading an Assyrian general in order to prevent his conquest of her people (**4.8**). The dramatic contrast of light and dark underscores the boldness of her compositions. Erotic and violent, Artemisia Gentileschi's Judith and Holofernes paintings demonstrate the effectiveness of strong emotional appeal in art.

4.8 Gentileschi, *Judith beheading Holofernes***.**

Artemisia Gentileschi was not a feminist in the contemporary sense of the word, but she was aware of the difficulties facing a woman working in a field dominated by male practitioners. She accompanied the shipment of one painting to a patron with a note that said, "This will show your Lordship what a woman can do." Later, she wrote, "You will find the spirit of Caesar in the soul of this woman."[15]

Gianlorenzo Bernini
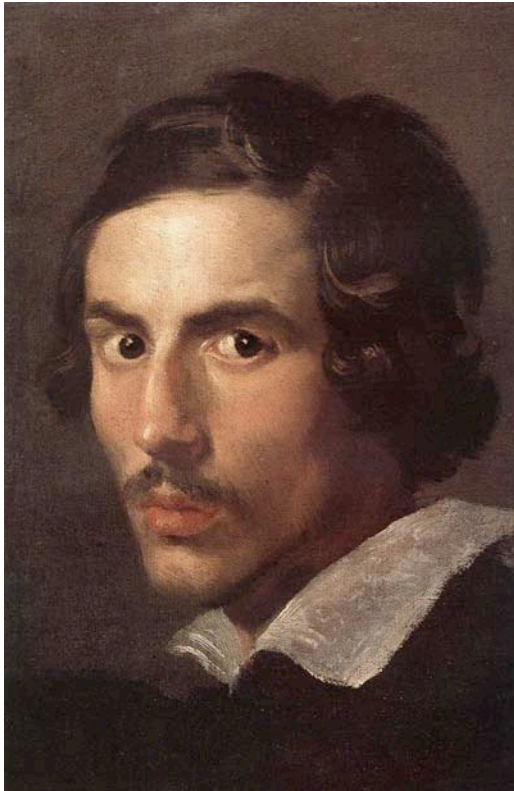
4.9 Bernini, *Self-Portrait.*

Like Artemisia Gentileschi, **Gianlorenzo Bernini** (1598-1680) was born in Naples (**4.9**). Also like her, he first studied with his artist father. The Bernini family settled in Rome, where at age 19, the young artist captured the attention of an important patron, Cardinal Maffeo Barberini. The cardinal later became Pope Urban VII and commissioned several of Bernini's major works.

A devout Catholic, Bernini attended mass every day and took communion twice a week. Emil Kren and Daniel Marx argue that the development of Bernini's art was "largely determined by his conscientious efforts to conform to the principles of the Counter-Reformation."[16] Bernini was also strongly influenced by his close study of the antique Greek and Roman marbles in the Vatican. And he had intimate knowledge of High Renaissance painting, like that of Michelangelo, whose work he quoted in several early pieces. Perhaps the biggest influence on Bernini, however, was the opera.

Chapter 4: Baroque

A Baroque fusion of the arts to create an overwhelming impressive whole, opera (short for *opera in musica*, or work of music) began in early seventeenth century Italy. Opera combined music, theater and the visual arts into a spectacle in which elaborately costumed actors sing some or all of their lines. Classical myths were revisited, history retold, and imagination stimulated in opulent pageantry with exotic scenery. Opera employed the newest of artistic advances: a 1656 English dictionary noted that opera was "adorned with scenes by perspective."[17] Germany imported opera in the later 1600s, as did France, where it flourished under Louis XIV.

Several of Bernini's sculptural complexes can be seen as opera scenes in fixed form. Bernini often melded the visual arts of painting, sculpture and architecture into what the Germans term *Gesamtkunstwerk*, a "total work of art."[18] The greatest example of this is his Cornaro Chapel in Santa Maria della Vittoria in Rome. Commissioned by Cardinal Federigo Cornaro to decorate a shallow subsidiary space along the side of the small church, Bernini's Cornaro Chapel portrays *The Ecstasy of Santa Teresa* (**4.10**).

4.10 Bernini, *The Ecstacy of Saint Teresa.*

Teresa of Avila (1515-1582) was one of most popular saints of Counter Reformation. Her writings were popular reading, especially her *Life (*1562) in which she recounts her experiences of hearing interior voices and seeing inner visions. Perhaps her most rapturous account is found in Chapter XXIX. Teresa tells of an angel appearing to her, a beautiful angel whose face appeared to be "aflame." The ensuing text is one of the most ecstatic—and sexual—accounts of Christian mysticism:

"In his hands I saw a long golden spear and at the end of the iron tip I seemed to see a point of fire. With this he seemed to pierce my heart several times so that it penetrated to my entrails. When he drew it out, I thought he was drawing them out with it and he left me completely afire with a great love for God. The pain was so sharp that it made me utter several moans; and so excessive was the sweetness caused me by this intense pain that one can never wish to lose it, nor will one's soul be content with anything less than God. It is not bodily pain, but spiritual, thought the body has a share in it—indeed a great share."[19]

Teresa, a Carmelite nun who had taken a vow of chastity, clearly understood that religious sentiments are sited *in* the body; Bernini portrayed her ecstatic moment in visual terms that can only be described as orgasmic. The life-sized saint and Cupid-like angel appear on a marble stage. To either side are raised opera seats. Seven members of the Cornaro family lean in from their seats to witness the mystical spectacle. Viewers are placed in front, as audience members.

Bernini's charged blending of religious and erotic, however accomplished, was not totally unprecedented. The saint's pose may have been derived from Caravaggio's 1606 Mary Magdalen; the angel/cupid may have been inspired by Caravaggio's 1602 *Love the Winner*.[20] Caravaggio, in turn, may have taken some of his poses from art works he saw in his childhood in Northern Italy. Robb writes, "Most of the images [Caravaggio] drew on came from Lombard and Venetian paintings he'd seen as a boy…They were a repertory of forms retrieved from deep in his young imagination's memory, and acted out in life by the models in front of him…The haunting of [Caravaggio's] paintings by forms drawn from the work of greater and lesser forerunners was a reminder that memory always played its part in the act of seeing and imitating."[21] However consciously or unconsciously, Bernini recalled Caravaggio's paintings in

his operatic sculpture ensemble. In a similar manner, today we "take in" media images—images from television, film, advertising—and they become a (largely unconscious) part of our behavioral repertory.

The sensual character of *The Ecstasy of St. Teresa* "aroused erotic associations and generated moral reservations from the second half of the eighteenth century. However, for contemporaries, it had met all religious and moral requirements."[22] It was but one in a long list of the artist's spectacular successes with both Church and populace.

Bernini traveled to Paris in 1665, at the invitation of Louis XIV. (This was not an unprecedented invitation: a French King had invited Leonardo da Vinci to his court in the previous century.) The monarch wanted the Italian to design new French royal residence. "By this time, Bernini was so famous that crowds lined the streets of each city along the route to watch him pass. His initial reception in Paris was equally triumphant, but he soon offended his sensitive hosts by imperiously praising the art and architecture of Italy at the expense of that of France."[23] Bernini's offence led to the rejection of his plans for the Louvre, also to the rejection of his proposed equestrian portrait of the king. Undeterred, the artist returned to Italy, where he continued to receive and execute major commissions from both ecclesiastical and private patrons.

When Bernini died at the age of 81, "he was widely considered not only Europe's greatest artist but also one of its greatest men. He was the last of Italy's remarkable series of universal geniuses…His death marked the end of Italy's artistic hegemony in Europe."[24]

Diego Velazquez

Whereas Bernini may be considered the greatest sculptor of the Baroque, **Diego Velazquez** (1599-1660) is often considered the greatest painter of the period (**4.11**). Born in

4.11 Velazquez, *Self-Portrait*.

Seville in southern Spain, Velazquez studied there and married his teacher's daughter at the age of 19. Soon thereafter, he moved to the Spanish capital of Madrid, where he became court painter to King Philip IV.

Velazquez's early works reveal the strong impact of Caravaggio. Images such as the *Waterseller of Seville* (1619, **4.12**) employ dramatic Caravaggesque lighting indicative of a single focused source of direct sunlight illuminating a darkened room. David Hockney suggests that Velazquez's second version of the *Waterseller* is so like the original that the artist probably used mechanical devices—perhaps like the compasses Caravaggio was arrested for carrying—in order to make the copy.[25]

4.12 Velazquez, *Waterseller of Seville*, 1619.

Decades later, Velazquez was still interested in the science of vision and its relation to image making. His optical concerns can be seen in *Las Meninas* (*The Maids of Honor*, 1656, **4.13**), which has been called the "greatest painting of all time." The large (10'5" X 9') and still somewhat mysterious canvas shows the artist at work in his royal studio. A dark, cavernous space, the studio has windows on the wall to the viewer's right, and paintings lining the back wall. A door in the back

wall is open, framing the body of a man who appears to be entering or exiting the room.

4.13 Velazquez, *Las Meninas*, **1656.**

The young Princess Margarita and her retinue—dwarfs, midgets, and dogs as well as

maids-- have entered the studio from the right. The canvas that Velazquez is apparently working

on occupies the left-hand side of the composition. He stands, brush and palette in hand, apparently just interrupted while painting. He looks out towards the viewer, but the viewer cannot see what he looks at or what he is painting. Perhaps it is the king and queen, who are seen reflected in a mirror at the very back of the studio.

French philosopher Michel Foucault suggests that Velazquez's painting is about the nature of representation: the images, the reflections in mirrors, and the depictions of the paintings-within-the-painting of *Las Meninas* add up to "all the signs and successive forms of representation."[26]

Las Meninas is also clearly about optics. The lighting of the room is so atmospheric and so convincing that the directors of the Prado Museum used to hang it alone in a room, opposite a small mirror suspended midway up the wall. Viewers stood between the two, looking into the mirror and seeing the painting reflected behind them as their optical environment. (Although Prado officials were probably not aware of it, the viewing experience they designed was similar to the one Brunelleschi set up with the mirrored surface and his perspective-rendered painting of the Baptistry in Florence.) The illusion was so convincing that people spent long hours meditating on the realism of Velazquez's masterpiece.

Velazquez's painted investigation of seeing and being seen was very bit as rational and scientific—and every bit as Baroque—as Galileo's study of the moon with a telescope.

In addition to his painting duties, Velazquez was appointed Marshal of the Royal Household. One of his responsibilities in this post was arranging ceremonies for the king. Such spectacles were important events for the Absolutist monarchs of the Baroque period. The artist's last assignment was to design and oversee the extravagant 1660 marriage ceremony for Maria

Chapter 4: Baroque

Teresa of Spain and French monarch Louis XIV (1638-1715). Overworked and stressed by the effort, Velazquez developed a fever and died soon after the royal wedding.

Louis XIV & Versailles

4.14 Louis XIV.

Louis XIV's father had died when he was five, but he did not take the throne until he was 23 (**4.14**). He then ruled as an absolute monarch until his death. Louis was a great patron of opera and art; he hung the *Mona Lisa* in his bedroom. During his reign, the French dictated artistic tastes and fashions of Europe.

France was an industrial leader when he took the throne, but there was marked economic decline as Louis's reign progressed. He fought disastrous and expensive wars, trying to annex the Netherlands three times between 1667 and 1697, and trying to establish dominance over Spain in1700, which led to the War of Spanish Succession 1701-1714. When Louis revoked the Edict of Nantes, which had guaranteed freedom for the Protestant Huguenots in France, thousands of Huguenots fled the country, taking their wealth and know-how with them.

Perhaps the greatest drain on the French economy was Louis' insatiable architectural ambition. As soon as he became king, he began the enlargement of his country home in Versailles, eleven miles from Paris. Louis determined to make it the most spectacular showcase of French wealth and taste, and he succeeded. The jewel of the Versailles crown is the Hall of Mirrors (**4.15**). When Louis conceived of the hall, mirror-making was a secret industry practiced

4.15 Hall of Mirrors, Versailles Palace.

only in Venice, Italy. Louis sent spies to Venice to learn the trade and convince mirror-makers to come to France. In doing so, he not only ensured the visual splendor of his hall, he also acquired a successful new industry for his country. Eventually, Versailles was comprised of over 200 rooms, occupied by over 1000 nobles and served by over 4000 workers. It was surrounded by a park that extended for several miles.

Louis adorned both palace and park with art. Although what remains are the monumental sculptures and paintings of Louis' era, ephemeral works were every bit as important at the time. In addition to opera and other staged dramas, Louis also presented *tableaux vivants* (living pictures) as entertainments for the courtiers that flocked to Versailles to curry favor (up to 10,000 courtiers were at Versailles at one point).

Louis determined to subordinate all of the arts to a single goal: the glorification of Louis XIV. Like Roman emperors before him, he erected numerous equestrian statues as symbols of royal authority. And he commissioned painters to execute numerous portraits, often created in multiples. His favorite was the 1700 standing portrait by **Hyacinth Rigaud** (**4.16**).

4.16 Rigaud, *Louis XIV*, **1700.**

Chapter 4: Baroque

Hyacinth Rigaud's Portrait of Louis XIV

The Sun King, as Louis XIV modestly called himself, was arguably the most powerful and masculine figure of his era. His image in the Rigaud portrait reveals the changing nature of gender construction in Western culture. Louis is portrayed with wig, make-up, jewelry, high heels, silk hose, garter belt, short fluffy skirt, velvet coat with fur collar and long lace cuffs. He is posed to show his legs, considered his sexiest attribute. The only masculine figures of the twentieth or twenty-first centuries who presented themselves this way were heavy metal rockers of the 1970s. Most other men of the modern era would have considered Louis' self-presentation effeminate at best. But that is not the way such an image was coded or understood at the time.

Close examination of Louis' lace cuff reveals the astonishing realism of Rigaud's art (**4.17**). Even magnified several times, the details of the painting are so precise that they looks like color photographs. This kind of realism, which produced an equivalence between the surface of things and their reproduction in oil paint, was the style Louis XIV supported. It was a painting style that required arduous and lengthy training. In order to acquire such training, French artists attended the Royal Academy under Louis' auspices.

4.17 Detail of *Louis XIV's* lace cuff.

Chapter 4: Baroque

Louis XIV & the French Royal Academy

Medieval artists had been organized in guilds under auspices of which student apprentices studied under master artists until ready to submit their "masterpieces" for consideration as full members and master artists themselves. During the Renaissance, guilds gradually transitioned into Academies, like the Academy in Florence, founded in 1562. The Counter Reformation revitalized the Florentine Academy in the 1590s, ostensibly to educate the artists but really to establish more church control over art.

In 1635, Cardinal Richelieu founded Academie Francaise "to defend and enhance the purity of the French language."[27] Richelieu's academy was followed in 1648 by the Academie Royal de Peinture et Sculpture, designed to establish and maintain artistic standards. In his efforts to centralize control over the arts, Lous XIV appointed the directors of the academy and oversaw the establishment of a rigid curriculum based on a rationalistic philosophy. The academy leaders graded past artists, giving classicists like Raphael the highest marks and demeaning the naturalism of painters like Caravaggio. Although they privileged precise realism (like that seen in the painting of Louis' lace cuff), they also insisted on elevated, idealized subjects. In fact, they also ranked subjects, placing history at the top and still life at the bottom.

A brilliant tactician, Louis XIV used academic painting as propaganda for his version of history. Propaganda is a term that originated with the Church's propagating, or spreading, the faith through art. Louis endeavored to shift the mythic base of culture from god to king. Through his manipulation of the academy and its products, Louis XIV used art to propagate his reign's justification.

(Readers should note that in Louis's time, the government did not control the practice of medicine. Barbers often worked as surgeons, cutting diseased bodies with the same instruments

they used to cut hair. But images were so powerful in the 17th century that they had to be regulated by the state.)

Academic painting is a term that can refer to any painting sponsored by the French Royal Academy of Fine Arts from the time it was established by Louis XIV in the seventeenth century as part of his attempt to bring all of French culture under royal control. The Academy controlled French art in three ways: it set training and admission standards for its own art school in Paris (the Ecole des Beaux-Arts); it sponsored annual or semiannual Salons, or public exhibitions, in Paris; and it controlled membership in the Academy itself.

Elizabeth Vigee-Lebrun & Marie Antoinette

The French Academy had a contradictory attitude about women. At first, a few women were elected members, although they did not enjoy all the privileges of male members. Women gained a certain prestige from membership and were given permission to exhibit in the Salons, but could not teach, compete for prizes or hold office in the Academy. In 1786, the Academy reversed its original policy and decided that no more women were to be admitted. Shortly before that date (1783), **Elizabeth Vigee-Lebrun** (1755-1842) gained membership in the Academy.

4.18 Vigee-Lebrun, *Self-Portrait.*

Marie Louise Elizabeth Vigee-Lebrun was the most celebrated woman artist of her time (**4.18**). She was born in Paris, the daughter of a portrait painter and art teacher. Art historians Linda Nochlin and Ann Sutherland Harris note that Vigee-Lebrun was "precocious": by age 15, she was supporting her family with her art.[28] She was a successful portrait painter in Paris by the age of 20. By 25, she was working for Queen Marie Antoinette (wife of Louis XVI).

Chapter 4: Baroque

In addition to her accomplishments as a painter, Vigee-Lebrun ran a salon in her home. Throughout the eighteenth century, royal patronage of the arts was "supplemented by powerful Parisian ladies who ran influential [private] salons," weekly social gatherings of the cultural elite which "cultivated refined conversation to excess."[29]

Vigee-Lebrun was "an exceptionally fine portrait painter."[30] Her images of the Queen, and of the Queen with her children are beautifully rendered with a life-like immediacy (**4.19**). They show Versailles life is all its beauty and grace. What they do not show is the social realities outside the palace. "While Marie Antoinette and her ladies cavorted at Versailles, playing at shepherdesses in her *hameau*, a phoney peasant hamlet, in the park real countrymen in the reign of Louis XVI were struggling against the threat of constant hunger and

4.19 Vigee-Lebrun, *Marie-Antoinette and her Children.*

worsening poverty."[31] Eventually, in 1789, French workers in Paris rose up in armed protest of tax burdens and other social abuses.

Vigee-Lebrun escaped at the time of the Revolution—she fled Paris the night the King and Queen were arrested—and continued her successes in other European capitals. She received aristocratic portrait commissions in Rome, Naples, Vienna, Saint Petersburg and London.

Chapter 4: Baroque

Vigee-Lebrun finally returned to France in 1801, where she continued exhibiting in the Academy Salons until 1824. Extraordinarily productive, her name has been attached to over 800 paintings.

The French Revolution

On July 14, 1789, a shouting mob of Parisians stormed the Bastille, a fortress used as a jail for political prisoners. With the help of soldiers who rallied to their cause, they eventually took the Bastille. It was a triumph for the workers.

At the time, Louis XVI and his wife Marie Antoinette were asleep in Versailles. Soon after, the king was forced to agree to a constitution and bill of rights. These documents were inspired by the French philosophy of Enlightenment, which held that the principles of scientific reason could be applied to all of life. In addition to reason, Enlightenment philosophers emphasized nature, feeling that what is natural is thereby good and reasonable. They felt that living according to nature brought happiness. They also believed in progress and liberty. Such ideas were dangerous under an absolutist monarchy. They had already proved dangerous in the American colonies, where they provided the intellectual underpinnings of the American Revolution in 1776.

Although the first few years after the Bastille were comparatively moderate, the French Revolution did not remain so. In 1793, in reaction to the king's intended deceptions, the people turned against him and executed the royal family and hundreds of other nobles in what is called the Reign of Terror. After the excesses of the Terror, many French people began to desire a powerful leader to re-establish control and re-normalize life. They found their leader in **Napoleon Bonaparte** (1769-1815, **4.20**), who began his rise to power in1799.

4.20 Napoleon Bonaparte.

From 1800 to 1810, Napoleon ruled the greatest European empire since Rome. But his crazed ambitions eventually proved his undoing. His invasion of first Spain and then Russia ended in disastrous retreats. But before he was defeated, Napoleon—like Louis XIV before him—established his impact on posterity through patronage of the arts.

Jacques Louis David: Painter of the Revolution

The French Revolution marks the point when one of the major cultural roles of art was as propaganda for the state. Such propaganda attempts to link the personality of the individual citizen with the personality of some heroic figure who personifies the state. Successful propaganda art produces icons that give the individual the experience of being at the center of the world of the state. A forerunner of the forms of propaganda used so extensively in our own day is the propaganda machine of Napoleon Bonaparte.

4.21 J.A.D. David, *Self-Portrait.*

icons for the state was **Jacques Louis David** (1748-1825, **4.21**). David became famous just before the Revolution in France with classically inspired paintings like the *Oath of the Horatii* (**4.22**, discussed in Chapter 1.) David's *Oath* had been commissioned by Louis XVI. Later, David—as Deputy—voted to send his patron to the guillotine. His *Oath*, first seen as an image of royal allegiance, was later viewed as a "manifesto of revolutionary sentiment."[32]

The artist who directed the French Revolution's search for new

4.22 David, *Oath of the Horatii*.

Another of David's paintings, *The Death of Socrates* pictured the famous Greek philosopher choosing death rather than accept the unjust verdict rendered by the Athenian political process (**4.23**).

4.23 David, *The Death of Socrates*.

Paintings like these caused intense discussion when they were shown at the semiannual Paris salons. They appeared to support the anti-king and anti-church sentiments that were growing in France at this time. David hoped that his paintings would "electrify" the public and make them more open to political change.

David continued to manage the image of the new cult of reason when the Revolution struck with its furious and almost uncontrollable energy. He was a member of the most radical group, the Jacobins, whose leader Robespierre initiated the infamous Reign of Terror. David himself was called the Robespierre of the brush. During this period, as Pageant Master of the Republic, David designed great national festivals whose aim was to give the people of France a new sense of mythic unity under the banner of human reason.

[SIDEBAR: The use of festivals as political tools continued into the twentieth century. In 1937, Adolf Hitler organized an immense national festival at Nuremberg. Hitler wanted to use the festival to generate a new German identity, healed from the wounds of WWI, that linked the "natural man" to the sacred earth with nostalgia for peasant life. The Nazi festival was documented in Leni Reifenstahl's controversial film *Triumph of the Will*.]

4.24 David, *The Death of Marat.*

A prime icon of the heroic cult of the "Revolution of Reason" is David's portrait of the journalist and leader of the Paris proletariat (working class), Jean Paul Marat (**4.24**). Marat is shown after his murder by the Republican patriot Charlotte Corday in 1793. Corday murdered Marat because she felt that he had led the Revolution beyond the original republican goals to something approaching anarchy. Marat became a martyr of the Revolution, and his

death inspired a cult that venerated his memory much like that of a saint. David's *Death of Marat* is one of the first of the modern images of heroes that, like earlier paintings of saints, reinforce the myth of the modern state as defender of the common man. (Related images of George Washington were being painted in the United States.)

The French Revolution eventually turned on Robespierre and required his death on the guillotine. David was also arrested; he expected to be executed. Instead, there was a general amnesty. The need of the new leader of the Revolution, Napoleon Bonaparte, for a master propagandist brought David back into artistic power.

David as First Painter to the Emperor

David served Napoleon well. He painted elaborate spectacle of Napoleon's coronation (**4.25**). At the emperor's insistence, David added the Napoleon's mother to the audience, although both men were fully aware that she did not attend.
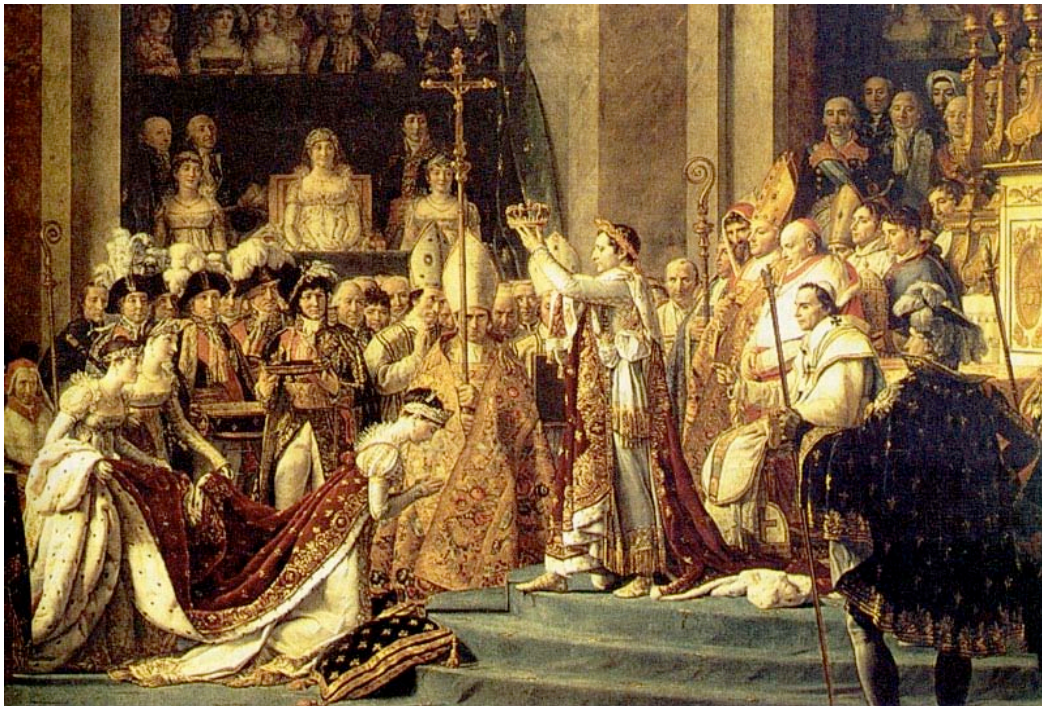
4.25 David, *The Coronation of Napoleon.*

David painted Napoleon crossing the Alps, as successor to Hannibal and Charlemagne (**4.26**). Although compellingly realist in appearance, David's image again manipulates and rewrites history. David uses all of his skill to convert an event into a glorious icon. He shows Napoleon heroically charging through the Alps on horseback. Napoleon actually crossed this pass on a donkey in the middle of a storm. David surrounds Napoleon's body (depicted larger in relation to the horse than it would have been) with a bright red cape, tossed by the wind that seems to be pushing the hero forward. Napoleon is not only larger in relation to the horse than a man of his small stature would have been; he looms giant-like over the tiny troops below him. David positions Napoleon in a pose that echoes that of conquering Roman generals who would erect equestrian statues in towns they'd just taken. On the rocks in the lower left, Napoleon's name is linked with Hannibal, who crossed the Alps to conquer Rome on elephants(!), and Charlemagne, who similarly crossed the Alps to enter Italy and become the Holy Roman Emperor. Napoleon's ambitions are flattered and confirmed in the painting. David has accomplished his propagandistic goals.


4.26 David, *Napoleon crossing the Alps.*

[SIDEBAR: David's Napoleonic image has had a long and varied life in the mass media. A popular television series of the 1950s—"The Lone Ranger"— ended each program with its title character rearing up on his white horse and yelling, "Hi-ho Silver and away!" As he did so, the Wild West hero repeated the pose in which David depicted the emperor crossing the Alps. Decades later, the pose was repeated in the opening scene of the film *The Mask of Zorro* (1998,

US, Martin Campbell). And in December 2004, the cover of *Wine Enthusiast Magazine* boasted a partial reproduction of David's famous painting. Artist Rich Hagedus digitally inserted a bottle of French wine in the emperor's left hand. Inside the magazine, another of David's portraits of Napoleon was used to illustrate the article "The Crisis Facing French Wine." To visualize the sorrow of French vintners, Hagedus digitally inserted a single tear in Napoleon's eye. Obviously, David's iconic images have been equated in the mass media with heroism in general, and with the French people in particular. (You can see the altered images at www.winemag.com.)]

During the nineteenth century, the paintings of David and his followers reached a large public by being reproduced as engravings. Even more people were brought into touch with icons of the Napoleonic cult through woodcuts like those that had for centuries featured images of the saints.

An engraving from 1802, at the beginning of Napoleon's reign as emperor, shows a group of children playing and cutting out pictures (**4.27**). The child Omer picks up a picture of Napoleon and says, "You will not find his equal." Elisa displays proper patriotic fervor by wearing a dress in the Neo-classical style that Napoleon adopted to connect his reign with that of imperial Rome. Urbain, though so young that he has to sit on two stools to participate, is politically precocious enough to applaud Omer's sentiments. Propaganda, then and now, is seldom subtle.
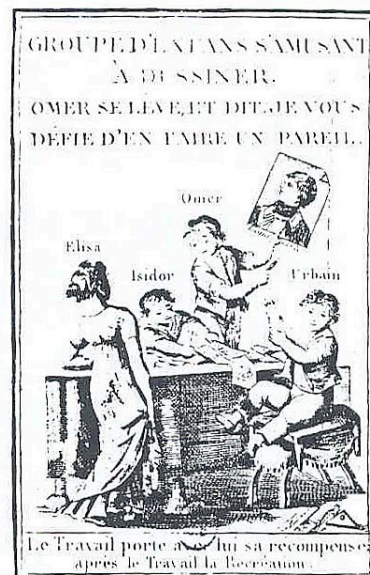
4.27 Engraving. 1802.

Chapter 4: Baroque

A woodcut made in 1834, almost twenty years after Napoleon's fall, demonstrates the effectiveness of his use of popular images that swept all ages into a connection with their emperor (**4.28**). This image is evidence of how enthralled "Omer's" generation still was, at middle age, with the memory of Napoleon. Napoleon is presented here as transformed into a deity in a kind of Valhalla surrounded by his generals.

4.28 *Apotheose de Napoleon*, 1835, epinal.

This image is particularly important because it is an image d'Epinal. Epinal is a town in eastern France that established a small industry producing crude, brightly colored woodcuts like this. With their bold outlining and bright, flat colors, images d'Epinal are the forerunners of today's comic strips and newspaper cartoon. They were cheap, easy to distribute, and clear in their propaganda messages to those who could not read. The images d'Epinal are examples of how printed pictures, forerunners of the mass media, were involved in the same complex relationship with new forms of power as the fine art of Vigee-Lebrun, David, and other artists of the day.

Art & Individualism: The Artist Becomes a Projector

The Napoleonic state lasted only until 1815. The French, exhausted by war and change, then restored a king to the throne. Though temporarily blocked in its political expression, the Enlightenment belief in individual freedom that had inspired the Revolution remained a compelling social myth.

4.29 Goya, *Self-Portrait.*

Many artists despaired for the possibility of individual freedom through politics. This reaction included disillusionment with David's use of art as a form of propaganda for the state. Such artists began to look increasingly inward for private visions to replace abandoned public expectations. The Spanish painter **Francisco de Goya** (1746-1828) is one of the first to show this transformation of the artist into a "projector" of his own subjectivity (**4.29**).

Francisco de Goya: The Subjective Vision of Hell

Goya was a remarkable success early in his career. Before he was forty, he was chief painter to the king of Spain. He led a life of unusually ostentatious independence at court, as evidenced by his highly unflattering portrait of the royal family (**4.30**) and his risqué portrait of the duchess of Alba, his alleged mistress.

4.30 Goya, *Charles IV and his Family***, 1800.**

But Goya did not experience the world as the bright, sparkling surfaces of his royal portraits. The fraud and hypocrisy of the Spanish court disillusioned him greatly. Goya used

etching to explore his personal reaction to the social world. At the end of the eighteenth century,

he did a print series called the *Caprichos* (Caprices, **4.31**). In order to sell the series and thereby


make the images available to a larger audience, Goya took out an ad in the Madrid newspaper. "The author is convinced that it is as proper for painting to criticize human error and vice as for poetry and prose to do so, although criticism is usually taken to be exclusively the business of literature. He has selected from amongst the innumerable foibles and follies to be found in any civilized society, and from the common prejudices and deceitful practices which custom, ignorance, or self-interest have made usual, those subjects which he feels to be the more suitable material for

4.31 Goya, from *Los Caprichos* series.

satire, and which, at the same time, stimulate the artist's imagination…Painting (like poetry)

chooses from universals what is most apposite. It brings together in a single imaginary being

circumstances and characteristics which occur in nature in many different persons."[33]

El sueno de la razon produce montruos depicts a
sleeping man asleep at his desk (**4.32**). The title Goya's print
is usually translated, "The sleep of reason produces monsters."
But the Spanish word *sueno* can also be translated as "dream."
Is Goya saying that the dream of reason produces monsters?
Was he asking if the rationalism of the Enlightenment had
brought the world to chaos? Goya scribbled below the image,
"The author dreaming. His only purpose is to root out harmful
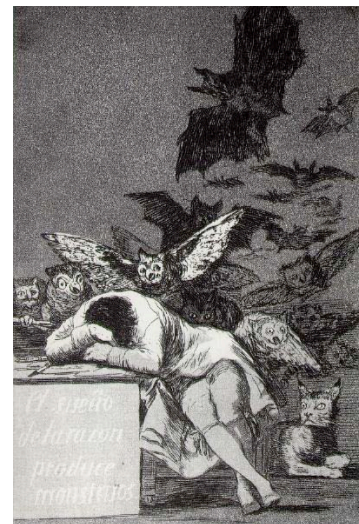
4.32 Goya, *El Sueno de la Razon produce Monstruos*.

ideas, commonly believed, and to perpetuate with this work of the *Caprichos* the soundly based

testimony of truth."[34]

The entry of Napoleon's army into Spain in 1808, however, overwhelmed even a nature

as cynical and robust as Goya's. His painting *The Third of May, 1808* (painted in 1814) shows

the mass execution of civilians that continued, as the illuminating lanterns indicate, far into the

night (**4.33**). The people of Madrid, on the second of May, had resisted the French army's entry

into the city.

4.33 Goya, *The Third of May, 1808,* **1815.**

Goya's image of war in *The Third of May* can be contrasted with David's version in

Napoleon Crossing the Alps (**4.34**) David painted war as the glorious actions of a transcendent
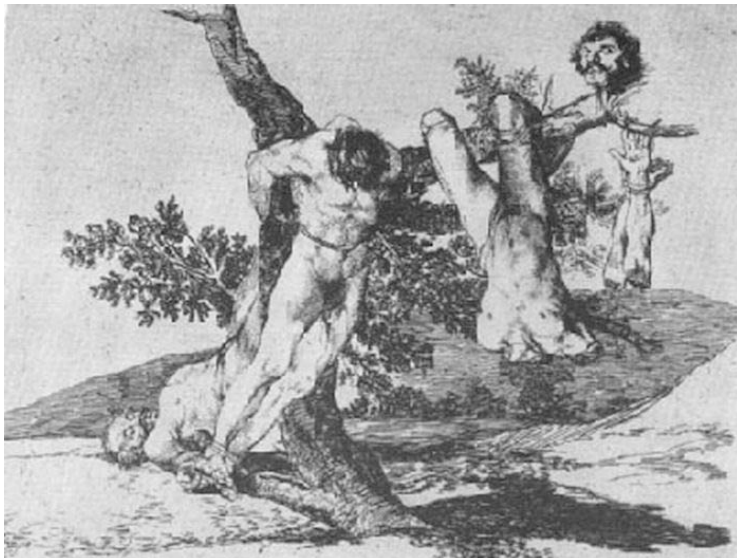
4.34 David, *Napoleon Crossing the Alps.*

paintings differ as well. Where David continued the idealized, almost photographic realism favored by Louis XIV and the French Royal Academy, Goya employed a looser, more painterly style that today we might say is more impressionistic. (Indeed, when Edouard Manet, father of Impressionism, traveled to Spain, he was profoundly influenced by Goya's art. But that story belongs to Chapter 6.)

hero. Goya focused on the suffering of anonymous victims. Stylistically, the two

The Napoleonic invasion of Spain, monumentally remembered in Goya's Second and Third of May paintings, lasted from 1808 to 1814. Throughout that time, Goya worked on another series of etchings. Usually known as *Desastres de la Guerra (Disasters of War*, **4.35***)*,

4.35 Goya, from the *Desastres de la Guerra* series.
the full title of the series was *Fatal consequences of the bloody war against Bonaparte in Spain. And other emphatic caprices.*[35] A nightmarish inventory of the horrors of war, the *Disasters*

portrays torture, beatings, beheadings, maimed   bodies,

severed arms hung on trees next to the mutilated torsos from which they were cut. Goya exposes

the shock and pain of man's inhumanity to man in a way not seen until twentieth century

photojournalistic coverage of the World Wars. Created during the war itself, the *Disasters* was

not published until decades after Goya's death.

If David's paintings and the mass-produced images d'Epinal pictured the appeal of the

modern technological state, Goya's etchings became an early witness to the destructive potential

of its increasingly effective reach. They have the caustic bite of today's front-page newsphotos

from scenes of war and terror. In addition, Goya's etchings are among the earliest examples of

the poor pictured as victims instead of being romanticized in picturesque scenarios.

After Napoleon's invasion, Goya shut himself up increasingly in his villa. There,

intensified by the burden of progressive deafness, his eye turned inward. Inside himself,

however, he saw only nightmares. Smeared in blackened colors on the villa's walls were images

that mark Goya's mind as one of the first to confront, as a personal inner reality, the experience

of nothingness, the experience of social reality as a lie.

One of the largest black paintings is *Saturn Eating his Children*. Saturn (or Chronos) was

the original patriarch of the Greek gods. A fortuneteller predicted that one of his children would

depose him. In a vain effort to change his fate, Saturn captured, killed, and ate all his children

except one, Zeus, whose mother hid him. Zeus grew up and, angered by his father's actions,

deposed him, thus satisfying the fateful prediction. Was Goya saying the king was like Saturn,

eating his children, the people? Was this also a powerful statement of mortality? Satrurn-

Chronos was the God of Time. Was Goya saying that time is devouring us all?

Goya's "black paintings" are icons of the void. They present a sense of individual subjectivity with nothing sacred or human to connect with outside the self. "For Goya," as Aldous Huxley described it, "the transcendent did not exist."[36]

The black paintings may be where modern art begins. After Goya, art as self-expression became a standard, continuing throughout van Gogh, the Surrealists, the Abstract Expressionists, and continuing into the present day.

[SIDEBAR: Goya's art has inspired numerous twentieth and twenty-first century creators. Goya's black period was celebrated in a moody cinematic masterpiece, Carlos Saura's *Goya in Bordeaux*. Check it out at: http://www.sonyclassics.com/goyainbordeaux. Contemporary Japanese artist Yasumasa Morimura has recently completed a series of works based on Goya's prints and paintings. You can see them on his New York gallery's website: http://www.luhringaugustine.com. Go to the site, click on the artists option, then select Morimura.]

Goya's haunting subjective visions can be contrasted with the quiet clarity of Baroque images from Northern Europe.

The Baroque in Northern Europe

Most of Northern Europe was not under the dominion of absolutist monarchs during the seventeenth and eighteenth centuries. Free of such autocratic control, capitalism developed and with it, a rising and increasingly wealthy middle class. The Dutch, for example, made their money with trade, including slave trade. But they did not want to portray the economic realities of their existence in art. Instead, the middle class of Holland wanted to decorate their homes with pleasant pictures of themselves, the places they enjoyed and the things they liked to do (which continue to be the pictorial preferences of the middle class.) Outside the academy salon system,

northern European artists created paintings for sale in an open market system. Far from the academic hierarchy of subjects, which had placed monumental history compositions at the top of their ranked list, northern European painters developed the arts of landscape, still life, and domestic interior scenes (also called genre scenes.) Several of practitioners of this more modest scale of painting employed an intriguing projective technology in their image making.

The Camera Obscura: A Mechanical Eye for the Artist

The use of the microscope was pioneered by the Dutch, who were the best lens makers in Europe. Their fascination with observing nature through lenses extended to art as well. By using the device known as the camera obscura, Dutch artists took one more step toward uniting Western art and technology.

The camera obscura ("dark room") is a device based on a method of producing a natural image that was known in Roman times (**4.37**). A small hole in a box acts as a kind of natural lens by producing an upside-down image on the side of the box opposite the hole. Early camera obscuras were large enough to hold a human being. This kind had been used both for amusement and for the study of optics since the Renaissance. Recently, it has been suggested that Brunelleschi employed the camera obscura to create his perspective depiction of the Florence Baptistry. If he stood inside the cathedral to generate his painting of the Baptistry, the darkened interior may have functioned as a "dark room" for viewing the space outside.
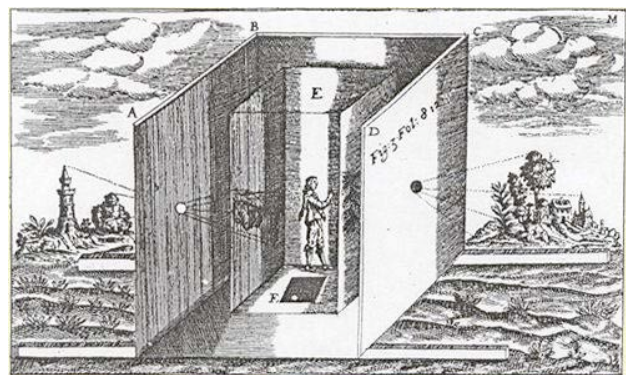
4.37 Camera obscura.

By the sixteenth century, a lens was substituted for the pinhole. The image produced in this kind of camera obscura was used as an aid for artists.

The camera obscura available to Dutch artists of the seventeenth century not only had far better lenses, it also had mirrors inside the box that inverted the image to right side up so that the viewer could see the subject in a viewfinder on top of the box (**4.38**). It was like a modern photographic camera in every major respect except that it did not use film.
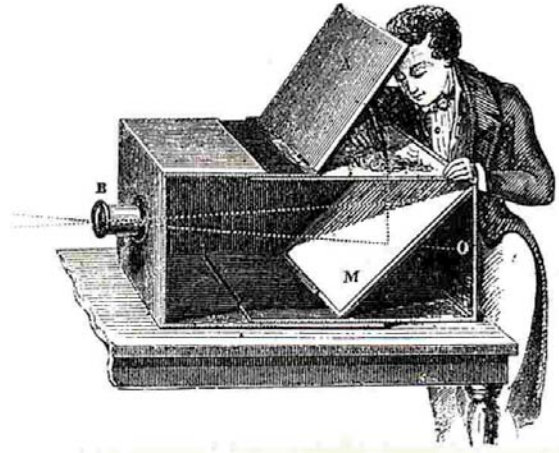

4.38 A more modern camera obscura.

This device was immensely superior to Durer's devices for making perspective images. It performed two important tasks for the artist: first, it reduced the size of the image to a convenient scale; second, it framed a two-dimensional image on the glass viewing plate, making it easy for the artist to study or trace image for his or her own artistic purposes.

A high degree of perfection and artistry in using the camera obscura as an aid in making perspective images is seen in the work of one of the greatest artists of the time: **Jan Vermeer** (1632-1675).

Jan Vermeer: Painting the World Seen through the Lens

Though innumerable artists used the camera obscura to enhance their perception and/or to record their images for painting, Vermeer's work shows the most complete involvement with it as part of the artistic process. His paintings fuse the objective perspective of the lens with the creative perspective of the human eye.

Despite the unique quality of his work, little is known about Vermeer himself. (The best-selling novel and award-winning film taken from it, both titled *Girl with Pearl Earring* [**4.39**], are highly romanticized recreations of the artists' life. You can check them out at: http://www.tchevalier.com/gwape). Vermeer did leave a detailed painting of the section of Delft where he lived, and many of his paintings show details of the interior of the house he lived in.
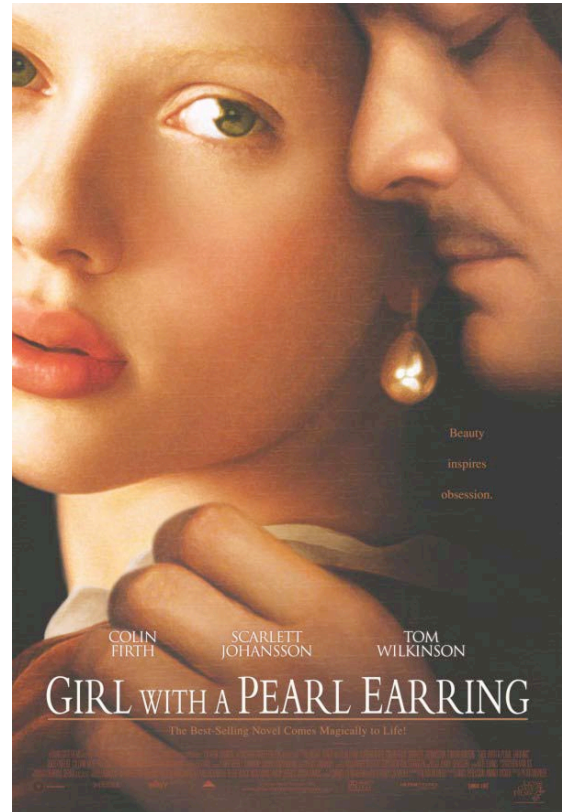
4.38 Movie poster for *Girl with a Pearl Earring*.

Vermeer was obviously known locally as an outstanding artist, and even had a reputation beyond Delft sufficient to attract a visit from a royal picture buyer. His alleged reply to the buyer's request to purchase one of his paintings tells as much as is known about his character: he told the gentleman that he had no paintings to sell but recommended a man in town who might have something to offer—decidedly unambitious for a man who later had to declare bankruptcy!

The style and thematic development of Vermeer's work over his lifetime, however, suggests that he may have made an early, unsuccessful bid for fame. His earliest works imitate the popular style of the day based on Caravaggio and earlier Dutch masters, but they also show distinct traces of the use of the camera obscura. The enlarged size of the soldier in *Officer and a Laughing Girl*, for instance, is a distortion typical of a camera lens, not the human eye (**4.40**).

By the early 1660s, however, a new phase began that focused on two enduring and highly personal themes for Vermeer: the portrayal of light, and of women (or a woman) in an almost meditatively quiet interior. His style is at once the height of personal sensitivity and privacy and the height of a strangely distant objectivity. The camera obscura helped him combine these two themes into a painting style that is unique in the history of Western art.

4.40 Vermeer, *Officer and a Laughing Girl.*

The Lacemaker is a masterpiece from this second phase of Vermeer's work (**4.41**). A close examination shows the unmistakable trace of the camera obscura lens: sprinkled around the surface of this small painting are numerous pearl-like dots. These are the so-called circles of confusion-little unfocused beads of light produced by the imperfectly ground lenses of Vermeer's day. They are not an aspect of normal vision. (You can also see the circles of confusion in Vermeer's *View of Delft*, **4.42**.)

4.41 Vermeer, *The Lacemaker.*

4.42 Vermeer, *View of Delft.*

The interesting thing about these "circles of confusion" in Vermeer's paintings is that there are more of them than would be caused by the lens itself. Vermeer, in other words, not only painted an effect that is not part of normal human vision, he liked it so much that he chose to manipulate it in his paintings as an extension of his personal perception.

Vermeer's involvement with the camera obscura shows how sight itself was coming under increasing human control. The extreme, almost photographic, objectivity of his paintings might also explain why they did not achieve popularity in his own lifetime. Vermeer's painting apparently struck the people of his day as *too* objective. The emotion, unlike that in more popular Dutch art, was too far below the surface. The art historian Lawrence Gowing has theorized:

Chapter 4: Baroque

"The rediscovery of Vermeer was hardly possible until photography had demonstrated and popularized the artistic value of the optical image and painting had turned again, with a different view and purpose, towards light as a medium of reporting."[37]

Vermeer was rediscovered after photography had given "objective" images a dramatically new importance and meaning. The impending mechanization of art suggested by the use of the camera obscura in seventeenth-century art was not an isolated or accidental development. It paralleled the broad impact of technology in all areas of Western culture. A decisive phase of acceleration began in the eighteenth century.

We have already discussed the discussion of the camera obscura in Giambattista della Porta's *Magiae Natualis* of 1558; Caravaggio probably knew both the author and his text. Della Porta's book was very popular: the first edition went through six printings and was translated from the original Latin to Italian, French, Dutch, and English. In 1620, Sir Henry Wotton wrote of the images created in a camera obscura formed inside a "little black tent" and asserted "surely no painter can do them so precisely."[38] The point here is that by the time Wotton wrote, painters were already using the camera obscura to create similar "precise" and realistic images.

By the middle of the eighteenth century, camera obscuras were considered standard tools of the artist's trade. In 1744, George Desmaree portrayed court painter Franz Joachim Berch with a box camera obscura, the kind that was sold in shops in London. George Adams'*Catalogue of Optical Philosophical, and Mathematical Instruments* included not only camera obscuras in boxes, but also concave and convex mirrors, magic lanterns, zograscopes, and heliostats.[39] The magic lantern was, in effect, the ancestor of today's slide projector, which was used for science and entertainment (**4.43**). The zograscope was a boxed optical device containing a convex lens and a mirror, which was used for viewing hand-colored etchings and engravings. The heliostate

or solar microscope was an arrangement of a mirror, two convex lenses, and a wooden or metal

frame.
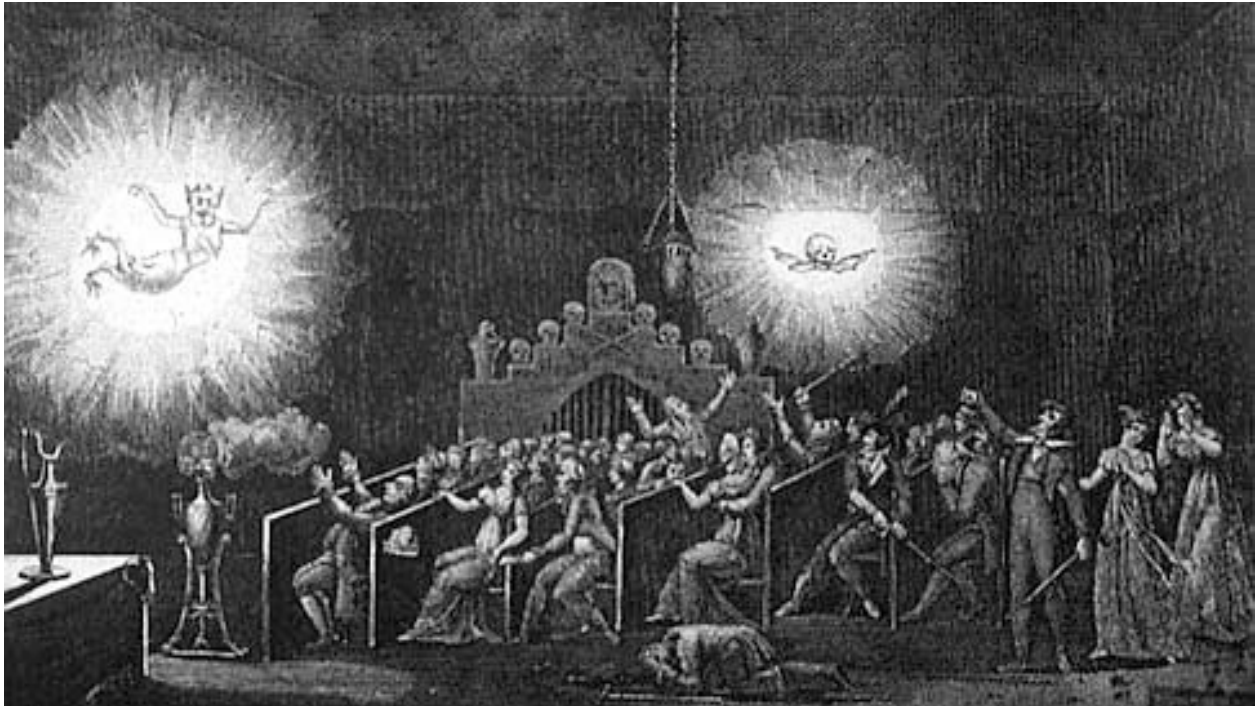
4.43 A Phantasmagoria, one of the many uses for a magic lantern.

As the extensive list of Adams' catalogue makes clear, the Baroque scientific revolution

had initiated unprecedented technological advances. Increasingly, scientists need to

communicate with each other, to access what each other had done in order to expand their own

knowledge base and avoid useless repetition. Scholars began to set down increasingly

comprehensive accounts of the state of knowledge in order to document and share what they

knew. The most comprehensive Baroque effort was Denis Diderot's *Encyclopedia*.

Printed Images from the *Encyclopedia*: Icons of Freedom through the Machine

Denis Diderot (1713-1784) directed the production of seventeen written volumes and

eleven volumes of engraved illustrations for his *Encyclopedia* over a span of twenty years

despite government harassment and delays (including three months of prison). The *Encyclopedia*

was a revolutionary attempt to make knowledge of all the sciences and arts democratically

available through printed words and printed images. It was the secular equivalent of Gutenberg

printing of the Bible for the common people.

The eleven volumes of engravings were absolutely essential to Diderot's purpose (**4.44**).

If accurate drawings of flowers are required for scientific understanding and communication,

accurate drawings of machines are even more necessary. Imagine trying to fix a carburetor or

even assemble a child's toy without accurate pictures along with the instructions. Diderot's

engravings are the industrial and craft equivalent of Leonardo's visualizations of the body.
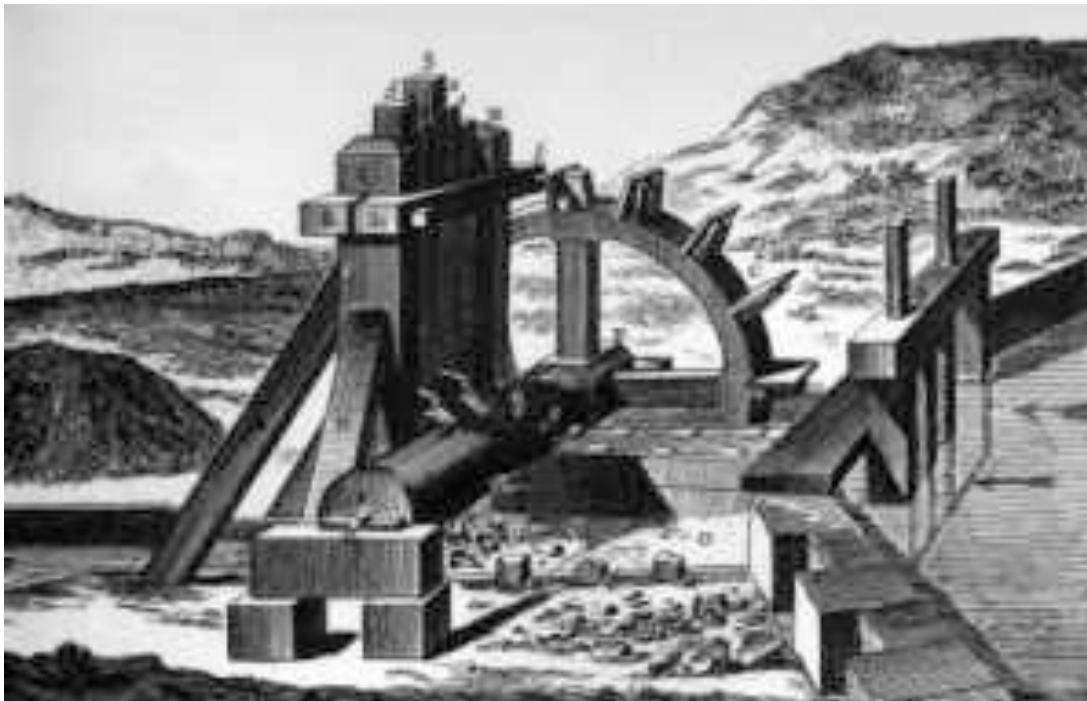
4.44 Diderot, engraving of a machine from *Encyclopedia*.

Looking back from our time, however, the *Encyclopedia* images look somewhat

different, rather naïve, in fact. The mood of these images now reads, in Roland Barthes's term, as

a kind of "preindustrial folklore" picturing the worker happily fulfilled through technology:

"The engraver represents him for the most part dressed neatly as a gentleman; this is not a

worker but a little lord who plays on a kind of technological organ, all of whose gears are

exposed. What is striking about the Encyclopedic machine is its absence of secrecy…the

Encyclopedic machine is never anything but an enormous relay; man is at one term, the object at the other…there is no sense of social distress."[40]

These pictures were constructed to celebrate the spectacle of workers enjoying access to wonderfully increased power. They are nevertheless equally spectacular as pictures of workers who are literally strapped into the numbing embrace of the machine that have already begun to organize and reshape the human environment. These images, despite the intended optimism, depict machines that obviously use human beings as "extensions of themselves." The men in the *Swordmaking* engraving are literally fastened to the machine and must adjust to its demands.

This, however, is only a "preindustrial" image: human beings help power the machines. Before Diderot's time, most work was done by hand. In the mid 1700s, the Industrial Revolution began as more and more machines contributed to the work force. In the late eighteenth century, technology had begun to harness the power of steam and electricity to the machine. In 1820, the railroad locomotive, powered by the steam engine, began to cross Europe and the Americas, effectively diminishing the time and travail of transportation.

Like the scientific and political revolutions that preceded it, the Industrial Revolution brought problems alongside its sweeping changes. It accelerated child labor abuses, increased pollution and urban crowding, and exacerbated class conflicts.

In the nineteenth century, enlarged machines would begin to absorb whole towns around them, instead of individual human beings. The sense of social distress would, once again, take on revolutionary proportions.

---

[1] Nicolas Pioch, WebMuseum on Baroque <http://www.ibiblio.org/wm/paint/glo/baroque>
[2] <http://en.wikipedia.org/wiki/Counter_Reformation>

[3] Peter Robb, *M, The Man Who Became Caravaggio* (New York: Henry Holt and Company, 1998) 7.

[4] Emil Kren and Daniel Marx, Web Gallery of Art
<http://www.kfki.hu/~arthp/bio/b/bernini/gianlore/biograph.html>

[5] Robb 33.

[6] Robb 489.

[7] Hockney 223.

[8] Robb 272.

[9] Hockney 224.

[10] Robb 275-76. Hockney (208) publishes an excerpt from Della Porta, next to a 1550 account of the camera obscura with lens by Italian scientist Girolamo Cardano.

[11] Hockney 209.

[12] Robb 363.

[13] Robb 64.

[14] Robb 71-72.

[15] Harris and Nochlin 119-20.

[16] Kren and Marx on Bernini

[17] Anthony A. Abruzzese, for the Pirandello Lyceum Institute of Italian American Studies, Research and Cultural Dissemination <http://www.pirandello.com/opera.html>

[18] Pioch, WebMuseum on Baroque.

[19] Santa Teresa of Avila, *The Complete Works of Santa Teresa of Jesus*, Vol. I, trans. and ed. E. Allison Peers (London: Sheed and Ward, 1946) 192-93.

[20] Robb 352.

[21] Robb 203.

[22] Kren and Marx on Bernini.

[23] Kren and Marx on Bernini.

[24] Kren and Marx on Bernini.

[25] Hockney 170.

[26] Michel Foucault, "Las Meninas" *The Order of Things, An Archaeology of the Human Sciences* (London, 1970) excerpted in Julia Thomas, ed. *Reading Images* (London: Palgrave, 2001) 196.

[27] Horne 99.

[28] Harris and Nochlin 190.

[29] Alistair Horne, *Seven Ages of Paris* (New York: Alfred A. Knopf, 2002) 133.

[30] Harris and Nochlin 192.

[31] Horne 154.

[32] H.H. Arnason, *History of Modern Art*, 5th ed. (Upper Saddle River, NJ: Prentice Hall, 2003) 7.

[33] Robert Hughes, *Goya* (New York: Alfred A Knopf, 2003) 181.

[34] Hughes 180.

[35] Hughes 180.

[36] Aldous Huxley, *Heaven and Hell* (New York: Harper & Row, 1980) 25.

[37] Lawrence Gowing, *Vermeer* (New York: Barnes & Noble, 1961) 14.

[38] Stafford and Terpak 309.

[39] Hockney 214.

[40] Roland Barthes, *New Critical Essays* (New York: Hill & Wang, 1980) 46.